S. HRG. 105–858

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED FIFTH CONGRESS

SECOND SESSION

ON

H.R. 4101/S. 2159

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1999, AND FOR OTHER PURPOSES

Commodity Futures Trading Commission
Department of Agriculture
Food and Drug Administration
Nondepartmental witnesses

Printed for the use of the Committee on Appropriations

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, FEBRUARY 10, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:07 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Gorton, Burns, Bumpers, Kohl, and Leahy.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

STATEMENT OF DAN GLICKMAN, SECRETARY

ACCOMPANIED BY:

RICHARD ROMINGER, DEPUTY SECRETARY
KEITH COLLINS, CHIEF ECONOMIST
STEPHEN B. DEWHURST, BUDGET OFFICER

OPENING REMARKS

Senator COCHRAN. The meeting of our subcommittee on agricultural appropriations will please come to order.

Today we are beginning our hearings to review the budget request submitted by the President for the fiscal year beginning October 1, 1998—the fiscal year 1999 budget—for agriculture, rural development, and related agencies.

We are very pleased to have as our leadoff witness at this hearing the Secretary of Agriculture, Dan Glickman. We appreciate very much your being here, Mr. Secretary, and we understand that you have accompanying you today Richard Rominger, Deputy Secretary of the Department of Agriculture; Keith Collins, the Department's Chief Economist; and Stephen Dewhurst, the Budget Officer for the Department.

This subcommittee has jurisdiction for all programs and activities of the Department of Agriculture, with the exception of the Forest Service which is funded by the Interior appropriations bill.

For this next fiscal year, the President has requested appropriations of $56 billion for Department of Agriculture programs and activities under the jurisdiction of the subcommittee, which is a net increase of $8 billion from the current fiscal year enacted level.

Three-fourths of that request is for mandatory appropriations required by law to be appropriated.

The President's total discretionary appropriations request is $12.6 billion.

This presents us with a proposed decrease of approximately $330 million from the enacted level for this current fiscal year. That's assuming that the President's legislative proposals and offsetting savings are enacted into law.

The Department's request relies very heavily on the adoption of new user fee legislation to generate $624 million in collections for this next fiscal year. One of these proposals is to cover the costs of meat, poultry, and egg products inspections. This and other user fee proposals of this administration have been rejected by previous Congresses, and I suspect they will be rejected by this Congress.

Further, a $205 million savings in appropriations for the crop insurance program results from the President's proposal to shift sales commissions for agents from discretionary to mandatory spending. That's not certain to be approved by Congress either.

Many other increases proposed for food safety, integrated pest management, and a host of other priorities are funded in the President's budget by redirecting funds from existing programs and activities.

I think it is fair to say that this subcommittee will not have the luxury of being able to count on the availability of user fee resources from legislation which has not been approved by Congress, and I also expect that Congress will disapprove many of the proposed shifts in funds from existing priorities of the Congress.

So, we have our work cut out for us, Mr. Secretary, to get these numbers to come out at the end of the line so that we fund our programs for research, for agriculture production, and for the food programs that are required to be funded by this subcommittee each year. So, we will work with you to try to identify the priorities and the needs for the Department's funding for this next fiscal year.

We appreciate very much your providing us with your statement in advance. It will be made a part of the record in full, and we would invite you to proceed to summarize your statement or make any other comments that you think are appropriate.

At this point, however, I am going to yield to the distinguished Senator from Arkansas, the ranking Democrat on the committee, Senator Bumpers.

STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Mr. Chairman, thank you very much. I will ask unanimous consent that my formal statement be inserted in the record and simply say that this is a sort of bittersweet occasion for me because this is the opening round of the hearings of my last year in the Congress and my last year on this subcommittee.

Having said that, Mr. Chairman, let me thank you personally for the cooperation and the kindnesses you have shown me. We have agreed on most things, but even when we have not agreed, they have been most amicable disagreements. I could not have asked for a better chairman to work with on this committee, and I want to publicly thank you for that and just summarize.

My statement would be basically the same things you said, but I would just like to emphasize again that when you consider the fact that the budget authority for 1999 is $332 million less than 1998 and then you add $600 million in user fees to that, we have a pretty tough year in front of us obviously because I agree with you, Mr. Chairman. User fees have been brought up here—I think this is maybe the sixth consecutive year that the Department has asked for user fees, and it will probably be the sixth consecutive year they will not be granted.

But I just want to point up the magnitude of our problem if user fees are not granted by this subcommittee or by the authorizing committee, for that matter, which technically we ought to have before we enter into such a thing as that.

But in any event, Mr. Secretary, I want to thank you for your services. You have always been very responsive to the members of this committee and we want to publicly thank you for that.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Senator. I especially appreciate your kind remarks. I do not know of any person I have worked with in Congress that I have enjoyed the relationship with than this distinguished Senator from Arkansas. We have swapped this job back and forth over the last decade a number of times. It has always been a pleasure to work with him closely on the subjects under the jurisdiction of this committee. We will insert your statement in the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

I am proud to join Senator Cochran and my other colleagues on the subcommittee in welcoming Secretary Glickman, Secretary Rominger, Mr. Collins, and Mr. Dewhurst. Secretary Glickman was in my state a few short days ago and it is a real pleasure to have him and others from the Department of Agriculture with us here today.

This is a bittersweet occasion for me because it marks the first hearing for the last annual appropriations bill of which I will have the pleasure to serve as a member of this subcommittee. Over the years, I have not always agreed with my colleague and friend, Senator Cochran, on every single issue before us, but I am happy to say that those times of disagreement have been very few and without doubt, the two of us have agreed on far more topics than we have disagreed. I want to publicly thank him for his courtesy, his thoughtfulness, and the partnership we have shared these past several years in crafting the funding bills for the Department of Agriculture, the Food and Drug Administration, and the other agencies under the jurisdiction of this subcommittee.

The fiscal year 1999 budget now before us appears to offer many new initiatives and a few themes we have seen before. Last year, as we considered the fiscal year 1998 bill on the Senate floor, I made clear my view that investment in agricultural research must be one of our highest priorities. I was disappointed to note the overall decline below the fiscal year 1998 level in new budget authority requested for programs in the Research, Education, and Economics mission area. I realize that some of this reduction is simply a result of moving specific programs to other mission areas or, as in the case of the Census of Agriculture, a function of cyclical budgeting.

However, I have serious concerns about reductions in formula funds to our nation's system of land grant universities and extension network. The federal-state partnerships in agricultural research have been the backbone for developing our nation's productive capability which has made us the envy of the world. Similarly, the budget's elimination of congressionally directed research through the Agricultural Research Service presents a challenge to us and to the research communities in our states who had looked forward to a reliable partnership with the federal research

arm of USDA. Still, I am confident the commitment of the President and of Secretary Glickman toward agricultural research is strong and I look forward to working together to craft legislation for the coming year that will help prepare our nation and our nation's farmers for the coming century.

I also worry about the farmers themselves. I know that may sound a little disingenuous when you consider that net farm income, though slightly down in 1997, was at a record high of $60 billion in 1996. It is an unfortunate lesson of history, but prosperity on the farm is usually fleeting. Cycles of high yields and high prices come, and those same cycles, in time, go. In 1996, when the tide was high, Congress with the stroke of a pen kicked away a tradition of cooperative support and assistance that the farmer had known for more than a generation. It may have been an imperfect partnership, but the American farmer knew USDA would be there when it was needed.

USDA is still there and the challenge now is for the Department of Agriculture to continue to be a Department for Agriculture in a very changing economic and political environment. The 1996 Farm Bill did not destroy the farm safety net, but it was badly mangled. Before declining budgets and different directions in farm programs and farm policies completely dismantle USDA's presence in rural America, we need to take a few steps back and reflect on where we have been, where we need to go, and how best to get there. I note that the budget for fiscal year 1999 contains several features designed to improve the farm safety net and I look forward to hearing from the Secretary on this subject.

The 1996 Farm Bill also included the creation of a Commission for Agriculture in the 21st Century. Being a new commission and a new appropriations account in a time when it has been difficult just to maintain the necessary ongoing programs, the Congress provided no direct funds for this activity in the fiscal year 1998 bill. I hope we will look more closely at the work and the potential of the Commission this year. I fear we may otherwise one day regret having turned our backs on the American farmer because times were good only to find that without him, times may become very, very bad for the rest of us.

Food Safety continues to demand our strict attention. Food recalls accounted for some of last year's largest news stories. Whether it is contaminated beef or tainted strawberries, the American people are more demanding than ever about the wholesomeness of the food they eat. Part of this goes back to my earlier comments about research. It is vital that we learn all we can about how to identify, detect, and prevent the occurrence of food borne illness. It is equally vital that we proceed with the very best science in order to avoid sensationalized scares regarding food safety that can, in an instant, destroy businesses that took generations to establish.

This subcommittee provided funds in fiscal year 1998 to implement the President's Food Safety Initiative, a collaboration of USDA, FDA, and CDC. The fiscal year 1999 submission carries this initiative forward. Food safety is an area where everyone should be in agreement. Food producers, processors, and consumers all have a vital interest in knowing that products are reliable and safe. Consumers demand such standards just as producers and processors hope consumers will demand their products. As more and more foods are imported from around the world, as emerging diseases and pests capture the headlines, it is more important than ever that we hold food safety to the highest attainable standard possible.

Again this year, the budget request is dotted with proposed user fees. Some are new creations, some are old acquaintances. The budget proposes to collect $573 million in new FSIS user fees. This sizable amount, we are told, would equal only pennies per pound in additional costs to the consumer. After all I have just stated about food safety, one would assume that the American consumer would think nothing of spending a few pennies more to know that the meat or poultry products in the shopping cart are safe. Unfortunately, I am not convinced higher consumer prices is the proper analogy to the user fee proposal.

If authorized and collected, the cost of FSIS user fees would seldom, if ever, be absorbed by the meat and poultry processing companies. Anecdotally, we are told that those few additional pennies per pound would come, not out of our tax burden, but out of our pocketbooks at the grocery store. However, it is most unlikely that the companies would pass this cost on to the consumers in grocery stores where competition is the most fierce. Instead, the companies are more likely to pass on these costs to the one sector of the economy that is unable to pass them on to anyone else, the producer. It seems odd that while we worry about the small farmer, while we shake our heads at livestock prices, while we worry about the economy of foreign nations that might disrupt our livestock exports, we would in the next breath propose adding another $573 million annual cost (nearly $2.8 billion through the year 2003) to these very producers.

The Department of Agriculture touches on many more subjects than those I have just discussed. Providing adequate nutrition for our people, protecting our environment, promoting rural development, and remaining on the cutting edge of world trade are but a few of the other vitally important functions of USDA. As we proceed through this year's hearing schedule, I look forward to hearing from all agencies of USDA on their plans for the coming year.

The budget presented to us by President Clinton is a balanced budget. It took a lot of pain and suffering by all of us to reach this historic point. We will have a lot of pain yet to endure to make a balanced budget more than simply a point in time. As we hear from Secretary Glickman, and the other USDA officials that will follow him, we need to keep in mind that austerity will continue as our guide. We will also recognize our duty to the constituencies we serve today and in the years to come. The passage of the fiscal year 1999 appropriations bill will be a point in time, but one which we must assure will lead us in the right direction to a coming millennium.

STATEMENT OF SENATOR BURNS

Senator COCHRAN. Are there other Senators who would like to make an opening statement? If so, I will be happy to recognize you for that purpose. Senator Burns, you were here early.

Senator BURNS. Well, Mr. Chairman, let me just place my statement in the record.

The Secretary already understands that I have got—I do not know why we ought to be appropriating any money for the Department, to be honest with you. That is where I am at right now.

Senator BUMPERS. Would you repeat that?

Senator BURNS. Yes; I do not know why we are appropriating any money because I do not see an advocate down there for the producer and I would sure like to.

I want to say that I am very disappointed in the roadless areas so far as the Forest Service is concerned with EEP having the money and not spending it, not competing. Those areas that I think would best be left to really just a private sit-down, I would like to sit down with the Secretary one of these days and go over each one of these things because what is going on in my State of Montana has far-reaching ramifications. It is serious. It is serious beyond belief. I know there is a way to work through this and I do not think probably in the public domain is the place to do that.

I have a hard time telling my farmers if you think everything is good on the farm. I have a hard time saying that we cannot get as much for a 60-pound bushel of wheat as they are getting for a pound of wheat in the grocery store. Now, something is awry and I am not smart enough to figure it out. I wish I was. I wish there was a single bullet, but there is not.

PREPARED STATEMENT

So, Mr. Chairman, I would just submit my statement for the record and one of these days I would like to sit down with the Secretary because we have some very, very serious things to go over, if we possibly can.

I thank the Secretary for coming today and I thank the chairman for holding the hearing.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BURNS

Thank you, Mr. Chairman. I would like to start by stating how well run I find this subcommittee to be, I believe the Chairman and the Ranking member do a very

good job of getting this process underway in this subcommittee. I would also like to commend the staff of this subcommittee for the professional manner in which they perform their jobs. Last year their work was a good example of how this process works and I do appreciate their fine work.

Now with that done, I am pleased to see the Secretary of Agriculture before us today. In my mind this is a very timely hearing considering much of the work that the Secretary and his department have been involved with in recent weeks. Between the difficult times that our farmers are facing in the field and the recent announcement on roadless areas in our National Forests. These issues have all had a definite impact on my state of Montana, and I honestly don't think a lot of consideration is being given to rural America by the Department at this time.

To start out with Mr. Secretary, we must all admit that the current farm program is in existence and is moving forward. The producers are getting their transition payments and all is well on the farms. That is the feeling I am getting from my constituents when they talk to the people in your department. But all is not well. When I go to the store to purchase breakfast cereal, and have to pay $3.75 a pound for Wheaties, and yet my farmers in Montana can't get that for a bushel which weighs sixty pounds, well something is far from right on the ground.

It is my belief, and it is shared by many on the ground that this is due to inadequate trade policies and work both by the office of the United States Trade Representative and the Department of Agriculture. In recent weeks I have had numerous inquiries into my position on the trade credits that this country is providing to countries in Asia. They are wondering about their future in these markets.

It is my position that I will accept the first payment made by this government to Asian countries, but Mr. Secretary we had better see some realistic development in the trade of American agriculture products from this effort. Without that I see a rough and rocky future for any approval of additional efforts for bailing out these countries. When our trade representatives are working with these people it is their responsibility to make sure that American farmers and ranchers are being taken care of on the world market.

As far as I am concerned this is not the case today. Most if not all American farmers are proud of and will back their country to the bitter end on matters of national defense and security. But, when doing so they would like to think that their government is giving them a fair break on dealing on the world trade stage. This is not the case today. As we place trade sanctions on many countries in the world, thus losing any and all opportunities for trade of food products with these countries, our friends and trade partners move into those markets and have a hay day.

It is known that some of our trade partners are going into the countries we have trade sanctions with and selling above market price. They then take the extra earnings they have achieved and sell below market price in those markets in which we compete with them. Yet, for the past two years the Department which you have been in charge of has yet to spend one dollar of Export Enhancement Program, (EEP), funds to counteract this trade difference. As a matter of fact you gladly turned back about $60 million last year for disaster assistance.

This year you propose capping EEP at a sum of $320 million, when Congress has provided you authority for up to $550 million for this program. I would personally like to see some of that money used, but in consideration of what you have done in the past couple of years, I honestly don't understand why you are even putting that amount in the account this year. I would be pleased today to hear you state that you really plan on using it, but I doubt you will say much more than if market conditions warrant the use of EEP funds your office will make those funds available.

In contrast to the EEP funds the Department of Agriculture has gone out and done a lot of good work with the Foreign Market Development funds. This seems to be the one account in the Department and in the Foreign Agriculture Service where the dollars are getting used. Then again we face another obstacle set forth by the Department, the lack of realistic funding for this program. If it is the one program that seems to be working and bringing dollars back to the American producer, why does the Department continue to under fund this vital program. It appears all the Department does is carry over funds for the Cooperator program.

This weekend I will be returning to Montana, as will many of my colleagues be returning to their states, for the President's week break. This Friday and Saturday in Shelby, Montana they will be hosting the annual Farm and Ranch Days in which I will be in attendance, answering questions and speaking to a number of farmers from Montana and surrounding Provinces and states about our Agriculture policy. I would like to invite you, and will assist your office to set up a time, for you to speak to my farmers about their future via the phone. Then you can explain to them why the rest of the world seems to be under selling our grain on the world market.

By the way, are you aware of the significance of this meeting being held in Shelby, it was the town that almost declared war on Canada several years ago due to the amount of wheat that was coming across the border in that area. They did it then, and don't be surprised if they do it again in the near future Mr. Secretary.

I can guarantee you, your staff and the Department that until I feel that the concerns of the American and Montana farmers are adequately addressed on the world market that you will continue to hear from me on this topic. I have not supported NAFTA or GATT and for the reasons listed above. This Department and this Administration continue to cut trade deals all across the world, but my farmers are not basking in the splendor that they were assured would come their way. Because the world looks upon us as easy traders, one of the first issues that drops off the table is agriculture.

Why is it that everybody is concerned about the food supply the American Farmer and Rancher provide. It is because without a doubt they produce the finest, most reliable and SAFEST food in the world. The rest of the world knows this, and in reality are afraid of our producers. Mr. Secretary, I am willing to put any producer in Montana up against, on a competitive market, any producer in any country in the world. Time and time again they will produce a SAFER, more reliable and less expensive product. But time and time again they, the producers, are faced with the fact that they must compete not against another farmer, but against a foreign government without much help from their own.

It is apparent that the current Administration wants you and your office to go down in history for providing a safer food supply for the people of this country. Well, Mr. Secretary, if this Department does not go out and assist our farmers with marketing on the world market, you won't have to worry too much about the food supply here in the United States. I wonder how safe you all will consider the food supply that we will be required to import from foreign countries in order to meet our daily needs.

Mr. Secretary, it is simple, Congress has provided you with the tools do go out and compete on the world market. Please use them and help our farmers make a decent living and have a chance. If not, the idea of the Big Open will occur again, and states like Montana will become the playgrounds that those with the big dollars would like to see anyway.

Well that is my sermon on agricultural trade for today. Here ends the lesson. Unfortunately now I must go onto the issue which I am sure you knew I would bring up today, Roadless Areas and the moratorium on any and all construction of roads in these areas.

I cannot believe the nature in which you and the Chief of the National Forest Service allowed this to occur. A couple of weeks prior to the announcement by the Forest Service, myself and several members of this committee and the Energy and Natural Resources Committee, joined in sending you a letter outlining our concerns and suggesting that we were as concerned as you about the roadless areas. We stated that we would be willing to work with you and the Administration in developing a policy to address these issues in our states where your announcement had the greatest impact. But obviously those people who have elected us have no understanding of the finer issues, since their voices and their concerns went selectively unanswered by your office.

This concerns me greatly, since we like the President are elected officials, and although both Congress and the Administration like to act like we have all the answers. By working together we may be able to at least address them in a fashion that will answer the concerns of all the people, not just special interest groups that fancy having one ear or the other.

Mr. Secretary, your decision to implement this moratorium and to notice proposed rule making has done more in the past few weeks to reignite the fire that was once called the "war on the west". No other Administration has done more to make people who live and work on the public, and for that matter private lands, in the west feel as though nobody cares about them like this Administration has. These are real people, Mr. Secretary, with real jobs and real dreams about the future, both for themselves and their children. Yet they are brokered as insignificant pawns in a motion to please the extreme elements within this Administration.

I have to honestly tell you how very disappointed I am in you and your office for this action. There were numerous ways in which to address the current situation, and you let them all slide in order to preserve some righteous thinking person in the White House. Just remember sir that which can be done by executive order can be undone by executive order, and god forbid the consequences at times can be worse than what we started out with in the first place.

Now I have preached a sermon, and given a lecture. I had hoped and always thought that this might be the one committee where I did not feel the need to do this, but current events have led me to this point today.

On to a point of interest in regards to a situation in Montana. You understand that I worked with the Chairman and Ranking Member of this Committee last year to provide funding for a quarantine facility in Montana for the bison that leave Yellowstone National Park. I also understood that with the timing of the Agriculture Appropriations, and the upcoming winter, that it would not be possible for the Department to do much work in relation to that facility. However I had assumed that in the past four months that there might be some dialogue with the state of Montana and the Department on the future of this facility.

Mr. Chairman, I admit to being rather long winded today, somewhat unlike me, but I had a great deal to get off my chest here today. I again appreciate the leadership that you and Mr. Bumpers provide to this committee and I am also aware of some of the differences that the Ranking member and I have on these issues. But it was important to me to get this out in the open and let the Secretary understand why I have such a lack of confidence in the Department of Agriculture at this time. Again thank you for this opportunity, and I look forward to listening to the Secretary explain the USDA budget for the coming year. I will have some questions later.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR LEAHY

Senator COCHRAN. Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman.

I too am one who has enjoyed working with you. We have served for so many years. I think we both had dark hair when we started. Well, you still have hair. [Laughter.]

I also was privileged to come to the Senate with Senator Bumpers who has been, like you, one of the best friends I have had here. I would like to praise Senator Bumpers because of what he has done, both as chairman and as ranking member of this subcommittee. I know that in that capacity he has had, as you have, Senators from both sides of the aisle constantly coming, asking for help on far more things than it is possible to do. Like you, he has helped when it was possible to do it, and when he was unable to, like you, he has still left the Senators feeling that they had a fair hearing. No more could be asked of any chairman or ranking member.

Right now we are close to funding full participation for the WIC Program. Mr. Secretary, I would say that is a pretty significant accomplishment when you consider that not very long ago one-half of the pregnant women, infants, and children went unserved.

Another important nutrition investment is the WIC farmers market program which helps create farmers markets and assists families on WIC at the same time. This committee has greatly helped that program with continued funding, and it has turned out to be a win-win situation; both a win for the producers and a win for the consumers.

Secretary Glickman, I want to especially thank you and your staff. I am glad that there is a USDA because you have been up in the past several weeks to help Vermonters in the aftermath of one of the worst ice storms in this century. I toured that area, along with Senator Jeffords. I know how badly it was hit, and I saw the USDA, the Vermont National Guard, and the private sector come together to help us there.

The ice storm paralyzed communities from northern New York to the tip of Maine. Trees collapsed from the weight of several inches of ice that coated their branches. Power lines were literally just

ripped right out of the houses. We had miles of utility poles that were just flattened. They were standing one hour, and the next hour they were all down. Hundreds of thousands of people were left without power for days and even weeks, while temperatures dropped down well below zero. The temperatures warmed up and we got hit with ice melting and rivers flooding, overpowering their banks.

I was born in Vermont. I have lived there 57 years. This storm is the worst I have ever seen. In the Burlington area, 50 percent of the trees were toppled or severely damaged, and across the region 70 percent of the trees were damaged. You have visited that area before, Mr. Secretary. You know the beauty and the utility of those trees, and you can imagine what it was like with them down.

Along with farming, forest and forest products make up the majority of the economy of the region hit by the ice storm. These rural communities, and the men and women who work there, are going to be feeling the economic effect of this storm for years to come. In some cases, sugarmakers and woodlot owners and apple orchards are going to have to wait several years before regrowth allows them to go back into what has been their livelihood not only for them but their families for generations. We see over $8 million in crop damages and $3 million in trail damages in our national forests and untold millions beyond that.

The hardest hit, though, were the dairy farmers in many ways. They are already struggling to make ends meet. Farmers were left without power needed to milk their cows. Cows have to be milked twice every day whether you have power or not, and sometimes cows went for days without being milked. Farms lost cows. Milk handlers were unable to get through on the roads to make their pickups. Farmers had to dump thousands of pounds of milk, and losing one milk check for a lot of these farmers can make the difference of whether they stay viable or not.

Local and State assistance is going to help them, but Federal relief is needed. I hope the Department can help us all the way through. There are a number of programs that you have in your Department, Mr. Secretary, and we are going to need your help and we will continue to work with you.

But there is another storm on the horizon and that is manmade. The storm that I am concerned about in the future is the one that the Department of Agriculture is proposing in the milk marketing order system. If it is made final, it is going to put thousands of small dairy farmers out of business in very short order.

The Commissioner of Agriculture of Vermont has advised me that Vermont could lose one-half its farms under the USDA proposal. Economic analyses by Agrimark Cooperative shows the Northeast will lose $117 million in annual income. Almost all regions of the country will be dramatically hurt.

So, you can imagine then, Mr. Secretary, you are going to hear a lot about this. You just had a proposal and a report which says we should increase efforts to keep smaller farms in farming. Yet, your proposal for milk pricing will force a lot of these same small farms out of business. We will address this in authorizing committee, but I just wanted you to know it is an area of concern.

Mr. Chairman, I thank you for your courtesy in allowing me to go on longer than usual.

Senator COCHRAN. Thank you, Senator.

Senator Gorton.

STATEMENT OF SENATOR GORTON

Senator GORTON. Mr. Chairman, I would like to start out also by saying how much we will miss Senator Bumpers when he leaves. I was reflecting on the fact that there is almost no one I have come across in my career with whom I can disagree more frequently or more cheerfully with more eloquence on his part and with less rancor from a personal point of view or, for that matter, someone who is so great a friend and an ally when we find ourselves in agreement. He has done a great deal on this subcommittee and the Senate as a whole.

I guess I wish I could be so kind to the Secretary and his budget, but Mr. Chairman, when you start by saying that in spite of the image that the American people have of the Department of Agriculture, overwhelmingly its money goes into entitlements that have to do with transferring money and assets from one group in our population to another and how little of it goes into agriculture itself, as both we and the American people think of agriculture, that is to say, our producers of food and fiber.

To see a budget that continues to move so radically in the direction of again cutting off farmers and being hostile to them and their interests in the way that this does is an intense regret. To see a complete cutoff, for all practical purposes, of cooperative research programs of work between the Department of Agriculture and our universities in order to fund basically more welfare programs.

The President's ideology that he is unwilling to submit to the Congress for its normal ratification just means in my view that we have a Department of Agriculture that has forgotten about agriculture, and I am convinced that you, Mr. Chairman, as has been the case in the past, are going to come up with a rather different budget in these research areas than the one that has been submitted to us here.

I also join Senator Burns in a statement, that is not directly relevant to this hearing because it is part of the Department of Agriculture that belongs in the jurisdiction of my subcommittee, over their forest initiatives, again hostile to traditional uses without having solicited the views of the people in communities who are greatly affected by those decisions, making decisions that really ought to be decisions made by the elected representatives of the people through their Congress rather than in individual Departments.

So, I have to say that an appropriation bill that I hoped we would have a wide degree of agreement on is one that is simply going to create controversy and has deeply disturbed people in agriculture in my State and I suspect across the country.

Senator COCHRAN. Thank you, Senator.

Senator Kohl.

STATEMENT OF SENATOR KOHL

Senator KOHL. Mr. Secretary, we appreciate your willingness to testify before this subcommittee today on the issues raised in USDA's fiscal year 1998 budget. We recognize the magnitude of the task before you. Managing the USDA with this administration's commitment to a balanced budget is no small task.

We do ask that as you review programs, you avoid picking winners and losers and focus on treating all programs and people fairly and equitably. Past decisions in one program, the milk pricing laws, have created winners and losers with family farms having the most at stake. What needs to happen to Federal milk marketing orders is equity and simplicity to eliminate the regional differences. Without reform, Wisconsin will lose almost one-half of our family dairy farmers over the next decade.

In addition, Mr. Secretary, the family farmers must be assured that other countries are not being given an unfair advantage or unfair access to our markets and we must expand our agricultural exports. To achieve these goals, USDA must actively monitor international agriculture trading agreements. While properly constructed trading agreements alone will not save the family farm, poorly monitored ones will harm their existence. Without detailed analysis and careful attention to the issues, I feel that family farms may in fact disappear forever. Mr. Secretary, USDA's actions on these issues will determine the future of the family dairy industry.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Mr. Secretary, with that warm welcome. [Laughter.]

Thank you. We appreciate your being here.

Secretary GLICKMAN. I am reminded of Senator Bumpers' joke which I have stolen from him and told about 4,000 times. I won't repeat it today.

But thank you very much, Senator Cochran.

Senator COCHRAN. It may be one of the few jokes of his you can retell. [Laughter.]

Senator GORTON. I did not know there was one.

Secretary GLICKMAN. If he has more, I would be glad if he called me this afternoon.

Senator COCHRAN. We better get back on the subject here. You may proceed.

STATEMENT OF SECRETARY GLICKMAN

Secretary GLICKMAN. Thank you. I want to thank you for your courtesy and hospitality.

I also would like to pay tribute to Senator Bumpers. I was in Lonoke, AR, Senator Bumpers, where we announced a water program that you had actually gotten started. The affection that people have for Senator Bumpers is higher than I have seen for about anybody in public life. So, I know that his contribution to his State is enormous.

In any event, I want to make a couple of comments.

DECREASES IN USDA OUTLAYS

One is if you look at the chart here, outlays in the Department of Agriculture for the last 6 years have clearly been coming down. There are a lot of reasons for that, but the prime reason is the reduction in entitlement spending: food stamps and farm programs. Food stamp reductions have largely taken place because of economic improvement and the resulting reduction in the numbers of people on the rolls and their length of time on the rolls, particularly for the last 3 years. Farm program spending also has come down largely because of congressional action related to AMTA payments.

So, the fact of the matter is that in the 1999 budget we have requested increases in EQIP, increases in conservation, and to fully fund crop insurance, but we have not asked for more money to fund the basic commodity programs because we are operating under the 7-year AMTA Freedom to Farm Act which has a ratcheting down of farm program expenditures every single year.

So, I do not want the impression to be left that there is a reduction on the farm side and an increase on the welfare side. Congress has made some decisions on the farm side to lock in reductions over the next 7 years, and I think by and large most farmers—not all, but most—think that that decision was an appropriate decision. And, we are implementing that the best way that we possibly can. The flexibility provisions of that farm bill have proven to be very positive.

Not every part of agriculture is doing well. Most farmers are doing better because interest rates are down. They are low because we have made progress on the budget. We also have made progress on inflation. I think that is a tribute to both the administration and Congress, but the fact is those lower interest rates have stabilized a lot of the slide on farm income that we saw in the 1980's.

SEVERE WEATHER PROBLEMS

But clearly, the Northern Plains regionally have the most serious problem in agriculture today. The Dakotas, Montana, the northern tier of States with the very severe weather problems, coupled with prices particularly in grains that have not been of an augmented level have caused serious problems there, and I understand that.

DAIRY PRICE ISSUE

In addition to that, dairy has not done as well as other segments of the American farm economy. Dairy prices today are better, but I cannot predict to you where they are going in the future. I think the basic formula price for last month was $13.30, which indicates some strengthening, but dairy producers have suffered a great deal and I think that that is a problem for us and we need to work on it. We have proposed milk marketing order reform, which is highly controversial, but at least we will get a national debate.

WEAKENED LIVESTOCK PRICES

A third issue is livestock. Livestock prices, while they have been strong the last few years, have weakened recently. Part of that has

to do with the Asia financial crisis. Part of it has to do with other factors.

CONSERVATION RESERVE PROGRAM

But without trying to be overly defensive, I think it is important to recognize that whether we are working on a conservation reserve program for example in Washington State to make sure that Senator Gorton's farmers are treated fairly under that CRP program or we are dealing with exports or other kinds of initiatives, the heart of the Department of Agriculture is in our efforts to preserve stable income and the health of production agriculture. We do a lot of other things as well, such as seeing to the sustainability of land and making sure that hungry people are fed.

But I take very seriously, coming from Kansas, my role in preserving the strength of production agriculture. A lot of decisions were made in the 1996 farm bill which changed farm policy, and perhaps we need to talk about some legislative issues. I want to make it clear that the heart of what we do is to preserve a strong farm economy out there in all sectors, all regions, and all commodities.

PRESIDENT'S BALANCED BUDGET

Let me just make a comment that we had to make difficult decisions in light of the Balanced Budget Act of 1997 and the President's commitment to a balanced budget, the first one in 30 years submitted. We had to make difficult decisions on resources in terms of where we provide them and how they are redirected. We did propose some new user fees. We absorbed certain costs and looked at our own business practices. Those efforts, combined with program reductions and reforms taken in prior years, have made a significant contribution to the President's balanced budget.

USDA's outlays, as you can see on this chart, are down by about 14 percent over the last 6 years, from $63 billion to a projected $54 billion.

Over this same period, employment, on the other chart, is down about 20,000 through reorganization and streamlining efforts. Today USDA is the smallest it has been since the mid-1960's. We are doing our part to reduce the deficit.

But notwithstanding those facts, there are serious challenges facing farmers, rural Americans, and the Nation and we cannot abdicate our role in that area.

CIVIL RIGHTS

I also want to emphasize to you the importance that the President and I place on improving USDA's civil rights performance. The necessary funding for civil rights-related activities contained in this budget, the largest increase in two decades in that area reflects that commitment. We are asking for funds to carry out recommendations of our Civil Rights Action Team and the National Commission on Small Farms that support our civil rights agenda. In total, we are requesting $250 million to invest in credit, outreach, and conservation programs relating to civil rights, plus funding to resolve discrimination cases that are currently pending.

Briefly, I want to go over the four major parts of the budget. The first one has to do with economic and trade opportunities.

CROP INSURANCE PROGRAM

The long-term viability of our farmers is now more dependent than ever on their ability to manage risks inherent in the market. This is what I call the post freedom to farm market, where the Government is not actively engaged in managing the supply and price of products. We believe that maintenance of a strong set of risk management tools is essential in this new situation, and that is why our budget provides for full funding of the crop insurance program. We will propose legislation to shift funding of certain crop insurance delivery expenses to mandatory funding to ensure maintenance of this vital program. There is no real safety net out there for most farmers except selling our products overseas and having an effective crop insurance program.

I admit to you that the crop insurance program is not perfect in all respects, but having it based on mandatory funding I think will give farmers some security that it will be there for a long time.

NATIONAL COMMISSION ON SMALL FARMS

Farmers and ranchers need credit to succeed. Our National Commission on Small Farms and our civil rights report emphasized that, driving home the point that improved access to credit creates opportunity for family farmers, in particular beginning and socially disadvantaged farmers.

For that reason, the 1999 budget provides more funding for farm loans. We have proposed doubling direct farm ownership loans to $85 million and increasing guaranteed loans. Under our budget, almost 3,500 beginning and small family farmers will be able to acquire or save their farms. The budget keeps direct and guaranteed farm operating loans at $2.4 billion to serve some 28,000 limited resource farmers.

GOVERNMENT DEBT FORGIVENESS

But I must tell you there is one other issue I urge you to deal with and that is that the 1996 farm bill contains an onerous provision which is a categorical ban on loans to farmers who have had Government debt forgiveness since the mid-1980's. Now, mind you, banks do not even do this. What the law says is that if you have had any kind of a write-down in the past, 10 years ago, you can no longer get a Government loan, a direct operating loan, a guaranteed loan, or the related farm loans that we have. So, that means, notwithstanding the redemption that we tend to believe that people should have, that once you have that impediment, you are forever barred from Government assistance. No bank has that kind of onerous requirement.

I admit to you that there were people back in the 1980's that took advantage of Government loans and abused the process, but since 1989 we have had between 75,000 and 80,000 people who have had write-downs and most of those people are doing OK now but they are forever barred from getting loans.

This is a very serious problem and one that has a monumental effect. It was raised by our Civil Rights Action Team, but it is a problem that affects every single State in this country. I am sure, Senator Kohl, you have had people who have had Government write-downs in the last 10 years. They are no longer eligible for Government farm credit assistance. We are denying a lot of small farmers access to credit.

We will ask Congress to replace this prohibitive standard with one that we think is based on common sense that will protect both taxpayers and hardworking, creditworthy farmers and ranchers. This is also one that we need to work on quickly because if we do not, we will lose more farmers because they will not be able to get credit assistance, guaranteed or direct credit.

AGRICULTURAL EXPORTS

Exports have never been more important to the health of the American agriculture. This is the other part of the safety net. We have to aggressively use our efforts to open new markets, maximize export opportunities, fight new obstacles to trade, particularly sanitary and phytosanitary restrictions being put on our products by other countries. We have been wrestling with the Asia financial situation. We have been extending export guarantees to key markets, keeping them open to our farmers and ranchers.

On that point but unrelated directly to our budget, I want to emphasize the critical importance to American agriculture of congressional support for IMF funding. The stability of these Asian countries to buy our products is in large degree due to stability of their currencies and their economic conditions, and it is unlikely that we will have much of a market there without that kind of stability.

For 1999 we have proposed spending nearly $6.5 billion for trade related activities, including a projected $4.6 billion for export credit guarantees to protect sales to Asia. Just this last week I announced that the Koreans were coming in for an additional $100 million of credit for hides and skins, Senator Burns, which had the cattlemen very, very interested.

Senator BURNS. It will not be my hide.

Secretary GLICKMAN. No.

Senator BURNS. That is the only one I am interested in right now.

Secretary GLICKMAN. OK. Well, I will not comment.

But anyway, the fact is that the export credits are a key way to deal with this issue.

The budget also proposes a flexible multiyear authorization for the export enhancement program.

RURAL DEVELOPMENT

We also believe that the programs dealing with housing, running water, electricity, and telecommunications are critical. They mean job opportunities. Overall the 1999 rural development budget will support about $9.8 billion in loans, loan guarantees, grants, and technical assistance, which is $300 million more than 1998 and $1.8 billion more than in 1997, largely due to reduced and stable interest rates. The budget supports the administration's Water 2000 initiative, homeowner initiative, and maintains rural rental

assistance to low-income families. I will not read all of the statement here, but the area of rural development is a very high priority to the administration.

AGRICULTURAL RESEARCH

Research is critical to the future economic growth of agriculture. Driven by publicly funded research, agricultural productivity has grown at an annual rate of 1.8 percent over the last 45 years. There have been all sorts of breakthroughs that I do not need to go into here. The budget increases the work we are supporting to identify and develop a better understanding of genes that are important to agricultural production and crop biodiversity. We also intend to increase our competitiveness in the global market, production efficiency, and ultimately our farmers' profitability through our research.

The budget emphasizes improving sustainable management systems to enhance the economic competitiveness of small farm producers and protecting the environment.

Marketing is more important to American agriculture than ever before, particularly protecting the health and well-being of American agriculture at home and protecting us from unfounded sanitary and phytosanitary barriers to trade. For example, we are making excellent progress in combating many plant and animal pest and disease programs such as brucellosis.

There are other budget increases that are useful in this area, in the area of pest detection, disease prevention, and border inspection. We have several proposals that will help farmers and ranchers stay competitive in an increasingly concentrated market, especially the meat and poultry markets. Our budget requests funds to carry out the organic certification program and broaden the pesticide data program.

NATIONAL FOOD SAFETY INITIATIVE

In connection with our goal for a healthy, safe, and affordable food supply, the USDA budget includes $46 million, roughly one-half of a Governmentwide increase of $101 million, for the President's national food safety initiative. This initiative will focus on enhancing the safety of imported and domestic fruits and vegetables, food safety education, modernizing our meat and poultry inspection systems, and developing information and tools to control a greater range of potential food safety hazards.

We are on our way to modernizing our 90-year-old meat and poultry inspection system. On January 26, 1998, or less than 2 weeks ago, 300 of the largest slaughter and poultry establishments, producing about 92 percent of all meat and poultry, implemented the HACCP system. These firms are using the latest science to identify and correct food safety hazards setting the framework for change.

For 1999 we proposed boosting food safety spending by $34 million to a program level of $710 million. The resources will allow us to maintain a frontline inspection work force providing rigorous science-based inspection while working to involve a greater range of food safety risks from farm to table. As you know, we have pro-

posed user fees in this area. I am well aware of the controversial nature of them. I dealt with them when I was in Congress.

My point is that, as I go around the country and talk to people, the food safety issue is perhaps the dominant issue that people talk to me about everywhere. So, in order to do what we need to do in the food safety area, we have proposed the user fees because without them we will have to either make major cuts in those areas or major cuts in a lot of other program areas. Funding for research and conservation needs to be maintained but we also have to keep our frontline meat inspectors on the ground.

Obviously, we are going to work with you to deal with this issue the best way we possibly can, but given the fact that the budget is going down, and we have a balanced budget, the old expression is something has got to give and I do not want the confidence that the public has in our food safety system threatened.

I will have to tell you this. We have the safest food supply in the world, bar none, but that is dependent on consumer confidence. People in the industry also understand that safe food sells. So, what we are doing with this is trying to ensure that we have the infrastructure in order to keep that public confidence as high as possible.

FOOD ASSISTANCE

In addition to that, not everybody has the advantages in this society. Low-income people still need food assistance. The budget requests full funding for the food stamps, child nutrition, and WIC programs to ensure that that takes place.

With respect to food stamps, we propose to restore food stamps to legal alien families, which include children, elderly, and disabled persons.

For WIC, we are requesting the funds to support 7.5 million recipients while we work to bring down the program's package costs. There are several other areas.

One area I would like to tell you about is our budget proposal for a new $20 million food recovery and gleaning initiative to provide community-based grants to help neighborhoods recover edible food and use it to alleviate hunger. The research we have done documents that 25 percent of the food produced every day in America is thrown away. Twenty-five percent of food that is prepared in this country is uneaten and thrown away, and a lot of that food can go to feed hungry people and to supplement the Food Stamp Program and other Government programs. These initiatives I think will help.

CONSERVATION

In the area of conservation, obviously we need to continue to have a vital, sustainable natural resource base. One of my top priorities is implementing the farm bill's conservation programs together with our State and local partners. To do so, USDA needs $825 million for the Natural Resources Conservation Service. That will help us to contribute to the administration's clean water initiative which will improve water quality in certain highly vulnerable watersheds that are impaired by agriculture.

I will have to tell you that those programs are much more farmer friendly than they have ever been in the past. Working cooperatively with State conservation districts, with RC&D's, and with other public and private bodies, most folks now believe that we have gone to a carrot approach rather than a stick approach when it comes to farmer-led conservation measures around the country.

We are making outstanding progress in our land conservation and cost share programs funded through the CCC.

On the CRP, we held our first signup last year under new environmentally focused rules. We have just completed another signup. The response has been impressive. There were mistakes made, but by and large we have tried to correct those mistakes as they have come to our attention. I mentioned that I was out in the Pacific Northwest correcting one of those mistakes in Senator Gorton's area. It had to deal with the environmental benefit index as it related to air quality.

I am pleased to report that in 1 year we have doubled the environmental benefits of CRP while at the same time saving taxpayers hundreds of millions of dollars, and we are doing similar things with the wetlands reserve program.

Another popular and vital conservation program, established by the last farm bill and funded through the CCC, is the Environmental Quality Incentives Program. The budget includes a $300 million amount for EQIP, a one-third increase over 1998 funding, which is critical to support the clean water initiatives. We also intend to manage EQIP to respond to recommendations made by the Civil Rights Action Team to increase participation by minority and low-income farmers and other underserved clientele.

CUSTOMER SERVICE AND PROGRAM DELIVERY

In the area of customer service and program delivery, we place high priority in this area. We are streamlining. We intend to go down to approximately 2,550 service centers. Right now we are about 2,700. And, we are collocating the county-based agencies into one-stop USDA centers. We are also consolidating the administrative functions that support the county-based agencies. Many times you would have one office in a county with an NRCS xerox machine, an FSA xerox machine, and a rural development xerox machine. I use that colloquially to talk about the fact that we have operated our farmer-based decentralized systems as separate units for far too long from an administrative perspective. We are developing a common administrative and computing environment for these agencies to achieve further efficiencies, and we have contracted with an independent consultant to examine what further steps, if any, we can take to improve the efficiency of our farm and rural program delivery system. And, that study is to be completed this year.

OFFICE OF THE INSPECTOR GENERAL

Our budget also includes an additional $22 million to support a Presidential initiative for our inspector general to crack down on abuse in our nutrition, rural development, and other programs. Our inspector general has had great success with a program called Operation Talon dealing with people who are fugitives who are get-

ting food stamps. That led the effort for prosecutions all over the United States. This is another very high priority for us. I might say that we have one of the most aggressive and energetic inspector general operations of any Federal agency.

So, I think to summarize in terms of our goal, to repeat it, because Senator Burns is here, our prime function is to protect the stability and security of America's food production capabilities. The budget is falling largely because there are fewer people on food stamps and the AMTA payment provisions of the Freedom to Farm bill have called for yearly reductions in farm program spending.

At the same time, we will fund whatever we need to fund to protect our markets overseas because we believe that is the ultimate safety net that American agriculture has, and in addition to that, we need a strong and aggressive crop insurance program to provide the safety net when disasters hit.

We also believe that funding for conservation programs and our food safety and security programs are necessary for the future of American agriculture as well.

So, I thank you very much, Mr. Chairman, for bearing with me during this conversation. I would be glad to answer any questions that you have.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Secretary. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF DAN GLICKMAN

Mr. Chairman, Members of the Committee, it is a privilege to appear before you to discuss the 1999 budget for the Department of Agriculture (USDA).

With the passage of the Balanced Budget Act of 1997 and the President's commitment to the first balanced budget in 30 years, we faced very tight funding constraints in developing the 1999 proposals for USDA. At the same time, our strategic plan contains goals and objectives we must achieve to meet the needs of the people we serve. These fundamental priorities include: increasing economic opportunities for family farms and for rural communities and expanding trade; providing more tools for the wise stewardship of our natural resources; feeding more needy children and families and raising consumer confidence in the safety of the Nation's food supply; and providing effective customer services and efficient program delivery and improving the Department's civil rights performance.

The discipline we imposed on the 1999 budget forced us to make difficult decisions to restrain, reduce, and redirect resources to focus on the priority goals we established. We have had to propose new user fees and contain and absorb certain costs. We thoroughly scrutinized our employment and business practices. As a part of the Department's continuing reorganization, we are implementing a field office streamlining plan which collocates the county-based agencies in one-stop USDA Service Centers and that will consolidate administrative support functions for the county-based agencies. We are developing a common computing environment for these agencies to optimize the use of data and equipment and improve our efficiencies across the agencies. The Department has also entered into a contract with an independent consultant to examine what further steps, if any, we can take to improve the efficiency of our farm and rural program delivery system. That study will be completed by September 1, 1998. These efforts, combined with program reductions and reforms taken in prior years, have made a significant contribution to the President's balanced budget submission to the Congress.

In addition to the improvements and strengthening in the economy, several factors account for the projected 14 percent reduction in our budget—from $63 million in 1993 to a projected $54 million for 1999. Farm programs are more market oriented today, significantly lowering outlays. The strong economy and welfare reform

lowered participation in our food assistance programs. Declining interest rates have led to large savings in rural credit programs and the shift to user fees in certain programs has contributed to deficit reductions. Over this period USDA employment will be reduced by over 22,000 staff years through our reorganization and streamlining efforts.

The President's balanced budget plan for 1999 contains a number of new governmentwide initiatives that include participation of USDA agencies, including:

—A Food Safety initiative for improving the Federal food inspection system from farm-to-table, through increased inspection, expanded research and consumer education, better food surveillance, and improved Federal, State, and local coordination.

—A Clean Water and Watershed Restoration initiative to achieve further progress in solving water quality problems and enhancing the environmental quality of agricultural and forest lands.

—A Land, Water and Facility Restoration initiative so that the Forest Service can better protect wildlife habitat, maintain recreation sites and preserve the national forests.

—A Climate Change Technology initiative to support research aimed at investigating mitigation tactics, including production practices which sequester greenhouse gases, to minimize the adverse effects of agricultural production practices on climate change.

—A Food Gleaning initiative to increase food recovery by one-third above current levels by the year 2000, providing a significant source of food to food banks and other non-profit institutions to help feed hungry people.

—A Law Enforcement initiative to provide funds and resources to crack down on fraud and abuse in the Food Stamp and other programs. This supports the President's commitment to assure that program benefits go only to those who are in need and eligible.

The President's budget proposes $57.4 billion in budget authority for 1999 for USDA compared to a current estimate of $55.9 billion for 1998. Budget authority for discretionary spending, which accounts for about 25 percent of USDA total budget authority, declines from $15.6 billion in 1998 to $15.2 billion in 1999. The request before this Committee for discretionary budget authority is $12.6 billion.

The budget also proposes legislation that affects the discretionary request before the Committee, including user fees for the Food Safety and Inspection Service; the Animal and Plant Health Inspection Service; the Grain Inspection, Packers and Stockyards Administration; the Farm Service Agency; and the Natural Resources Conservation Service. The budget also proposes shifting sales commissions for the crop insurance program from discretionary to mandatory spending. We will send this proposed legislation to the authorizing committees. If the entire package is enacted, it would lower the discretionary request to this Committee by $829 million.

The budget also proposes legislative changes in some mandatory programs, including restoring food stamp benefits to most legal aliens, reducing the Federal share of administrative funding provided to the States in the Food Stamp Program to prevent cost shifting, reducing the cost of the crop insurance program, capping cotton step-2 payments, providing a flexible multi-year cap for the Export Enhancement Program, and increasing the Environmental Quality Incentives Program, Rural Empowerment Zones, and a change in the formula for Forest Service payments to States.

Before addressing specifics of the budget, I want to emphasize the importance that the President has placed on our civil rights work at USDA; the priority is reflected in the budget. The President's budget calls for the largest increase in civil rights funding in two decades. For USDA, that means providing funding to carry out the recommendations of the Civil Rights Action Team (CRAT) as well as the recommendations of the National Commission on Small Farms which support our civil rights agenda. In total, we are requesting about $250 million for civil rights-related activities that would increase farm ownership and operating loans; increase loans and grants to construct housing for the Nation's farmworkers; support an integrated research, extension, and education competitive grants program for new technology adoption and transfer to small farms; eliminate disparities in funding and enhance the Department's cooperative efforts with institutions of higher education that are primarily devoted to the needs of minority students; and improve outreach and technical assistance to assure that all customers have full access to USDA programs and services, and to provide assistance to socially disadvantaged farmers and ranchers through a substantial increase in the Section 2501 outreach program. Also, we are requesting increased funds for more timely processing and resolution of complaints, as well as efforts to prevent disputes and discrimination.

FARM AND FOREIGN AGRICULTURAL SERVICES

The mission of the Farm and Foreign Agricultural Services area is to secure the long-term vitality and global competitiveness of American agriculture. Implementation of planting flexibility and other provisions of the Federal Agriculture Improvement and Reform Act of 1996 (the 1996 Act), in conjunction with strong export programs and sound trade policy, are helping us reach these goals. However, we remain concerned about the adequacy of the safety net for our producers and have been working to expand and improve programs which help producers manage their risk. We are also working hard to assure improved assistance and expanded opportunities for minority and limited resource producers in our farm programs.

Maintenance of an effective economic safety net for our farmers and ranchers is a major priority for our plans in 1999, particularly in our proposals for risk management. Last year we proposed legislation to make some modest improvements in the safety net which were not acted upon by the Congress. The proposed improvements included, among other things, provisions to permit extension of the terms of marketing assistance loans during periods of extraordinary market disruption; and the expansion of revenue insurance. These proposals deserve further consideration by the Congress.

The challenge of providing improved customer service with improved efficiency as resource constraints are tightened also remains a major focus of our efforts, particularly in the Farm Service Agency (FSA) and the other county-based farm conservation and rural development agencies. The independent study being conducted by a private consulting firm during 1998 of our county-based agencies will help us better assess county office workload and identify options to gain efficiencies while meeting customer needs.

Farm Service Agency

The consolidation of staffs and county offices, establishment of a common computing environment, and the convergence of administrative services at all levels of the county-based agencies, continue to be the focus of FSA streamlining efforts. FSA staffing has changed dramatically as a result of these streamlining efforts and workload changes brought about by the 1996 Act. FSA Federal and county staffing is projected to be down by over 500 staff years, from 17,267 staff years at the end of 1997 to 16,744 staff years at the end of 1998 as a result of buyouts, Reductions-In-Force (RIF's), and attrition. The 1999 budget for FSA salaries and expenses proposes a program level of $976 million, including $30 million earmarked for the establishment of a common computing environment in the service centers of the county-based agencies. The budget also incorporates a proposed increase in user fees to help offset some of the costs of providing information and other services to FSA clients. It is estimated that the budget will support a staff year level about 7 percent below 1998 levels.

Farm Loan Programs

Access to credit is one of the most important elements of success in farming. That point has been made in fairly dramatic fashion by USDA's Civil Rights Action Team and by the Small Farms Commission. Improved access to credit means more opportunities for beginning and small farmers and, in particular, members of socially disadvantaged groups. For that reason, the 1999 budget provides more funding for farm loans. Farm ownership loans would be increased to $85 million in direct loans and $425 million in loan guarantees, compared to 1998 levels of $45 million in direct and $400 million in guarantees. In terms of people served, this means that 3,500 beginning and small farmers will be given an opportunity to either acquire their own farm or to save an existing one—600 more than during 1998. About 1,000 of these farmers will receive direct loans and the rest will receive guarantees. The budget also provides for $2.4 billion in direct and guaranteed farm operating loans, which maintains the 1998 level of funding and would serve an estimated 28,000 beginning and small farmers about 12,000 of whom will receive direct loans.

The share of direct loans made at the reduced interest rate for limited resource borrowers would be continued at current levels about 61 percent for farm ownership loans and about 40 percent for farm operating loans. The budget also provides funding for emergency loans, credit sales, the boll weevil eradication program and credit for Native Americans.

The Administration will also be proposing emergency legislation to modify the 1996 Act prohibition on loans to borrowers who received debt forgiveness. It is unfair to deny these borrowers a second chance.

Commodity Credit Corporation

Changes over the last decade in commodity, disaster, and conservation programs have dramatically changed the level, mix, and variability of the Commodity Credit Corporation (CCC) outlays. CCC outlays are projected to total $8.6 billion in 1998 and $8.4 billion in 1999 and are projected to decline to a total of about $7.0 billion in 2003. Since the late 1980's, commodity program spending has declined dramatically, spending for ad hoc crop disaster programs has been virtually eliminated, and spending for conservation programs has increased and has become a major portion of CCC's outlays. Commodity program outlays account for about two-thirds of total CCC outlays in 1999, and they largely reflect the pattern of production flexibility contract (PFC) payments set in the 1996 Act. Outlays for the commodity programs are projected to decline from $6.0 billion in 1998 to $5.7 billion in 1999 and to $4.0 billion in 2003.

Conservation program outlays account for almost one-fourth of the CCC expenditures in 1999. The 1996 Act authorized direct CCC funding for the Conservation Reserve Program (CRP) administered by FSA and several new conservation programs administered by the Natural Resources Conservation Service (NRCS). CRP provides landowners annual payments and half the cost of establishing a conserving cover in exchange for retiring environmentally sensitive land from production for 10 to 15 years. The 1996 Act authorized the program through 2002 and set maximum enrollment in the program at 36.4 million acres. Current enrollment totaled about 28 million acres at the end of calendar year 1997. The budget assumes that the acreage goal will be achieved gradually. Other conservation programs funded by CCC but administered by NRCS include the Wetlands Reserve Program and the Environmental Quality Incentives Program (EQIP), which along with the Conservation Farm Option give producers incentives to create long-term comprehensive farm plans. The budget proposes to help meet critical water quality goals by increasing CCC spending for EQIP by $100 million in 1999 and $350 million between 1999 and 2003. Other new programs funded by CCC include the Wildlife Habitat Incentives Program which provides cost-share assistance to landowners to implement management practices improving wildlife habitat, and the Farmland Protection Program which provides for the purchase of easements limiting nonagricultural uses on prime and unique farmland.

Risk Management Agency

Implementation of the 1994 reform of the crop insurance program has been a major achievement for American agriculture. It has alleviated the need for ad hoc disaster assistance. About 63 percent of the insurable acreage nationwide is covered by the program, about 22 percent at the catastrophic (CAT) level of coverage, which is fully subsidized by the Government, and 41 percent at higher levels of coverage for which producers pay a portion of the premium. Producers may buy-up to 75 percent of normal production and 100 percent of expected market price or purchase a relatively new product, Crop Revenue Coverage (CRC), which provides protection against price declines even without a production loss. CRC already accounts for about 16 percent of the business.

While the reform legislation allowed for a dual delivery system with FSA providing CAT coverage and private insurance companies providing both CAT and buy-up coverage, the private insurance industry has demonstrated that it can handle the job alone and has been given that opportunity beginning in 1998.

There are 17 private insurance companies of various sizes participating in the program. Sales agents work for these companies, mostly on a commission basis, while loss adjusters are usually independent contractors. Companies sell policies that the Government reinsures. However, the companies are required to retain some risk of loss on the policies they sell, for which they may earn underwriting gains or incur underwriting losses.

Weather has played a big role in the program performance over the last few years. In 1997, the weather was particularly good and indications are that the program had a very favorable loss ratio of less than .80, which is well below the statutory requirement of 1.10. Consequently, the companies received underwriting gains based on the risk they retained. Under normal conditions, the amount of underwriting gains received by companies would have been far less.

The 1999 budget provides full funding of the crop insurance program, but proposes legislative changes to accommodate a shift in sales commissions for agents from discretionary to mandatory spending. This shift would consolidate all program spending into a single account and eliminate the possibility of the program being restricted by a limited appropriation of discretionary funds for sales commissions. In effect, the proposal is intended to fix a problem that dates back to the 1994 legislative reform of the program which divided the funding for company expense reim-

bursements between the mandatory and discretionary budgets for the sole purpose of meeting technical scoring requirements.

Because the shift to mandatory spending will require PAYGO offsets, the Administration will also propose various program changes, including a reduction in the loss ratio, a limit on CAT coverage to $100,000, and other changes. These changes are expected to take effect in 2000 because other program offsets are available for 1999.

It should also be noted that the Risk Management Agency is charged with the responsibility for risk management education. About $5 million is budgeted in the agency's mandatory account for this activity in 1999. The Cooperative State Research, Education and Extension Service and the Commodity Futures Trading Commission are assisting in the education program. This is expected to be an important part of helping producers adjust to the changes in price and income support programs that came about in the 1996 Act.

International Trade and Export Programs

The performance of U.S. agricultural exports was again robust in 1997, reaching the second highest level ever at $57.3 billion. While this was somewhat below the all-time high achieved in 1996, many positive developments did occur. It was the third year running in which agricultural exports topped $50 billion, and new export records were established for both intermediate and consumer-oriented products. And, for the 37th consecutive year; U.S. agriculture made a positive contribution to the Nation's trade balance, with exports exceeding imports by $21.5 billion.

The value of agricultural exports to the Nation's economy is very significant, but for the agricultural sector, exports are critical. Today, U.S. agriculture's reliance on exports as measured by gross receipts is approaching 30 percent, a level which is twice as high as for the U.S. economy as a whole. With improving productivity and slow growth in domestic demand, the future prosperity of our farmers and ranchers is increasingly linked to strong export markets. Recent changes in domestic farm policy also have reinforced the importance of global markets and have made export performance a critical component of the farm safety net.

For these reasons, USDA's 5-year strategic plan has established the expansion of global market opportunities for U.S. agricultural producers as one of the Department's primary objectives. With this mandate, we are continuing our aggressive efforts of recent years to bolster export competitiveness, open new markets, and expand exports. The 1999 budget request supports these efforts by providing a total program level of nearly $6.4 billion for the Department's trade and export promotion activities.

The CCC export credit guarantee programs are the largest of the Department's export promotion activities. These programs make an important contribution to meeting our export expansion objective by facilitating sales of U.S. agricultural products to buyers in markets where credit is necessary to maintain or increase sales. The value of these programs is being demonstrated this year. In recent months, we have made available to countries in southeast Asia and the Republic of Korea a total of $2 billion of export credit guarantees. This action is helping these countries tackle their import financing problems and allows them to continue to purchase agricultural products from the United States. By doing so, continued access to these important Asian markets will be ensured.

The 1999 budget adopts a new approach for presenting the annual program levels and budget estimates for the guarantee programs. These estimates will now reflect the actual level of sales expected to be registered under the programs for which CCC guarantees will be issued. This change will result in more realistic estimates of the costs of these programs and will increase the accuracy of the CCC budget estimates. The actual level of guarantees to be issued during the course of the year will not be limited by the budget estimates but will instead be determined by market conditions and program demand.

Based on this new approach, the budget projects a total program level for CCC export credit guarantees of $5 billion in 1998 and $4.6 billion in 1999. These levels are substantially above sales registrations in 1997 and prior years, due primarily to the recent boost in programming to Asian countries.

The Export Enhancement Program (EEP) has seen very little activity during the past 2½ years because of world commodity supply and competitive conditions. Nevertheless, the program remains in place and can be reactivated whenever market conditions warrant. To ensure our ability to do so, the budget provides a program level of up to $320 million for EEP in 1999, an increase of $170 million above this year's level.

In conjunction with the budget, we will be submitting proposed legislation to provide a flexible, multi-year program level authorization for EEP, which will apply to

the 1999 to 2003 period. The proposal will authorize a total program level of $1.2 billion for EEP over the 5-year period and will provide administrative discretion to the Department to determine the annual level of funding for EEP. Any funding that is not used in 1 year will remain available for use in subsequent years. However, the annual level of programming will continue to be subject to the Uruguay Round export subsidy reduction commitments. The proposal would generate approximately $1.4 billion in savings during the 5-year period that will help to offset increased funding proposed in the budget for other mandatory programs.

The pace of programming under our other subsidy program, the Dairy Export Incentive Program (DEIP), has increased significantly during the past year. This has helped to move additional dairy products into export markets and modify price fluctuations here at home. The budget projects a somewhat reduced level of programming under DEIP in 1999 because of a projected tightening in the domestic supply situation; however, the actual level of programming will be determined by market conditions at that time.

The budget continues funding for the Market Access Program (MAP) at its maximum authorized funding level of $90 million. In recent years, the Department has taken steps to make MAP more targeted and friendly to small businesses. These efforts continue and, in 1998, for the first time export promotion assistance will be provided to small companies or cooperatives only.

The Public Law 480 foreign food assistance programs remain a mainstay of efforts to assist developing countries meet their food import needs and develop long-term trading relationships. For 1999, the budget requests a total program level of $979 million for Public Law 480 programs, which is expected to provide 2.8 million metric tons of commodity assistance to recipient countries.

For the Foreign Agricultural Service (FAS), the budget provides direct appropriated funding of $146 million, an increase of $6 million above the 1998 level. The budget includes a proposal to establish a buying power maintenance fund to assist FAS manage unanticipated changes in the costs of its overseas operations. These changes result from exchange rate losses or gains and overseas inflation which are difficult to predict when budget estimates are prepared. Under the proposal, a revolving fund would be established which can be drawn upon to meet higher costs resulting from exchange rate losses. Alternatively, exchange rate gains would be credited to the account and would be available for use to meet future cost increases. This proposal responds to a request of the Conference Committee on the 1998 Agriculture Appropriations Bill.

The budget also proposes that certain FAS Information Resources Management costs, including the operating costs of the CCC Computer Facility, will no longer be funded through a reimbursable agreement with CCC. Instead, these costs will now be funded through FAS appropriations. With this change, this funding will shift from mandatory to discretionary spending and will no longer be subject to the annual limitation on CCC reimbursable agreements established by the 1996 Act.

RURAL DEVELOPMENT

Rural development creates opportunities for people who live in rural America—the kind of housing they occupy; access to such amenities as running water, electricity, telecommunications; and the strengthening of local economic activity that affect their prospects for finding a job that will allow them to earn enough income to have a decent standard of living. The Department's rural development programs help rural residents achieve these benefits by providing financial assistance and by working with rural communities through partnerships, empowerment and technical assistance. Under this Administration, special attention has been given to serving those rural communities that have been underserved in the past—where poverty is persistent and unemployment remains high.

Overall, the 1999 budget reflects the Administration's strong support for ensuring that rural Americans have the ability to take advantage of the same opportunities for economic growth that exist in urban areas. It supports the Administration's Water 2000 initiative which targets resources to the estimated 2.5 million rural residents who have some of the Nation's most serious drinking water availability, dependability, and quality problems. It supports the Administration's National Home Ownership initiative to increase home ownership, and maintains rural rental assistance for low-income families and individuals, many of whom are elderly women. It continues programs that provide infrastructure for meeting electric, telecommunications and a variety of other community needs. Further, it encourages business and industry activity in rural areas through loan guarantees that create or save jobs.

About $129 million of the rural development program funding would be targeted to Empowerment Zones and Enterprise Communities (EZ/EC). The EZ/EC initiative

reaches communities with the most persistent poverty and other economic adversity, which have developed strategic plans for development. In addition, the budget proposes to provide $20 million annually in mandatory spending to fund additional grants for 5 new rural Empowerment Zones.

About $715 million of the $2.2 billion in budget authority included in the 1999 budget for USDA's rural development programs would be funded under the provisions of the Rural Community Advancement Program (RCAP). RCAP was enacted in the 1996 Act. It provides flexibility for transferring funds among programs in order to meet local priorities. It also provides for the development of strategic plans to help guide the development process. The Department's proposal assumes the full flexibility to transfer funds among accounts as authorized in the 1996 Act, which is an important tool in tailoring assistance to meet the unique needs of each rural community.

Rural Utilities Service

Without the Department's rural utilities programs, much of rural America would have been unable to obtain, at reasonable prices, basic infrastructure such as electricity, telephone, and water and waste disposal services. In earlier times, progress was measured in terms of the number of farms and rural households receiving any level of services. Today, the primary need is to assure quality infrastructure and service at a reasonable price so that rural America can keep pace with modern technology and clean water requirements.

The water and waste disposal programs are one of the Administration's highest priorities. The budget provides $500 million in grants, essentially the same level as provided in 1998. In addition, the budget proposes a $73 million increase in the direct loan program. This level of funding will allow the Department to continue making significant progress towards meeting the goals of the Administration's Water 2000 initiative. Water 2000 targets resources to the estimated 2.5 million rural residents who have some of the Nation's most serious drinking water availability, dependability, and quality problems—including the estimated 400,000 rural households lacking such basic amenities as complete plumbing.

The 1999 budget provides for $1.65 billion in electric and telecommunications loans, about $55 million above 1998; however, there will be a shift in how this assistance will be provided in order to meet growing demand. The budget proposes greater reliance on direct Treasury rate and Federal Financing Bank insured loans. Legislation will be proposed to authorize direct Treasury rate loans under the electric program. This authority is currently available under the telecommunications program.

The budget calls for $175 million in loans to be made by the Rural Telephone Bank, the same as 1998. The Administration continues to work with the industry towards its goal of privatizing the bank. In 1999, the bank is proposed to become a "Performance Based Organization," in order to establish its commercial viability prior to being fully privatized in 10 years or less.

With regard to the distance learning and medical link program, the 1999 budget includes about $15 million for grants and $150 million in loans at the Treasury rate, requiring a total budget authority of $15.2 million. In 1998, Congress provided a budget authority of $12.5 million which the Department converted into a grant program of about $12.5 million and a loan program of $150 million at the Treasury rate. This program encompasses two of the most useful applications of modern telecommunications—education and medical services. Applications for this program are well in excess of current funding. The increase in grant funding will provide vitally needed assistance to some of rural America's most remote and poorest communities.

Rural Housing Service

USDA's rural housing programs have been important in improving the availability and quality of housing in rural America since the 1970's. The programs reach those who cannot otherwise afford decent, safe, and sanitary housing, and those who cannot obtain credit from other sources to achieve home ownership.

The 1999 budget supports $4.4 billion in rural housing loans and loan guarantees, an increase of about $200 million over 1998. This includes $1 billion in direct loans and $3.1 billion in guaranteed loans for single family housing. Direct loans are available only to low-income families, low-income meaning less than 80 percent of area median income. Guaranteed loans are available to families up to 115 percent of area median income. Further, the Administration will propose legislation to make guaranteed loans available for refinancing existing direct loans—$100 million is included in the $3.1 billion overall funding level for this purpose.

For rural rental housing, the budget includes $100 million in direct loans and $150 million in guaranteed loans. These levels represent a reduction of $29 million

in direct loans from the amount available for 1998, but a significant increase in guaranteed loans, which were first introduced in 1997 and are limited to about $20 million in 1998. The guaranteed loan program has operated on a pilot basis to date but has shown great potential, particularly where it can be used to leverage other Federal, State and local or private financing. It serves a higher income clientele than the direct loan program, yet reaches some lower income families and individuals, and operates at far less cost than the direct loan program.

USDA currently has a portfolio of about 18,000 rural rental housing projects which contain about 470,000 units. About one-half of these units receive rental assistance payments. Tenants in units receiving rental assistance pay 30 percent of their income for rent. Rental assistance, provided through 5-year contracts, makes up the difference between what the low-income tenant pays and the rent required for the project owner to meet debt servicing requirements. The average income of tenants receiving rental assistance payments is $7,300. In 1999, contracts on an estimated 37,500 units are expected to expire. The budget provides for the renewal of these contracts and a limited number of contracts on additional units, and includes full funding of all new farm labor housing projects. No rental assistance is provided for projects financed with guaranteed loans.

The 1999 budget also provides for $97.1 million in loans and $72.9 million in grants for various specific purpose housing programs. This includes $32 million in loans and $13 million in grants for farm labor housing projects, an increase of $17 million in loans and $3 million in grants over last year's levels. This would allow the agency to finance 658 new units and rehabilitate 199 units of existing housing for farm workers. The increase is proposed as part of USDA's CRAT report.

Rural Business-Cooperative Service

Jobs are the cornerstone of all economic development—rural as well as urban. The Department's role in creating jobs and improving the infrastructure in rural areas is both financial and supportive. Despite budgetary pressures, it is important that the job creation and retention programs in rural areas remain adequately funded.

The business and industry (B&I) loan program is one of our best means to help foster the growth of rural businesses including cooperatives. The cooperative form of business is seeing a resurgence throughout rural America, agricultural producers are embracing cooperatives for a variety of purposes including: value-added processing, to return more of the value of farm products to producers; as a safety net, to protect against price fluctuations; and for the traditional use of purchasing farm supplies. Many "new-wave" cooperatives are being organized and operated in a manner which is quite different from the historic cooperative principles. The 1996 Act helped to improve the effectiveness of the B&I loan program in developing cooperative businesses by authorizing loan guarantees to assist farmers and ranchers to purchase start-up capital stock in processing cooperatives where the cooperative will process the commodity being produced by the farmer. The 1999 budget maintains the direct loan program at $50 million, while the guaranteed loan program would be funded at $1 billion, including $200 million that will be directed to cooperative-owned businesses. Further, using the flexibility available under RCAP, the Department expects to fund a $1 billion guaranteed loan program during the current fiscal year.

Our investments in cooperative businesses, however, will not provide the expected returns unless there also is an investment in understanding the "evolving" cooperative form of business. Therefore, the budget also proposes an increase of $2 million in funding for research on cooperatives. These funds will be used to form cooperative agreements primarily with State departments of agriculture, universities, and colleges to conduct research on rural cooperatives. This funding will help provide vitally needed research and information at a time when available Federal resources in this area are dwindling.

Through the intermediary relending program the Department provides low interest (1 percent) loans to a variety of public and private organizations who, in turn, provide loans to finance business facilities and community development projects in their local areas. By providing assistance through local organizations the Department ensures that funding is used on the basis of local priorities. The budget maintains support for the intermediary relending program at $35 million, the same level as 1998.

Rural business enterprise grants may be provided to public bodies, Indian tribes, and nonprofit corporations to finance and facilitate development of small and emerging businesses in rural areas. The budget provides $40 million for rural business enterprise grants in 1999, a small increase from 1998.

The budget provides for an increase in the Alternative Agricultural Research and Commercialization (AARC) program from $7 million in 1998 to $10 million in 1999.

This program is particularly useful in meeting the needs for capital to commercialize innovative value-added products from agricultural and forestry materials and animal by-products.

Salaries and Expenses

The Department's rural development programs are delivered through about 800 field offices, located within USDA Service Centers. The delivery system has been noticeably improved by the introduction in 1997 of a centralized system for servicing single family housing loans, which will save taxpayers $250 million through 2000 and allowed staff resources to be redirected to other urgent needs. Further, the rural development programs are included in our administrative convergence efforts for county-based agencies.

The 1999 budget includes $529 million for the administration of USDA's rural development programs including AARC. This amount includes funding for an estimated 7,138 staff years, which is a decrease of about 150 below 1998.

FOOD, NUTRITION AND CONSUMER SERVICES

USDA's farm and food safety programs help ensure a safe and affordable food supply, while the nutrition assistance programs help to ensure that low-income families are adequately nourished. The Food Stamp, Child Nutrition and WIC (the Special Supplemental Nutrition Program for Women, Infants and Children) Programs are the primary programs for carrying out the Nation's food assistance policy. The 1999 budget request combines better management with increased funding to advance the Administration's war on hunger and demonstrate our commitment to improve the nutritional levels of low-income households.

The Food Stamp Program will be funded at a program level of $23.9 billion in 1999. The Administration proposes to restore Food Stamp benefits for vulnerable groups of legal immigrants. Upon signing the 1996 welfare law, the President pledged to work toward reversing the harsh, unnecessary cuts in benefits to legal immigrants that had nothing to do with moving people from welfare to work. The President believes that legal immigrants should have the same opportunity, and bear the same responsibility, as other members of society. The 1999 budget would provide Food Stamp benefits to 730,000 legal immigrants at a cost of $535 million in 1999 and $2.5 billion over 5 years. The proposal expands access to Food Stamps for families with children, people with disabilities, the elderly, and refugees and asylees. Legislation will also be proposed to address the allocation of administrative costs between the Temporary Assistance for Needy Families program, Medicaid, and the Food Stamp Program which will result in a savings of $180 million in 1999.

We are working to improve Food Stamp program integrity, and are requesting funds to improve accuracy in the food stamp certification process to achieve our annual performance plan of reducing error by at least 4 percent. The annual plan calls for an increase in food stamp overpayment collections of 5 percent a year. Achieving these goals will reduce program costs by over $60 million. We will also continue our integrity efforts to reduce State over-billing of State administrative expenses and trafficking.

Child Nutrition will be funded at a program level of $9.6 billion, an increase of $0.4 billion from the 1998 estimate. This increase is needed for increased free meal claims in the School Lunch Program, increased school and child care enrollment and food cost increases. Child Nutrition Programs, both school and community based, help keep children nourished and ready to learn. The Child Nutrition Programs are particularly well positioned to provide nutrition assistance directly to children from low-income families, easing the transition from welfare to work for their parents and to support the President's initiative to assure reading skills by the end of the 3rd grade.

With portions of the Child Nutrition Programs expiring at the end of 1998, we will also be seeking reauthorization legislation. We want to work with Congress to improve program integrity, reduce paperwork burden, support the President's child care initiatives, and foster improved dietary practices. As stated in the annual performance plan, we will work to assist school food service management to implement better business systems and increase the proportion of correctly claimed free meals. And we believe we can better meet the Recommended Daily Allowance and Dietary Guideline requirements for meals served, as well as improve the nutritional intake of school children. School programs are demonstrated to be a very effective way to shape the nutritional choices not only of our children, but their families as well.

WIC will be funded at $4.2 billion, 4 percent more than the 1998 appropriation and sufficient to support 7.5 million recipients. Improving Federal and State program management will be a major focus of our activities for 1999, including continued efforts to reduce the overall cost of WIC food packages by 10 percent by 2002.

WIC State agencies have been highly successful in keeping unit food costs down for the past decade primarily through rebates on infant formula, and now we will be working together to expand other promising cost control activities. We are also undertaking a series of management reforms to improve WIC program integrity.

The Commodity Assistance Programs will be funded at $317 million, including $96 million for the Commodity Supplemental Food Program, $45 million for the Emergency Food Assistance Program (TEFAP), $140 million for the Nutrition Program for the Elderly, and the budget also requests $15 million for the farmers' market program, an increase from the $12 million provided in 1998.

The budget includes $20 million for a new gleaning initiative that would be used to support community-based grants and other incentives to help local neighborhoods recover edible food before it is lost and use it to help alleviate hunger and distress. With billions of pounds of food going to waste, we anticipate that the initiative will yield large returns in helping needy families through temporary hard times, supplementing food stamps for some; and for others providing necessary sustenance on an occasional basis.

The budget also requests funds for research on nutrition assistance programs. The Administration places high priority on receiving accurate, relevant, and timely information from research and evaluation on the food assistance programs. To ensure that the policy and research needs of the nutrition programs are most effectively met in the context of administering the food programs, the Administration strongly believes that the Food and Nutrition Service (FNS) is the appropriate agency to oversee and administer these research funds.

For Food Program Administration, the primary funding source for administrative management of the Nation's food assistance programs and the Center for Nutrition Policy and Promotion, we request $111.8 million, an increase of $4.2 million. The increase will fund existing responsibilities at current levels and provide for increased Civil Rights effectiveness. In addition, the requested increase will improve food assistance program management, particularly financial system integrity. Also, funds will be used for work on year 2000 Dietary Guidelines for Americans.

FOOD SAFETY

On July 25, 1996, a milestone was reached in our strategy for making significant gains in improving the safety of America's food supply. The final rule for Pathogen Reduction and Hazard Analysis and Critical Control Point (HACCP) Systems for meat and poultry products was published. This rule modernizes a 90-year old inspection system and lays out the Administration's commitment to improve food safety and reduce the incidence of foodborne illness by 25 percent by the year 2000 as stated in the Department's strategic plan.

On January 27, 1997, the first implementation date for the final rule was reached. All meat and poultry establishments now have in place standard operating procedures for sanitation to ensure they are meeting their responsibility for preventing direct product contamination and maintaining sanitary conditions. In addition, slaughter establishments have begun testing carcasses for generic E. coli to ensure their processes are under control with respect to prevention of fecal contamination. On January 26, 1998, the 300 largest establishments, which produce 92 percent of inspected meat and poultry products, were required to have HACCP systems in place. In addition to HACCP systems in place, those establishments that slaughter and those that produce ground product will have to meet Salmonella performance standards, thereby implementing a major portion of the science-based inspection system. By January 25, 2000, all the provisions of the rule will be implemented in all establishments.

The final rule sets an important framework for change, but is only part of our overall strategy to improve the safety of our meat and poultry supply. On January 25, 1997, the President announced the National Food Safety initiative. The initiative includes seven components for improving the Federal food inspection system from farm-to-table. Key components include expansion of the Federal food safety surveillance system, improved coordination between Federal, State, and local health authorities, improved risk assessment capabilities, increased inspection, expanded research, consumer education, and strategic planning. The initiative reflects a high level of coordination between agencies within USDA and the Department of Health and Human Services. For 1999, we plan to build on these investments which Congress supported in 1998. Continued investment in meat, poultry, and egg products inspection activities will enhance public health by minimizing foodborne illness from these products.

For 1999 the budget requests $623 million, an increase of $34 million over the 1998 current estimate. The additional resources will allow the Department to ad-

dress a greater range of food safety risks from farm-to-table. At the farm level, we will work with producers to develop voluntary measures that producers can utilize to reduce pathogenic contamination of animals prior to presentation at the slaughter plant. In addition, we will provide support to State educational efforts that will improve the ability of producers to respond to new demands that slaughter and processing establishments may make with the implementation of HACCP. In order to improve inspection we will provide additional technology and training to Federal inspectors and provide special assistance to State programs to facilitate their transformation to HACCP. Another key component of the Department's strategy in 1999 will be targeted food safety education. In a coordinated effort between the public and private sectors product specific and audience specific messages that address food safety risks relevant to such groups will be developed, evaluated, and disseminated.

The 1999 budget request proposes legislation to recover the full cost of providing Federal meat, poultry, and egg products inspection. We estimate that this proposal would generate approximately $573 million in new revenues in 1999 and thereafter. The budget requests $150 million in appropriated funding to convert the program to user fees and to maintain State inspection programs. States administering their own inspection programs would continue to be reimbursed by the Federal government for up to 50 percent of the cost of administering their programs and the special assistance proposed for 1999.

Requiring the payment of user fees for Federal inspection services would not only result in savings to the taxpayer, but would also ensure that sufficient resources are available to provide the mandatory inspection services needed to meet increasing industry demand. The overall impact on prices as a result of these fees has been estimated to be less than one cent per pound for meat, poultry, and egg products production. The implementation of the user fee authority would be designed to be fair and equitable, promote accountability and efficiency, and minimize the impact on the affected industries.

NATURAL RESOURCES AND ENVIRONMENT

The 1999 budget reflects the Department's continuing commitment to voluntary, cooperative and well-financed conservation programs that provide farmers with the financial and technical assistance they need to remain competitive while not putting our vital natural resources in jeopardy. The 1996 Act recognized the need for this balance and dramatically expanded USDA's conservation mission by creating new or refocused existing conservation programs. The effects of programs like the Conservation Reserve Program and the Environmental Quality Incentives Program (EQIP) are already being felt as we focus on protecting mainly environmentally sensitive lands that need our attention while returning fertile lands to production.

As farmers rely more on markets and utilize greater planting flexibility, it becomes even more critical that we maintain and strengthen our technical expertise in the field, where it is needed. The Department's field office streamlining initiative has been successfully implemented so far and has enabled NRCS to continue to provide high quality technical assistance to farmers with proportionately fewer management and support staff. In so doing, NRCS has reduced headquarters staff by over 50 percent, reduced State office staff by almost one-third, and consolidated a number of administrative functions, which will continue under the administrative convergence initiative for USDA's county-based agencies.

The request for appropriated funds for NRCS totals $826 million which includes $650 million for conservation technical assistance and water resources assistance. This will fund critical NRCS technical support needed to meet the ambitious goals set out in the agency's Annual Performance Plan. For example, in 1999, NRCS will protect more than 4 million acres of cropland against excessive erosion and complete conservation management systems on 6.4 million acres of grazing land. The budget will also provide the resources needed by NRCS to maintain and enhance the conservation partnership that has grown over the years not only with conservation districts but also with farmers, ranchers, and other private landowners. As we approach the 21st century, this partnership becomes more vital when we consider how much more we can accomplish for the environment when we work together.

The budget supports this continuing shift toward greater cooperation and includes an increase of $20 million for incentive payments to those States that are successful in increasing the level of non-Federal support for the private-public partnership. To further leverage the Department's conservation dollar, we are also proposing to collect $10 million in user fees for certain types of products or technical services that are available in the private sector or that provide mostly private benefits. Fee struc-

tures and applications will be developed by NRCS with direct input from State offices and other groups or individuals that are directly affected.

The technical assistance budget also includes the NRCS contribution to the goal of improving water quality in certain highly vulnerable watersheds where it is impaired by agriculture. Through the proposed interagency Clean Water and Watershed Restoration initiative, in order to strengthen local leadership capacity, NRCS will direct $20 million to Competitive Partnership Grants. These funds will be awarded to locally-led institutions such as conservation districts or watershed councils, primarily for the hiring of non-Federal watershed coordinators who will take an active role in problem identification, goal setting and watershed restoration planning. An additional $3 million is also provided for monitoring work to help target resources and document baseline conditions and performance. In addition to these appropriated funds, the budget includes an increase of $100 million for EQIP as proposed legislation in 1999 to provide added support to the Clean Water initiative as well as to meet other Administration priorities in the Civil Rights area.

In the watershed planning and construction area, the Department will continue efforts that have begun in improving how these limited resources are allocated. Only the most cost-effective and environmentally beneficial projects will be funded with an emphasis on nonstructural management systems. We will also continue to examine approved watershed plans to eliminate those projects that are now infeasible in order to reduce the backlog of unfunded work. Beginning in 1999, technical support for NRCS' watershed planning and construction activities will come from the agency's conservation technical assistance program which will reduce the number of NRCS accounts that include payroll items. Also, we will try to help sponsors with implementation costs by allowing some of the funds to be used to subsidize rates of municipal loans administered by the Rural Utilities Service. Increases are provided for additional planning activities and for educational assistance to watershed sponsors to make them more aware of the need to examine and possibly repair older systems.

Finally, the Department's 1999 budget continues its support of the 290 authorized Resource Conservation and Development (RC&D) areas. It will also be sufficient to support the approximately 25 new area authorizations that I hope to announce later this year.

RESEARCH, EDUCATION, AND ECONOMICS

The budget recommendations for the programs administered by the four Research, Education, and Economics (REE) mission area agencies reflect the importance of scientific, technological, and economic knowledge on future performance of the agricultural sector in the U.S. economy, and its competitiveness abroad. Driven by publicly funded research in Federal laboratories, land-grant universities, and private sector investments, agricultural productivity has grown at an annual average rate of 1.8 percent over the past 45 years. Yet hunger and malnutrition remain a problem for too many people in the U.S., and throughout the world, and with the projected population growth rates, there are moral challenges and economic opportunities to make our agricultural system even more productive in the future. Federally-supported agricultural research and education is needed to promote key Departmental objectives related to expanding agricultural-based economic and trade opportunities for all producers; ensuring a safe and affordable food supply; and protecting natural resources for the benefit of current and future generations.

The ability of U.S. agriculture to help meet world food requirements relies on research and technology to enhance productivity growth, develop a safer food supply, and address critical human nutrition needs. Increased support for research and education will also lead to a better understanding of how agricultural production impacts the environment and how effective management practices can be applied to mitigate harmful effects. Federal support for research conducted at land-grant universities and private laboratories encourages these institutions to invest in science and technology needed to address critical issues at a level beyond what they could do on their own. Publicly supported research and extension programs provide the basis to complement much of the work carried out by the private sector.

The activities proposed under REE aim to achieve the five general goals for research and extension set forth in the mission area strategic plan and in the agencies' performance plans: (1) an agricultural production system that is highly competitive in the global economy; (2) a safe and secure food and fiber system; (3) a healthy, well-nourished population; (4) an agricultural system which protects the environment; and (5) enhanced economic opportunity and quality of life for American citizens. These goals are derived from the purpose statement for agricultural research in the 1996 Act and the advice we have received from users and stakeholders

represented on the National Agricultural Research, Education, and Extension, and Economics Advisory Board.

Total funding requested for REE agencies in 1999 is about $1.8 billion. Within this total, research in ARS would be increased by $32 million, funding for Federal facilities would be reduced by $43 million, funding for university research and extension would be reduced by $9 million, and support for economic research and agricultural statistics would be increased by $3.1 million. ARS will be redirecting about $35 million from a number of ongoing research projects to support programs and initiatives of high national priority.

An increase of $6 million in the ARS budget is provided for research efforts to reduce the incidence of emerging diseases and exotic pests that threaten the safety of the U.S. food supply. Of the total, $3.7 million will be used to enhance the development of diagnostic tests, vaccines, and other immune strategies that prevent the outbreaks and spread of exotic and zoonotic diseases, and pathogens. The remaining $2.3 million will be used to prevent the introduction of emerging plant diseases and pests.

Enhanced genetic diversity supported under the Department's Food Genome initiative can reduce the likelihood of losses due to rapid environmental changes or epidemics of pests or pathogens. An increase of $3.5 million in the ARS budget is provided to support the continued development and maintenance of living germplasm collections for crops, animals, and microbes. New funding for this initiative is also proposed in the Cooperative State Research, Education, and Extension Service (CSREES) budget. Under proposed legislation, competitive grants totaling $10 million will fund selected projects that enhance the genetic knowledge base resulting in improved agricultural production and crop biodiversity. Also, within the total CSREES National Research Initiative (NRI) funds, $16 million is proposed for this initiative.

The budget for ARS includes an increase of $14 million for the President's Food Safety initiative. Of the total, about $8 million is provided for pre-harvest food safety research to design effective control programs to prevent the spread of bacteria and parasites from animals to humans, and to improve post-harvest handling practices for fruits and vegetables. The remaining $6 million is provided for post-harvest research in support of the HACCP model implemented by the Food Safety and Inspection Service. Efforts will be focused on developing methods to reduce the pathogens and toxins infecting our food supply, including fruits and vegetables, and meat and poultry products. The $11 million increase proposed in the CSREES budget for food safety research and education programs will complement the ARS efforts. Of the total CSREES request, $3 million is proposed to assess the impact of food handling and storage practices on selected population groups, and $3 million of the NRI funds is proposed for research to improve the understanding of disease-causing pathogens. The remaining $5 million targets education programs for consumers in support of HACCP implementation for meat and poultry products.

An increase of $5.5 million in ARS will support the development of substitute pest management technologies to replace pesticides that are slated for elimination under the new Food Quality Protection Act (FQPA) regulatory standards. The research will also support the Department's commitment to encourage the adoption of Integrated Pest Management (IPM) practices on 75 percent of the Nation's crop land by the year 2000. The CSREES budget also includes funding to support the Departmental goal on adoption of IPM practices. Increased funding of $15.5 million is proposed for research and extension programs on improved IPM systems to provide pest control solutions that are economically and environmentally sound. All IPM activities in the Department will be coordinated by the newly established Office of Pest Management Policy which will work closely with EPA to promote safer pest control practices and coordinate data and analysis to support informed decision-making on pesticide regulations.

The ARS budget also includes a $10.5 million increase in support of the Presidential Initiative on Human Nutrition. The overall objective of the human nutrition program, conducted at the six ARS Human Nutrition Research Centers, is to enhance nutritional means to promote optimum human health and well-being for individuals through improved nutrition. The impact of nutrition on childhood growth and development will be given special emphasis. Of the total request, $1.5 million is also proposed to expand the sample size of the ongoing dietary survey to provide more accurate and up-to-date information on food consumption patterns for pesticide tolerance review activities mandated under FQPA.

Additional emphasis is placed on addressing pressing environmental issues. An increase of $7 million in the ARS budget is proposed in support of the President's Climate Change Technology Initiative. This will also complement the climate change research undertaken by the Forest Service. Efforts will be aimed at minimizing the

adverse effects of agricultural production practices on climate change, as well as using agricultural practices to mitigate global warming. An additional $2 million is provided under the President's Clean Water and Watershed Restoration initiative to deal with the recent Pfiesteria outbreak in the Chesapeake Bay.

ARS also plays an important role in the Administration's initiative to restore the South Florida Everglades ecosystem. The budget includes an increase of about $1 million to develop mechanisms to control the spread of invasive Melaleuca trees and $4 million for construction of a quarantine facility to house the study of biological control agents. Construction of this facility was designated by the Administration's South Florida Ecosystem Task Force as a top priority to ensure prompt restoration of the Everglades National Park.

The budget includes about $36 million for facility construction and modernization projects, a reduction of $43 million from 1998. Of the total, $2.5 million is provided for modernization of the Beltsville Agricultural Research Center at Beltsville, Maryland. The request includes $17.7 million for modernization of facilities at three ARS Regional Research Centers. Remaining funds provide $5.6 million for the renovation of facilities at the National Animal Disease Center at Ames, Iowa, $3.5 million for ongoing renovation projects at the Plum Island Animal Disease Center at Greenport, New York, and $1.4 million for the renovation of the Grain Marketing and Production Research Center at Manhattan, Kansas.

The budget request for CSREES is reduced by $9 million from the 1998 appropriation. Within this total, however, there are proposals for enhanced programs to support a number of high priority research and education projects and Presidential initiatives. Offsetting reductions are proposed for selected research and extension formula programs. Current law gives States broad authority to determine research program priorities and provide funding for selected projects accordingly. In addition, the Administration recommends legislative changes to permit States to use up to 10 percent of the Hatch Act and Smith-Lever formula funds for research and extension interchangeably.

The CSREES budget includes an increase of $33 million for the NRI, bringing funding for this competitive grants program to $130 million. NRI grants support a wide range of environmental, health, food safety, and nutrition programs through a competitive, peer-reviewed grant process that is open to all of the Nation's scientists. NRI encourages breakthroughs and new approaches to problem-solving in biological sciences that equip scientists with powerful new tools to meet continuing and emerging challenges in agricultural and food sciences.

CSREES also proposes a $2 million increase to develop and improve sustainable agriculture systems which require fewer off-farm inputs. The Sustainable Agriculture Research, and Education program, which has been funded at $8 million annually since 1995, is proposed to be funded at $10 million. Research and education grants under this program are awarded competitively at the regional level.

In response to the recommendations of the Civil Rights Action Team and the National Commission on Small Farms, the CSREES budget also contains proposals of $27 million for selected activities to strengthen programs at minority-serving institutions and to enhance opportunities for small farm and minority producers. The request includes $4 million to address problems that are unique to small farm producers. Proposed legislation which authorizes grants for integrated research, extension, or education activities, is requested to carry out this program. Other proposals include $12 million for the renovation and construction of the 1890 facilities, $5 million to support additional extension agents under the Extension Indian Reservation Program, $3.5 million to expand the extension and teaching capacity at the 29 Native American Institutions, and $2.5 million to enhance the education capacity at the Hispanic Serving Institutions.

The CSREES budget includes $2 million for continued expansion of the REE Data Information System begun in 1996. An increase of $1.2 million above the 1998 appropriated level is provided to continue development of an interactive information system with the capability to manage administrative, financial, and management-related data for any research, education, extension, and economics activities. This information will be used for GPRA reporting and evaluation requirements.

The Economic Research Service (ERS) is an important source of information on food and agricultural related issues, and the economic and social science research conducted by ERS helps both policymakers and producers make informed decisions. The budget request for ERS is $56 million, a decrease of $16 million below the 1998 appropriated level. The 1998 appropriation included $18 million for food program studies previously funded within FNS. The 1999 budget reflects this funding within FNS, which we believe is the appropriate agency to conduct this research.

The ERS budget includes increases to support economic analysis on three high priority issues. Funding included as part of the President's Food Safety initiative

would support work with the Centers for Disease Control and Prevention to more accurately assess the costs of foodborne illness and the economic consequences of efforts to improve food safety. ERS would also collaborate on the development of risk assessment models to identify where pathogens enter the food chain and where control efforts would be most cost effective. A second increase would support an assessment of the Department's role in meeting the information needs of small farmers. More specifically, ERS will assess how information needs vary by the type of operation, how well USDA and private information services meet the needs of small farmers, and what reforms and modifications in the Department's current market information programs are needed in order to better serve small farmers. Finally, an increase is included to support research on electric utility deregulation in order to assess the potential impacts of deregulation on the Department's rural utility loan programs, the competitiveness of rural businesses and communities, and rural households.

The National Agricultural Statistics Service (NASS) is also an important source of information. NASS estimates and forecasts are relied upon by a wide range of participants in the agricultural economy, and NASS has earned and maintained an unmatched reputation for accurate, unbiased, and timely information. The implementation of the 1996 Freedom to Farm Act has made reliable and timely information about production, supply and prices even more critical to participants in agricultural markets.

This year for the first time, NASS is conducting the Census of Agriculture which has previously been conducted every 5 years by the Department of Commerce. The census serves as the main source of local level data about American agriculture, the only complete enumeration of farmers, and an important benchmark for USDA's program to produce national and State estimates. Overall, the budget for NASS reflects a net decrease of $11 million, from $118 million to $107 million, due to the cyclical funding needs of the Census. With the proposed NASS budget, 98 percent of total national agricultural production will be included in NASS' annual estimates program, an increase of 5 percent above 1998.

The NASS budget includes increases for two follow-on surveys to the 1997 Census of Agriculture: (1) the Agriculture Economics Land Ownership Survey (AELOS) which has historically been conducted as a follow-on survey to the Census of Agriculture since the 1950's; and (2) a national survey of the fast growing aquaculture industry for which very little data is currently available. For NASS' Agricultural Estimates program, an increase of $1.4 million is included to expand the current pesticide use surveys supporting implementation of FQPA to include the fast growing nursery and greenhouse industries. In addition to providing pesticide use data for an important sector of agriculture, this initiative also supports the CRAT recommendation to address concerns about farmworker exposure to pesticides and the Administration's IPM initiative.

MARKETING AND REGULATORY PROGRAMS

The Marketing and Regulatory Programs contribute to increased domestic and international marketing of U.S. agricultural products by: (1) reducing international trade barriers and assuring that all sanitary and phytosanitary requirements are based on sound science; (2) protecting domestic producers from animal and plant pests and diseases; (3) monitoring markets to assure fair trading practices; (4) promoting competition and efficient marketing; (5) reducing the effects of destructive wildlife; and (6) assuring the well-being of research, exhibition, and pet animals. Consumers, as well as the agricultural sector, benefit from these activities.

Beneficiaries of these services already pay a large percentage of the program costs through user fees. And, we are proposing legislation to recover over $31 million in new user fees from those who directly benefit from USDA services. New license fees are requested to recover the cost of administering the Packers and Stockyards Act except for the one-time restructuring costs. Expanded user fees are requested for developing grain standards and developing methods for measuring grain quality, and for certain animal and plant inspection activities.

The budget includes an increase of $11 million for the Agricultural Marketing Service (AMS). Modest increases are requested for expanding foreign market news reporting and expanded reporting of livestock and poultry markets in accordance with recommendations set forth by the Advisory Committee on Agricultural Concentration. The proposed rule to implement the Organic Foods Production Act was published on December 16, 1997. In order to implement this new program, we are requesting additional funds to accredit organic certifiers. Program costs will be recovered through user fees. Funding for the Pesticide Data Program (PDP) was provided within AMS in 1998 after being funded through the Environmental Protection

Agency (EPA) for 1997. For 1999, program increases are requested to initiate a rapid response capability necessary to support EPA's data requirements under FQPA. As part of the President's Food Safety initiative, an increase of $6.3 million is requested to broaden the scope of PDP to include microbiological testing of fruits and vegetables.

For the Animal and Plant Health Inspection Service (APHIS), the budget contains $10 million in new user fees and a redirection of $12 million from APHIS appropriations for the cotton growers' share of boll weevil eradication to a USDA loan program. This redirection in boll weevil eradication allows an appropriations decrease without a decrease in program operations. Program successes in brucellosis eradication allow an $8 million redirection to higher priority activities to help the agency comply with international trade agreements. APHIS anticipates that all 50 States will reach brucellosis Class "Free" Status by the end of 1999. The budget assumes increased cost sharing from beneficiaries of Wildlife Services activities. Also, this budget supports activities that would increase agricultural exports. It maintains funding for our important data gathering and risk analysis used in negotiations concerning sanitary and phytosanitary trade barriers and restrictions on genetically engineered products entering world markets. Funding increases are provided for Pest Detection activities such as Agricultural Quarantine Inspection at the borders. APHIS will likely inspect upwards of 85 million passengers potentially carrying banned agricultural products into the United States.

The budget requests an increase in available resources of $4.8 million to strengthen the Packers and Stockyards (P&S) programs of the Grain Inspection, Packers and Stockyards Administration (GIPSA). The increased funding will enable GIPSA to address more of the recommendations of the Advisory Committee on Agricultural Concentration related to livestock and poultry marketing. Specifically the agency would: (1) hire additional staff to monitor and analyze packer competitive practices and the implications of structural changes in the meat packing industry; (2) expand poultry compliance activities; and (3) install electronic filing equipment to reduce financial reporting costs for stockyard owners and packing house operators. P&S programs will be able to conduct upwards of 1,950 compliance investigations in 1999. Legislation will again be proposed to authorize a dealer trust similar to that of the existing packer trust. The legislation would require dealers to maintain trust assets covering the value of livestock inventory and accounts receivable due from the sale of livestock until livestock is paid for. This proposed trust would be a valuable tool in assisting the recovery of payments for unpaid sellers. Finally, this budget proposes to fund the one-time costs of $3.0 million associated with restructuring the P&S programs. The restructuring will strengthen P&S programs' ability to investigate anti-competitive practices and provide greater flexibility and efficiency in enforcing the trade practice and payment protection provisions of the Act.

Funding for grain inspection is maintained at the 1998 level and GIPSA expects to officially inspect 260 million metric tons in 1999. The budget proposes to recover the cost of standardization and methods development through increased inspection fees.

DEPARTMENTAL MANAGEMENT ACTIVITIES

Several offices are responsible for Departmental management activities. These offices provide leadership and administrative support to USDA agencies. The 1999 budget provides the resources necessary for these offices to enhance their leadership, coordination, and support the Department's Strategic Plan Management initiatives to: ensure that all customers and employees are treated fairly and equitably, with dignity and respect; improve customer service by streamlining and restructuring the county offices; create a unified system of information technology management; and improve financial management and reporting.

As indicated previously, this request reflects a number of priority funding increases to carry out the recommendations contained in the report of the Department's Civil Rights Action Team. In both 1997 and 1998, the Congress increased funding specifically for certain civil rights activities within Departmental Administration. These activities will continue. The 1999 budget includes an increase of $6.3 million for civil rights and other activities. These resources are needed to meet the Department's strategic objective of ensuring that all employees and customers are treated fairly and equitably with dignity and respect. The funds will support additional staffing to improve personnel services and assistance to USDA agencies, including ethics compliance; to improve outreach to USDA customers including support for the new USDA Office of Outreach that will assure all customers, especially underserved populations, have full access to USDA programs and services; and to

enhance management-employee relations that support early resolution of employee grievances and conflicts within USDA.

The Office of the General Counsel (OGC) provides critical legal support and advice to the Department and its agencies. An increase is proposed in 1999 to facilitate the processing and adjudicating of civil rights complaints by expanding the Civil Rights Division in OGC.

The Office of the Chief Information Officer provides policy guidance, leadership, and coordination to USDA's information management and technology investment activities. The proposed increase for 1999 includes $1.5 million for further development of the Department's information technology capital planning and investment control programs and the USDA information architecture. USDA is also taking a strong management approach to effectively respond to the challenges of year 2000 remediation and we fully expect that all mission critical systems will be compliant by no later than March 1999.

The Office of the Chief Financial Officer (OCFO) provides overall direction and leadership in the development of modern financial management structures and systems. In addition, the OCFO is responsible for implementation of the Government Performance and Results Act (GPRA). Additional funds are requested for 1999 to strengthen the Department's capability to provide cost accounting information for services provided, particularly with regard to implementing GPRA.

The request includes additional funds to continue the implementation of the USDA Strategic Space Plan for the Washington metropolitan area. This plan has been tailored to meet the needs of USDA based on the projected staff levels at the Washington headquarters and to provide a safe, efficient work place for our employees. The Beltsville facility will be ready for occupancy in early 1998. The design for the first phase of the South Building renovation was completed and a construction contract is expected to be awarded in February. The design for phase 2 of the modernization is now underway and scheduled to be completed during 1998. The 1999 request includes funds for the construction of phase 2.

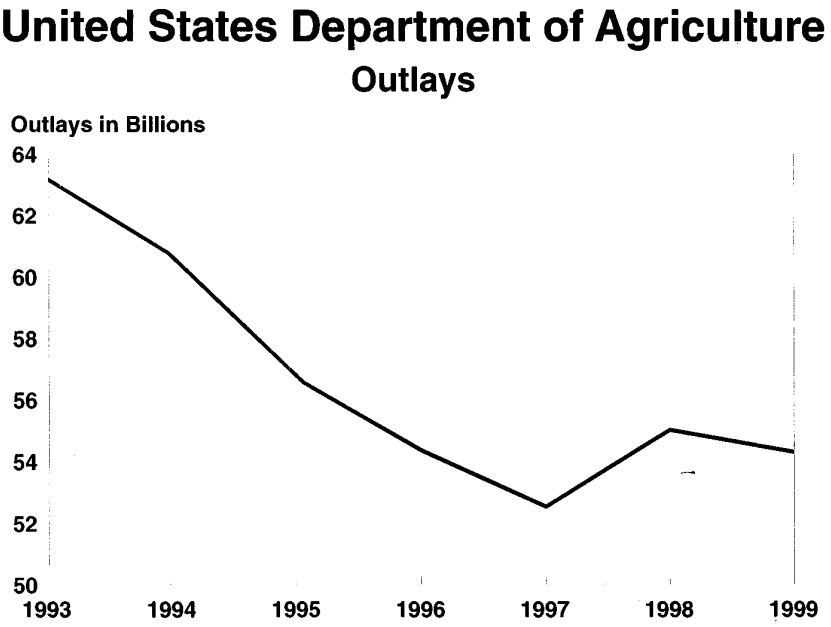
The Office of the Chief Economist advises the Secretary on policies and programs related to U.S. agriculture and rural areas, provides objective analysis on the impacts of policy options on the agricultural and rural economy, and participates in planning and development programs to improve the Department's forecasts, projections, and policy analysis capabilities. The proposed increase would be used to continue USDA's initiative to provide enhanced weather and climate data for agricultural areas. This initiative includes modernization of USDA's weather and climate data acquisition equipment to allow USDA to continue to provide data to and receive data from the National Weather Service, and implementation of the second phase of the National Agricultural Weather Observing Network which will manage the collection, quality control, and dissemination of the weather and climate data in agricultural areas.

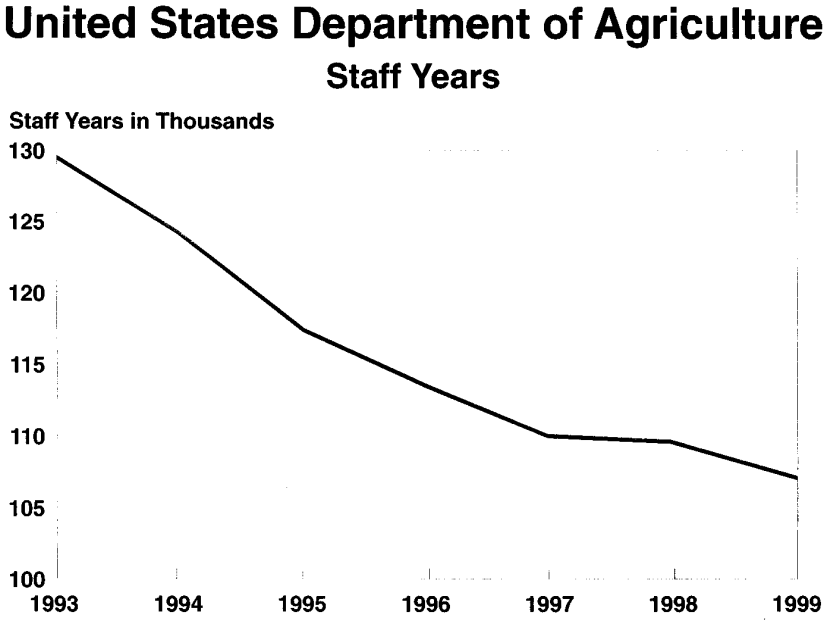
An increase is proposed for the Office of Risk Assessment and Cost Benefit Analysis in support of the President's Food Safety initiative. Additional funding is also included for the Commission on 21st Century Agriculture. The Commission is conducting a comprehensive review and assessment of the future of production agriculture in the U.S. and the appropriate role of the Federal Government in support of production agriculture.

An increase is proposed for the Office of Inspector General (OIG) including $21.7 million to support a Presidential Law Enforcement initiative. Included in the initiative is funding for OIG to expand activities to crack down on fraud and abuse in the food stamp and other nutrition programs. In this area, estimates indicate that over $50 million a year in food stamps goes illegally to convicted felons and prison inmates, and that a sizable number of retailers who accept food stamps make money from them illegally. OIG's recent pilot effort, Operation Talon, has been extremely successful. In the 24 metropolitan areas around the country included in the pilot, Operation Talon resulted in the arrest of over 2,200 fugitive felons and the savings of millions of dollars to the U.S. Treasury. This initiative will allow OIG to expand these efforts nationwide.

In addition to food stamp fraud, these funds will also enable OIG to dedicate more resources to rural rental housing programs, and disaster and health and safety programs. Health and safety of food from production to the consumer is of special concern because of such highly visible emergencies as contaminated strawberries in the School Lunch Program and the tainted meat in the food distribution chain resulting in the recall of 25 million pounds of ground beef from public consumption.

That concludes my statement, I am looking forward to working with the Committee on the 1999 budget so that together we can meet the needs of our clients and at the same time balance the Federal budget.





OFFICE OF THE INSPECTOR GENERAL

Senator COCHRAN. Mr. Secretary, you mentioned the Office of Inspector General. I just wanted to bring up the fact that I had a

meeting with the inspector general in my office yesterday to talk about some of these initiatives.

One thing which we discussed was the authority that we had written into the agriculture appropriations bill I think in 1996 giving our OIG access to forfeited funds or funds that were forfeited to the Government by reason of actions taken by this office so that we would not have to appropriate as much money to operate that office in the future. But for some reason or another, the Department of Justice has blocked access to those forfeited funds. I wonder if you would take it up with the Attorney General and find out what is going on. For 2 straight years, we have had that authority in the law, but the Department has prevented its being implemented.

Do you know anything about that problem?

Secretary GLICKMAN. Not any more than you have just stated, although I have talked to Mr. Viadero, as my staff has, and I will follow it up with the Attorney General. The fact that it is in the law—and I think the law is pretty clear—we need to work this out.

Senator COCHRAN. Well, I would like to work with you if you feel that we can be of any specific help in getting cooperation from the Department of Justice on that subject.

ASIAN FINANCIAL CRISIS

On another topic, the Asian financial crisis is something that is being talked about because it concerns us in agriculture with respect to pressure on markets for U.S. agriculture commodities in that part of the world. Many of these countries are major markets for U.S. agriculture commodities such as soybeans, poultry, beef, cotton, and others.

What is the situation with respect to our access to those markets, whether we are going to sustain losses in sales in that part of the world? What about the use of our Federal programs such as GSM credit guarantees in helping to deal with that problem?

Secretary GLICKMAN. I dispatched a team to Asia: our Under Secretary, Gus Schumacher, and the head of our Foreign Agricultural Service, Lon Hatamiya. They were in virtually every country in Asia. Their assessment is basically that the crisis could reduce U.S. agricultural exports between 3 to 6 percent from levels where it would have been had there been no crisis. Much as this loss will be in Korea and Indonesia, which is expected to account for the lion's share. I do not think they expect very much impact at all with Japan or China, Hong Kong, or the other nations.

Now, we have just made available about 2 billion dollars' worth of CCC export credit guarantees to the Republic of Korea and five Southeast Asian countries. That action is helping to ease liquidity constraints. A lot of these people could not even get letters of credit because the banks would not issue them in some of the areas. So, this is the highest priority for us right now in terms of the farm sector, to make sure that those markets remain open to us.

It is my understanding that there is no statutory limit on the amount of GSM credits that we can provide. It is a budget question determining how much of a loss there will be, and we obviously have to work with OMB on this particular issue. But it is my goal

to use that provision of the law aggressively in order to ensure that goods keep flowing.

Now, some of the other countries in the world are extremely unhappy with our use of these export credits—Australia, for example, I think their term for us was—how did they characterize it? Avaricious looters. The Americans were avaricious looters moving into a market which they believe perhaps was traditionally their own. The fact of the matter is the use of our credits is perfectly consistent with our obligations under all international trade arrangements.

Again, these are not subsidies. These are Government guaranteed bank credits, a commercial credit. But this is at the heart of what we are doing in this particular area.

As I mentioned just briefly, the livestock industry, which used to only export 2 or 3 percent of their product—but which now exports up to about 10 percent—is very much affected by this, pork and beef particularly. But the poultry industry has been a little more on historical trend to both Hong Kong as well as Eastern Europe.

We are going to aggressively use our credit programs. Obviously we will have to look at the potential for taxpayers' losses in this particular area, but I would say that is the biggest line of defense right now for our exports. And it is not limited by the budget estimates.

By the way, we have thought that we would use about—let's see. What are we talking about? About $5.7 billion this year?

Mr. DEWHURST. $5 billion this year, $4.6 billion next year.

Secretary GLICKMAN. But that is based on what we considered the demand to be. That is not a cap. The level could go up if their utilization—and our desire is to move as much product as we possibly can.

Senator COCHRAN. I think Mr. Dewhurst responded to you that the plan was to use up to $5 billion this year and $4.6 billion next year. Is that your understanding of the forecast?

Secretary GLICKMAN. I would just say that is an estimate, though. It is not a cap.

Mr. DEWHURST. That is right. That is an estimate of our use of that authority, but it is not a limit. We could go above that number if that is what the situation requires.

FEDERAL CROP INSURANCE FUNDING

Senator COCHRAN. Speaking of limits, one of the caps that is proposed in the President's budget request is on the cotton program, proposing to save $110 million. This savings, as I understand it, would fund the Federal crop insurance sales commissions. And, there is another cap that is supposed to save an additional $48 million.

These are troubling to those of us who come from cotton producing States. We worry about why the administration has singled out the cotton industry to impose these caps to help fund the crop insurance program. If enacted, the competitiveness of our cotton products may be harmed, particularly in light of this Asian financial crisis, making sales more difficult.

Have you undertaken to assess what the effect of these caps would have as a practical matter on the marketability of U.S. cotton in the overseas markets?

Secretary GLICKMAN. I would ask Mr. Collins.

Mr. COLLINS. Yes, Mr. Chairman; we have looked at that. You are right. It would hurt our competitiveness somewhat. Our estimate is that a total loss of sales might be a couple of hundred thousand bales as a result of these caps, $140 million cap in fiscal year 1999. We would have essentially $193 million total that we could spend in the year 2000 and beyond.

I might point out just one thing, though, that for every dollar that we spend in step 2 payments on the export side, we are spending $2 to support domestic mills. There has been very little evidence that that $2 spending on the domestic mills has really made that much of a difference in domestic mill use.

But overall, yes, there would be some effect on our export competitiveness.

CSREES RESEARCH PROGRAMS

Senator COCHRAN. One other proposal in the budget that troubles me considerably is zeroing out Cooperative State Research Education Service research programs and the reduction of formula funds for the Hatch Act, Smith-Lever, McIntyre-Stennis cooperative forestry research.

What is the rationale for proposing such significant reductions in formula research and extension programs? These enable the States to meet local priority needs, to set some goals for helping students, things like 4–H Club activities, others that are at the heart of rural communities and small schools around the country. I worry about the approval of that. I do not think we are going to approve that. Why do you propose it?

Secretary GLICKMAN. First of all, let me say with respect to both the cotton step 2 program, as well as this program, we obviously are going to work with you to try to devise the best dollars and language that we can get under the circumstances.

The step 2 program has been the subject again of a serious amount of OIG audits and investigations. So, we need to work together to make sure we enhance our competitiveness, but at the same time have a program that gives the taxpayer a good bang for the buck and is not prone to being misused. I think we hopefully can do that.

On the formula funding, obviously this is something else that relates to the total budget picture. We do not anticipate that the proposed reductions in the formula program will have a materially negative impact on activities carried out at the State level. States will have full discretion to fund their research and extension activities that they consider to be of high priority, and the reductions in Federal funding can be offset with modest increases in State and local funding, less than 1 percent I believe, the total amount.

So, there are a lot of pieces of this puzzle. There are some increases in the research budget in other areas as well. We will work with you on this.

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Mr. Secretary, thank you very much for your statement, a big part of which I, of course, agree with. But Senator Cochran has touched on something that is becoming increasingly important to me because I have just been studying it a little bit.

But a couple of years ago, as best I could tell, we were putting about $1.3 billion into research each year. Does that sound like about a right figure, Mr. Dewhurst?

Mr. DEWHURST. Yes.

Senator BUMPERS. When you consider we spend about $40 to $45 billion a year over at the Pentagon to make things explode and then we spend, which everybody would agree with, roughly $15 billion at NIH for medical research, but when you consider the fact that we have roughly 435 million acres of arable land in the lower 48 and we are taking 2 million acres a year out for highways, urban sprawl, housing, shopping centers, and so on, and we are adding 2 million people to the population every year, and when you consider the addition of people to the population every year, 2 million, taking 2 million acres out of cultivation and we are spending $1.3 billion on research, that seems frankly like a pitifully small amount.

Would you comment on that?

Secretary GLICKMAN. My personal reaction is I agree with you. We have to deal with the priorities in the total budget process, and working together, we do our best to try to make sure those priorities are an adequate amount.

There are some increases on the research side of the budget. We have put some additional money into human and food genome research as well as the Pfiesteria and other key problem areas, but the total dollars have not been going up.

I would say a couple of things here. If you had to ask me is every bit of agriculture research we are doing necessary or is there duplication of research being done at various universities around this country, I would say probably there is some duplication of research and not every bit of agriculture research that is being done is necessarily serving the good as much as it could.

We do have an outside advisory group that is looking at our facilities now and trying to see if there is a way that we can better do our research job less expensively. It is difficult to close down a research facility, as you know.

Senator BUMPERS. I want you to close all the others. I do not want you to close the ones in Arkansas.

Secretary GLICKMAN. That is right.

Overall, I do not think we spend enough in agriculture research.

Senator BUMPERS. We obviously do not.

Secretary GLICKMAN. That is a personal item, but we have to do the best we can and we have to make the best of the resources we have.

Senator BUMPERS. We have a gigantic train wreck that is going to happen probably long after I am dead, but you can see it developing and we are not really addressing it. That is the reason I raise that sort of macro, long-term problem.

Secretary GLICKMAN. Let us just take a few areas. How do we increase yields without using more pesticides, herbicides, fungicides, particularly in massive areas of both the arid area of the

United States but also in the developing areas of the world. That is obviously one key area. How do we produce more nutrition in the crops that are grown, how do we protect production agriculture and still not have land wash away and blow away.

As you look down the next 30 or 40 or 50 years in terms of crisis problems, how do we deal with global climate change, which I know is controversial, but I suspect that it is going on and we have to protect American agriculture in that process rather than just say it is not happening and we do not want anything to do with it. We have to make sure we do adequate planning, and that means research activities as well. So, we need to spend the money to do it.

Senator BUMPERS. Mr. Secretary, what kind of food safety inspection do we have on imported fruits and vegetables? I have never really known.

Secretary GLICKMAN. The FDA is essentially responsible for that. They do some spot inspections.

Senator BUMPERS. I will save that. They will be here, so I will save that question for them.

Secretary GLICKMAN. I would say they are rather limited in amounts, and that is one of the reasons the increase in the President's budget is to provide more resources for them.

Senator BUMPERS. I just will make one observation—two observations.

No. 1, in connection with the train wreck that I have described, we have a piece of that problem which is slightly different in my State. The Mississippi alluvial aquifer which covers a good portion of Mississippi, a lot of Arkansas, a little of Missouri, the southern part, northern Louisiana. I had been successful in getting money to study the depletion of that aquifer. Those studies have been completed.

RICE PRODUCTION

As you know, we produce roughly 43 percent of all the rice produced in this country. Rice is very water intensive, and we have been depleting that aquifer for rice growing for many, many years now. We have reached the point where if something is not done, rather dramatically done, by the year 2015, rice production, because of the loss of that aquifer, will be so much lower, and by the year 2020, there will be no rice grown in my State, virtually none.

I felt so strongly about it, I went over to talk to the President about it, and of course, coming from Arkansas, he was fully familiar with it and put some money in his budget request to start dealing with it.

All I want to say is it is a $1 billion problem. In the budget, the President asked for $13.5 million to initiate a program that the Corps of Engineers—now the Corps does not like agricultural products. They are not prohibited from doing them, but they do not like them. They are going to have to learn to like them because this is not just a problem in my State. This is a problem that is developing everyplace, for example, the Ogallala aquifer that covers the Plains States. That aquifer is going to disappear too.

So, what we are proposing to do is to divert surface water from the rivers to the rice fields. I tell you that simply because the Corps of Engineers is going to have to get actively involved, even though

they would rather not, and the Department of Agriculture is going to have to help in coordinating these efforts and helping us determine where the most critical areas are.

Now, finally, Mr. Secretary, let me laud you by saying I think you have done a superb job. You have been a very responsive Secretary. I have never called, I have never asked for anything that I did not get a fast response.

FOOD SAFETY INSPECTION SERVICE

But I must say when it comes to the Food Safety Inspection Service, the one big disagreement I have had with the Department is the way the *Hudson Foods* case was handled. I have been familiar with that company since I ran for Governor in 1970 when it was just doing a few million dollars a year, until it became last year a $1.5 billion business. Let me just say what my concern is and ask you to respond to it.

What Hudson Foods had was one meat packing—they are big in the turkey and poultry business. That is all they are. They built a meat packing company just to accommodate Burger King. It was a state-of-the-art facility. There is no question but E. coli was found in the plant. There is not any question that the Secretary of Agriculture, the Food Inspection Service had to move. They had to do something to find out about it.

But what happened, I really felt that these were gratuitous, inflammatory, and unnecessary statements made that caused Hudson to have to sell a good company, built over a 30-year period, and they had no choice but to sell at what I have been told is $300 million less than the fair market value of the company. The publicity was so pervasive and so volatile they could not survive it.

Yet, the E. coli that was found in that plant came from another USDA-inspected beef slaughtering plant. The question was why should Hudson have had to bear the brunt of it when the E. coli that came into that plant came from another FSIS-inspected facility, which so far as I know, till this day has never been named, and yet Hudson had to bear the whole brunt of it. It seems to me that USDA and FSIS should have taken the hit on the very fact that this beef came in from another inspected plant which Hudson had relied on. Hudson was relying on FSIS to make sure that the beef they got from these other packing plants—they bought from about 15, but they were all inspected. They had the right to rely on the safety and the efficacy of that beef.

Secretary GLICKMAN. Well, first of all, let me say that I am somewhat limited because there has been a U.S. Attorney investigation, and I do not know if there is a grand jury looking at this.

Senator BUMPERS. Well, I was not aware of that. I am not trying to prejudice the case.

Secretary GLICKMAN. I cannot talk about the specifics of that case.

E. COLI

The only thing I can tell you is this, that I think we have learned a lot from that episode. E. coli was either nonexistent or we had not identified it as recently as 15 years ago. It is new. It is virulent, it kills, and it is a troublesome problem, much more than a

lot of other food safety problems. The fact is that we are learning about this and how to deal with these kinds of problems. The companies are learning as well how to manage their systems in order to keep problems from happening. We have to regulate that process. So, I cannot tell you today that everything we did was perfect in that context.

But I would tell you this, that I have had some very successful meetings with the meat and poultry industry as a result of the new HACCP rules that went into effect. The new HACCP rules changed the way that they and we do business so that no longer do you wait until you find a problem in a piece of meat that has gone out in the countryside before you take action. You try to deal with the systems approach so that you test and the company itself focuses on those critical systems at every stage of the operation.

Right now the focus is primarily on the packers, slaughterers, and processors. Restaurants are beginning to use this system as well. We obviously need a farm-to-table system that involves production agriculture and involves the consumers because they are the last line of defense.

Hopefully with the new system there will be a process that will provide greater public safety so unsafe products will not be distributed. We will discover hazards inside the operations of the plant, and at the same time we will be involved with the companies in a way that still preserves our arm's length regulatory approach but in a cooperative way to try to find a problem when it occurs early on.

So, Senator, I cannot tell you that I would do it exactly every iota of the way we did it before, but I will tell you this, that this issue is one that is going to grow in magnitude and complexity, the concern about food safety. What we have to do as a country is to make sure that the industry and USDA are working together to try to understand that the public cares about food safety more than they care just about any other thing in the world. So, we are just going to continue to do the best that we can, and the new system I think will help a lot.

Senator COCHRAN. Mr. Secretary, we have a vote in progress. We are going to have to go over there and be recorded and we will be right back. We will stand in recess temporarily.

[A brief recess was taken.]

Senator COCHRAN. If the committee could return to order. We apologize for the interruption for the votes on the floor of the Senate.

We are prepared now to resume our questioning of the Secretary of Agriculture. Senator Bumpers was in the process of asking questions. He will be returning, and we will yield to him when he does return to continue his questioning, but until he returns, I am going to call on Senator Burns, if you are ready, or Senator Kohl.

Senator BURNS. Mr. Chairman, I will be very quick. The Secretary and I have talked over a couple of things. We are going to have a sit-down when we come back, and we have some very specific things we would like to go over and maybe we can find some answers. We are very concerned not only with the road moratorium and how that is being held, but also what the designs are on the Royal Teton Ranch and how that plays into the public land man-

agement there north of the Yellowstone Park. We just talked about the buffalo situation and APHIS and the things that we have to do to deal with that situation.

So, Mr. Chairman, rather than take up a lot of time, I have a whip meeting anyway. We have agreed to sit down and visit about it because these are isolated instances that probably have very little to do with the overall picture of funding the Department of Agriculture.

Senator COCHRAN. Thank you, Senator.

Senator BURNS. Thank you. I want to thank the Secretary for that, and I want to thank the chairman.

As far as Mr. Bumpers going through his final hearings on agriculture appropriations, I for one am very disappointed that he is leaving because he is one of the easiest guys to imitate. I can give his space station speech on the floor now if they give me a pointer. And I got them all up and we can do all those things. I will miss him because he is a great source of good humor. So, I will be sorry to see him go.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Kohl.

NEW MILK MARKETING ORDER

Senator KOHL. Thank you very much, Mr. Chairman.

Secretary Glickman, when USDA announced the new milk marketing order, two options were proposed which you called 1–A and 1–B, 1–A being the status quo and 1–B recognizing the need to make some movement.

You have said on innumerable occasions that you do not support status quo, that you support movement. The nature of that movement is the contentiousness that exists in terms of what is finally going to be done, but there has never been any question about your position that the present system needs to be changed. I am troubled by the fact that 1–A, which represents the present system, is still out there.

Now, is that a misunderstanding in my interpretation of what you said, or do I have cause to wonder about what is this 1–A?

Secretary GLICKMAN. Senator, somehow I believed you would ask this question. So, let me just say this.

We have indicated that 1–B is our preferred option. So, we are clearly on record as saying 1–B, which reflects some changes in the order of price determination for class 1 milk, is our preferred option.

We had examined several options before, five or six, and 1–A and 1–B had clearly the most public interest as well as congressional and academic support. So, we chose to pool those two options into this final review process for comment. There is no question the Department prefers 1–B, but we also now have to go out to the public and get the input in the hearing process that is necessary. In a sense, what we have done is we have given people a clear choice, and now it is up to farmers, dairymen, consumers and others around the country to help us augment the record in order to make the decision that we have to make.

By the way, even if I had only gone with one option, under the law, I would have been required to accept testimony and, where relevant, make modifications in that anyway in accordance with the Administrative Procedure Act.

Senator KOHL. I appreciate that and I understand how——

Secretary GLICKMAN. If I just may make a couple of other points.

Senator KOHL. Go right ahead, yes.

Secretary GLICKMAN. In the 1–B option, we also provide a transition option, a suboption of 1–B. So, what we have in 1–B is differentials for class 1 milk in some regions of the country flattened out. Some class 1 milk price reductions do occur, although reductions would not be as great as some would expect for all milk prices because of the way it is computed. We have also proposed a transition option where there would be a bump-up on the price in certain areas. We proposed two or three different ways of doing that, and that is also out there for public comment as well.

Dairy did not get transition assistance in previous farm bills as we went to a more market oriented system. So, what we have tried to do is provide some transition assistance in this bill.

One final thing, if I might. We have also proposed flooring the basic formula price until such time as all of this milk marketing order reform is done, and there will be a hearing next week on the 17th on that issue as well. That is a separate issue but they kind of relate.

Senator KOHL. Yes; and I appreciate that answer, but I still must say that having heard you say so often that the present system cannot endure and will not endure, and recognizing that the Department has the authority to make the change—it does not have to come up for a congressional vote——

Secretary GLICKMAN. But we have to take public comment.

Senator KOHL. That is all right and I understand that, but it is not as though USDA is not aware or has been unaware of the problem and has gone into this whole process starting from ground zero. USDA is pretty expert at the order, and you as the leader of the USDA, having taken a position, which I respect and, as you know, agree with, that the present system must change, it still is troubling to have you put out the present system as though it were maybe not your alternative but an alternative. And I do not understand that.

I know how contentious this is and what kind of powerful forces are arrayed, and then I hear Senator Leahy representing his own district saying, hey, we cannot change the system, the system benefits us. Any change in the system will be a disaster for Vermont. And you hear that I am sure from other States.

And then I see, yes, the present system is still out there as an alternative, maybe not yours, but an alternative. You can understand how, as I learn more and more about the political system and how it operates, that the fact that you put that out as an alternative is troubling to those of us who want change, particularly in light of your stated position that change must occur. If change must occur, then why is 1–A, the status quo, out there?

Secretary GLICKMAN. Well, let me say a couple things. One is that we do provide preferred alternatives and options on environmental impact statements all the time. We do it on proposed rules.

We will provide options on proposed rules sometimes when there is a very strong public interest perspective, and we decide to put options in there. So, that is not unusual. This is not the only case we have ever done that before.

The second thing I would say is that it is incumbent upon us to get folks in your district and your constituents to actively engage in this rulemaking process. We are going to get inundated with comments on these rules. It is very important that your perspective on this be known. I am not sure if it conforms with the 1–B option—I think you had even further ideas on what to do, but it is very important that your perspective is reflected in that rulemaking process.

The third thing I would say is that beyond 1–A and 1–B, which really just relates to differential prices on class 1 milk, there is a lot in this rule that affects the price of milk. For example, we changed the way the basic formula price is computed which will probably have the benefit of reducing the wide variations. It will be based on a longer time period and there will be some consolidations and are other things in there as well.

So, my hope is that we get the kind of comment that we are hearing now.

But again, I want to make it clear. We have set forth a preferred option. It is not as if I am bucking or ducking the issue, but we do have a preferred option.

Senator KOHL. All right. I do appreciate that.

STATE TRADING ENTERPRISES

Mr. Secretary, charges have been brought in state trading enterprises in England for illegal importing schemes, but problems do exist in prosecuting STE's in England. I am asking what is being done to ensure that state trading enterprises, which may well be engaging in unfair transfer pricing of dairy products, are compelled to compete fairly with United States farmers.

Secretary GLICKMAN. Well, generally, I am aware that the IRS and Treasury are looking at this issue to see if there are any violations of Federal revenue laws. So, I have asked our folks to provide them whatever assistance that they need. That is on the pricing issue. So, we need to make sure they comply with our laws.

I also would say that we are generally concerned about state trading enterprises, and we intend to highlight this issue in the next round of trade discussions. The Deputy was in Singapore last year where this was one of the dominant issues raised. The state trading enterprises in Canada, and there are others.

Senator KOHL. New Zealand particularly.

Secretary GLICKMAN. There are dairy boards.

Senator KOHL. You understand, which I am sure you do, what they do at the worst—and they do do that—is they price their products to the American affiliate so high that the American affiliate does not make any profit, and then there are no taxes to be paid. As a result of that, the American affiliate is able to undersell local domestic companies and take away business because of this unfair pricing procedure that they go through which brings their tax liability down to zero.

Now, that is something which I know you do not agree with and the IRS does not agree with, and we need to get to a resolution of that. I would like to hope that will be on a list of priorities that you have.

Secretary GLICKMAN. It will be.

EUROPEAN UNION

Senator KOHL. Last question. The European Union is aggressively targeting our traditional barley malt markets in Central and South America. Five years ago the malt industry exported 6 to 9 million bushels. This year only 50,000 bushels were exported from the United States. This business was essentially lost by three Wisconsin companies, so I am very concerned.

You have the Export Enhancement Program which helps companies compete against unfair competition. My question is, can we expect that you are going to give the companies in this industry, the barley malt industry, the help they need to compete with other companies in Europe who are subsidized by their governments and have thereby been able to take away this 6 to 9 million bushels market in Central and South America on barley malt?

Secretary GLICKMAN. Well, I need to look at the issue specifically. The EEP program, the Export Enhancement Program, is geared to the specific issue of dealing with unfair farm subsidies—it's not just a trade tool. It must be focused on, let us say, the EU or other places that are undercutting us in a way that we need to use this authority to keep markets. So, if what you are saying is an accurate reflection, it would seem to be something that would be suitable for EEP. But we will take a look at this. I presume our folks know about this particular issue, but we may need to contact your office to get more information.

Senator KOHL. I would appreciate that. I think we can provide you with enough information that would hopefully satisfy you that there is some assistance here that is deserved.

Secretary GLICKMAN. Have these constituents of yours filed any other trade complaints under various sections of our trade laws?

Senator KOHL. Well, maybe I can be in touch or you can be in touch and we can work out the facts and maybe some resolution.

Secretary GLICKMAN. Yes.

Senator KOHL. I would appreciate it.

Secretary GLICKMAN. OK.

Senator KOHL. Thank you, Mr. Secretary. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman. I just have one or two items.

STATUS OF AGRICULTURE

Mr. Secretary, first of all, does the Department have any studies as to what the status of agriculture in this country will be, good or bad or somewhere in between, once the farm subsidies expire?

Secretary GLICKMAN. I will ask our Chief Economist to determine what we are doing there.

But as you know, Congress authorized a Commission on 21st Century Agriculture. In fact, there is a representative. I believe Jim DuPree from Arkansas is on it. You do have somebody from Mississippi on there as well.

They have started to meet and their task is to look at this issue, but not as much from an economic perspective. It is more what comes next, and they are currently doing that. We are having trouble, frankly, providing them the resources they need because our advisory committee budget is so limited. We are trying to do our best to make sure they can at least do some of their work.

Perhaps Mr. Collins might talk about what we are doing in the post–1996 farm bill environment to look at what is going on.

Mr. COLLINS. That is in our plans to look at, Mr. Bumpers. We are going to be releasing on February 23 a 10-year assessment that looks out at agriculture over the next 10 years. But in that assessment, we used the conventional assumption that in years beyond the expiration of the farm bill, we use the level of CCC payments that were available in the last year of the farm bill which is roughly $4 billion. So, we assume a $4 billion annual continuation beyond 2003.

But certainly as we move closer to the year 2003, we are going to look at this question in more detail, and I think we will also do it in conjunction with the Commission on 21st Century Production Agriculture.

Secretary GLICKMAN. Yes.

The other thing I would say is that crop insurance is going to have to be the center piece for risk management. This program works pretty well for some, not very well for others. We really need to make it an effective operating tool for all producers. If you are in the Northern Plains and you suffer two, three, four disasters in a row, given the actuarial nature of it, it is a problem. If you are in a place that does not get disasters all that frequently, it can work out very effectively. That is one of the reasons why we have asked for moving it on the mandatory side in order to give it some long-term predictability so it can operate. So, we have looked at that as well.

We have provided some other safety net proposals like loan extensions, other kinds of things that we have asked in our budget before.

But the question is a good question. What happens post-2002? Actually the question may be more relevant, what happens next year and the year after? The first 2 years of Freedom to Farm were quite good for most producers with the payments and the market. They have come out ahead. I think the majority of producers have come out ahead, but I do not know what happens next.

COMMODITY YIELD COMPARISONS

Senator BUMPERS. Mr. Secretary, let me ask you—and if you could just give me a short answer to this—what is the comparison on a per-acre-yield basis of corn, wheat, soybeans? Just take those. Those are basic food crops. What is the comparison of yields now per acre as compared over the last 3 or 4 years? Are they not rather static? Are the yields in this country not rather static? Secretary Rominger or Mr. Collins?

Mr. COLLINS. Actually we are doing much better in soybeans over the last couple of years.

Senator BUMPERS. Is that because of irrigation?

Mr. COLLINS. It is because of a change in agricultural practices. Much higher plant populations per acre are being used in the Midwest, and we also have much better varieties in the South. So, the South is getting much better soybean yields.

We have actually gone up a little bit on wheat yields. If you just look at this past year, 1997, we had the largest wheat crop that we have had in the 1990's, and in the winter wheat areas, Kansas and other areas, we had record high yields.

For corn, we had a 127-bushel-per-acre yield this past year. I think it was the fourth highest in history, the record being in 1994 of about 139 bushels.

So, actually we still do continue to trend up. I know your concern earlier about research is whether we will be able to sustain that trend given the research investment that we have been making.

AGRICULTURAL TRADE BALANCE

Senator BUMPERS. Well, I am concerned about another matter, and that is we depend on farm exports to keep our balance of trade sort of halfway in balance. You stated I think maybe in your statement, Mr. Secretary, that the trade balance afforded by agriculture last year was a plus $21 billion——

Secretary GLICKMAN. Correct.

Senator BUMPERS. Even though overall exports were $3 or $4 billion less than the preceding year.

I am sort of coming back to where I was a moment ago, and that is I do not see, unless we have some unbelievable breakthroughs in research, any way that we can continue to export unless we have much bigger yields than we have had in the past. I do not think we can feed an ever-increasing population in this country and continue to increase our exports abroad unless yields go up much faster than they have been going up.

This is just a country lawyer's sort of common sensical approach to it. It seems to me that where we are headed is for lower exports, not higher, because we are going to have to feed an ever-increasing population in our own country and we are taking a lot of land out of cultivation every year.

Secretary GLICKMAN. I think you have to segregate agriculture a little bit. Bulk commodities—well, there has been some growth and some decline. The big increases in exports have been in value-added, which is livestock, meat, poultry, and fresh fruits and vegetables, and those have been dramatic, profound increases. We talked a little bit about the poultry exports to Russia and related countries. Our export growth has doubled in the last decade, roughly. And much of that growth has occurred in the value-added fresh fruits and vegetables horticulture products.

In terms of the bulk commodities, I cannot give you a projection. A lot of that frankly depends on the income levels of these importing countries. Most of these countries want to be self-sufficient in those commodities, and they look to us kind of as a reservoir of last resort when things get bad.

So, I still think there is great positive potential out there, particularly in the value-added side of the picture.

Senator BUMPERS. I am not quite as sanguine about our future on this as you are.

ASIA'S COMMODITY EXPORT VALUE

The final question, Mr. Chairman. Of the $56 or $57 billion in exports in 1997, what percentage of that went to Asia or what dollar figure went to Asia?

Secretary GLICKMAN. I think 40 percent of our exports go to Asia.

Senator BUMPERS. Have you already seen a decline in demand for exports?

Secretary GLICKMAN. A small decrease.

Mr. COLLINS. Our most recent data is only through the month of November from Commerce, but it does look like that, plus anecdotal data do show that our sales have fallen off some.

Secretary GLICKMAN. But let me just tell you the real worry of the dropoff is Korea and Indonesia. We have not seen any material dropoff in China, Hong Kong, Japan, other major markets.

Senator BUMPERS. How did exports to China in 1997 compare with 1996? Can anybody answer that?

Mr. COLLINS. They were a little bit lower. China usually buys about 2 to 3 billion dollars' worth of our products. In 1997 they had a superb wheat crop. They had very large corn stocks, and so they actually became a net grain exporter. This is a country that in the early 1990's was importing 12 million, 13 million tons of wheat, in 1995–96 actually imported 3 million tons of coarse grain, and here in 1997 they became a net grain exporter. So, there has been quite a shift in China because they have been promoting a policy of self-sufficiency in grains.

Senator BUMPERS. They do not import cotton anymore either, do they?

Mr. COLLINS. They are importing our cotton this year. I think we expect somewhere in the neighborhood of 1 million bales of cotton to China this year.

Senator BUMPERS. Thank you, Mr. Chairman.

Senator COCHRAN. On that subject, I think India is another country that has had a turnaround in production in wheat. It used to be a big importer. Now it is self-sufficient and even exporting some as I understand it.

Mr. COLLINS. That's true. They're also increasing their exports of soybeans and they have become a competitor for us in oilseed products in Asia because of their own soybean production.

Secretary GLICKMAN. But notwithstanding that, there is population growth of the world. I hope that you are wrong and I am right. The population growth is significant enough to allow for radically increased demand over the next 10 years if we can capitalize on that.

CONSERVATION PROGRAMS

Senator COCHRAN. There is a substantial commitment in this budget request to conservation which I applaud. We have done a good job, I think, in helping to devise programs to protect more effectively soil and water resources. We have also added another di-

mension and that is incentives for development of wildlife habitat on privately owned land where land is idle. The conservation reserve program has been a big contributor to nurturing wildlife, endangered species, and the rest.

I noticed in the EQIP program, the Environmental Quality Incentives Program, there is a big increase in the request from $100 million in mandatory funding to a total program level of $300 million.

What is the justification? Given all these programs that we have seen working effectively, like CRP and the wildlife habitat incentives program, why is it necessary for that big jump proposed in that one EQIP program?

Secretary GLICKMAN. There is a tremendous demand for this program. A lot of it involves small and medium-size livestock operators who sense a lot of problems associated with environmental issues affecting livestock production and the need for water systems and sewer systems and control mechanisms to deal with effluent. That is one thing.

There has also been a big demand from farmers installing practices that improve water quality and the overall health of their watershed. A lot of this was a result of State conservationists and our farm folks around the country saying there is a tremendous amount we could be doing in land practices.

The Deputy might want to comment on this too.

Mr. ROMINGER. I think one reason, as the Secretary mentioned, is water quality and the fact that as a country we are beginning to focus now on the nonpoint source pollution, which means in this case agriculture being one of those. So, this is a program that will help farmers address those areas so that they can improve water quality in the watersheds where they are operating.

EQIP PROGRAM

Senator COCHRAN. Some are suspicious that this program just gives the Department of Agriculture more people to go out and beat up on farmers. But you are saying it provides technical assistance and helps them meet the challenges of meeting these goals and targets.

Mr. ROMINGER. Technical assistance and cost share money.

Secretary GLICKMAN. I think that in the NRCS—the old Soil Conservation Service—there was this belief that they had this club and they hit people over the head, but I think by and large, it is not true any longer. I mean, there may be some Government programs that still do that, but by and large, NRCS is cooperative with the farm groups, conservation districts, related folks.

Senator COCHRAN. So, in this program when the person comes to your farm gate and says, I am from the Government and I am here to help you, he is really on the level? Is that what you are saying?

Secretary GLICKMAN. Theoretically. He would not be coming unless he was asked to come.

Senator COCHRAN. Well, that would be a good attitude to try to develop in the Department in these conservation programs because a lot of farmers are still nervous that when you add money to this program, you are just creating more trouble for them rather than providing technical assistance, as it is called.

Secretary GLICKMAN. It also keeps land in production. Farmers like to farm and if we can provide them assistance to, let us say, prevent soil from washing away, they view this positively.

Senator COCHRAN. I would like for the record to reflect what our enrollment in the wildlife habitat incentives program is anticipated to be in 1998 and what level of CCC funds will be needed to support the enrollment number, what enrollment and level of funding is projected to be needed to support the program in 1999. Those can be submitted for the record. I do not expect you to have all those details in front of you.

LOWER MISSISSIPPI DELTA COMMISSION

There is a submission in the Interior appropriations budget I presume—at least I know there is a request for $26 million for new economic development initiatives in the lower Mississippi River Delta. Some years ago, Senator Bumpers and I and others proposed a commission to study the lower Mississippi Delta to come up with some answers to the serious problems because of economic stagnation in that area and human resource problems of various kinds. The commission worked for a couple of years, made some recommendations. We implemented some of those. But now the President's budget is suggesting a $26 million new program to be under the auspices of the Appalachian Regional Commission and its staff.

My question to you is, would this be just as well administered by the Department of Agriculture's Rural Development Agency or some other agency that is available for that job?

There are some of these States, for example, like Louisiana, Arkansas, Illinois, Missouri, which will be in this new program—be beneficiaries of this new program—but they are not in the Appalachian Regional Commission area. Some of the Governors have—in particular, the Governor of my State is worried that this is going to weaken the Appalachian regional program and there is some controversy about that aspect of it.

It would be nice to have the benefit of your thoughts on that. I do not want to put you at cross purposes with the President right now in public.

Secretary GLICKMAN. Of course, I will take jurisdiction over anything you want to give us.

The only thing I can say is that I am not personally familiar with the specifics of this. I do know that we have our empowerment zone program. One is in the Mississippi Delta region, and we are working with the Southern EZ/EC Forum, which is an informal organization of communities in the region, including Arkansas, Louisiana, Mississippi, to form a partnership to implement many of the recommendations in the original Lower Delta Commission report. We are talking about expanding the number of zones.

As you know, the empowerment zone concept is basically to do a lot of what they have talked about, which is to bring various Federal agencies together but allow it to be locally driven.

So, all I can tell you is that we will—we are still working on the delta empowerment zone because it has done a lot of good.

But I cannot tell you what the conflicts are. We will raise the issue internally to see what else we might be doing on it.

COCHRAN FELLOWSHIP PROGRAM

Senator COCHRAN. There is a request, I understand, in the budget for $3 million for funding a fellowship program which we started some years ago to bring students, midlevel managers and others in agriculture and agriculture-related activities, to the United States to learn more about our market economic system and political institutions, hoping that this would develop better relationships between our country and others.

Tell me how that program is working, and if you can for the record, give us a status of that fellowship program so we can see where the money has been spent last year and whether we should add money to that or $3 million is all we need to fully fund that program.

Secretary GLICKMAN. I would have to tell you this is a very popular, successful program. The Vice President has a commission with South Africa, and it is fascinating to see the impact of the Cochran program with respect to people who have been trained, South Africans who come to this country and train in a variety of areas.

My records indicate in fiscal year 1997 about 700 participants from 45 countries received training through the program. For fiscal year 1998, the number of countries is expected to increase to 49 with the addition of Guatemala, Senegal, Tanzania, and Uganda, and about 760 participants are expected to participate.

So, we have asked for a basic $3 million which is the same funding level, but I can tell you this program is extremely popular.

SUBMITTED QUESTIONS

Senator COCHRAN. Thank you for that, and we will continue to monitor it and try to be supportive in our committee of the program goals.

There are a number of other questions and areas that we want to explore with you, but my hope is that we can submit all those questions to you and have the answers printed in our record. Other Senators may very well want to submit questions too, and we hope you will be able to respond to them in a timely way.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD SAFETY AND INSPECTION SERVICE

Question. User fees to require industry to pay the cost of meat and poultry inspection have been consistently proposed by the Administration although they have never been authorized. The fiscal year 1999 budget for FSIS again assumes collections from these unauthorized user fees. In the past, the Administration has proposed user fees to cover the costs of pay for overtime of inspectors. The fiscal year 1999 budget user fees to recover the full costs of inspections. Why does the Administration believe this proposal will have any greater success this year?

Answer. User fees are essential to the successful long-term implementation of meat, poultry, and egg products inspection reform. The time for user fees is now before budget restrictions hamper our ability to ensure the safety of the food supply. Each year discretionary funds for USDA have been getting reduced, which has made it more difficult to ensure a stable budget for food safety inspection activities. By converting the program to user fees now, we can ensure that meat, poultry, and egg products inspection get the resources needed to protect the safety of the food supply without an adverse impact on other important USDA programs.

Question. Mr. Secretary, it is unlikely that Congress will legislate these proposed user fees. What impact will adoption of the FSIS's appropriations request have on the country's food safety if the legislative proposal is not accepted?

Answer. In the event that the proposed user fees are not enacted, we will have to seek additional funding for meat, poultry, and egg products inspection to the level needed under current law.

Question. The FSIS proposed budget also requests increases for other food safety program activities. What is the priority of these new increases if an appropriation for inspection activities are required and the full request cannot be provided for these additional activities?

Answer. Maintaining an adequate inspection work force that has the training and tools necessary for conducting effective inspection, facilitating the adoption of HACCP by State inspection programs, and ensuring food safety from farm-to-table are all essential to our mission of improving the safety of the food supply.

Question. The fiscal year 1999 request for the President's Food Safety Initiative includes an $11 million increase for the Food Safety Inspection Service (FSIS). How will the agency use this money to fund the FSIS portion of this initiative? Please designate which activities are new and which ones are a continuation of current programs. Please prioritize these activities.

Answer. Under the President's Food Safety Initiative, the Food Safety and Inspection Service will facilitate the transformation of State programs to Hazard Analysis and Critical Control Point systems, work cooperatively with other Federal agencies to expand consumer education, and develop voluntary measures to reduce the risk of pathogenic contamination of animals on the farm. These new activities would build on the successes and fill the gaps identified in the President's 1998 Food Safety Initiative. The food safety activities identified as part of the initiative are all of high priority and we urge Congress to fund it as an integrated approach within available resources to reducing foodborne illness.

Question. Farmers are currently over-burdened with regulations. There is much speculation that FSIS will eventually implement regulations which will affect the farmer and his farming operation. In the fiscal year 1999 USDA explanatory notes, there is mention of voluntary activities to deal with food safety issues from the farm-to-table and the collection of data linking "food animal production to processing contamination." Would you please explain these voluntary activities and how the agency plans to implement them?

Answer. We do not have, nor are we seeking, authority to mandate on farm practices. The FSIS Animal Production Food Safety Program is actively working with producers to develop voluntary science-based animal management practices to improve food safety on the farm. To assist producers in dealing with marketing pressures and to improve the safety of the food supply, we are proposing risk assessment and education activities. Risk assessments will help producers identify food safety hazards and measures that can be taken on a voluntary basis to mitigate them on their own behalf. Education is necessary to ensure that producers understand the changes that are occurring within the industry due to HACCP implementation and to communicate the ways risk assessment can assist them in meeting these new challenges.

Question. Does the agency see the need in the future to make these activities mandatory?

Answer. We do not see the need to make any on farm food safety practices mandatory.

Question. How does the agency plan to collect this data and use it once it is collected?

Answer. Successful development of risk assessments and education strategies will require a collaborative effort between producers, academia, and State agriculture and public health agencies. Any data collected to support these activities will be used to assist producers in identifying food safety hazards and cost-effective intervention strategies they can voluntarily utilize on their own behalf.

Question. Mr. Secretary, the National Academy of Sciences is publishing a report this summer on the creation of a single food agency. Are there any joint initiatives that FSIS and the Food and Drug Administration (FDA) are undertaking currently?

Answer. FSIS, FDA, and several other Federal agencies have a close working relationship, which can be seen through the joint implementation of the President's Food Safety Initiative.

Question. What is the Administration's current position on the need to create one single food agency?

Answer. Like Congress, we are also interested in seeing the conclusions of the National Academy of Science and would not like to prejudge them at this time.

Question. The fiscal year 1999 budget request indicates an increase of $130,000 to provide additional resources to the Under Secretary and the Secretary to support activities associated with the President's Food Safety Initiative. What sort of resources do you mean?

Answer. With the additional resources requested we will be able to support the level of staffing necessary for this office to fulfill its role of building greater public confidence in the safety of the food supply and maintaining the integrity of the Federal inspection system.

Question. The fiscal year 1999 budget request proposes a number of funding increases in support of the President's Food Safety Initiative. Please rank these increases in order of priority.

Answer. The Administration has proposed an integrated food safety initiative that encompasses several high priority activities and involves several Departments and agencies. We encourage Congress to fund this proposal within available resources as a part of the integrated initiative.

NATIONAL COMMISSION ON SMALL FARMS

The Secretary of Agriculture established the National Commission on Small Farms on July 9, 1997, and identified the Natural Resources Conservation Service (NRCS) to provide support to the Commission.

Question. What recommendations were made by the Commission and does the President's fiscal year 1999 budget incorporate these recommendations?

Answer. There were in excess of 140 recommendations made by the National Commission on Small Farms. All of the recommendations are outlined in the January 1998 Report entitled "A Time To Act—A report to the USDA National Commission on Small Farms." A copy of the report is being provided for the record. No additional funds have been requested in the President's fiscal year 1999 budget to implement recommendations of the commission's report. It is anticipated that recommendations can be accommodated through ongoing operations.

Question. Why was the NRCS chosen to support the Commission?

Answer. NRCS was selected because of its long standing history and success in working with outside groups and locally led initiatives.

Question. Is the Commission still in formation and meeting formally?

Answer. The Commission was chartered for a period of up to two (2) years. Although the commission is currently not meeting, it is scheduled to reconvene within nine (9) months of the receipt of their report to provide input on emerging concerns within the Commission's domain.

WILDLIFE HABITAT INCENTIVES PROGRAM

Question. What is the enrollment in WHIP anticipated to be in 1998?

Answer. Enrollment is anticipated to be approximately 170,000 acres under 3,400 agreements.

Question. What level of CCC funds will be needed to support this enrollment in fiscal year 1998?

Answer. This enrollment level will require up to $30 million in CCC funding.

Question. What enrollment and level of funding is projected to be needed to support the program in fiscal year 1999?

Answer. The enrollment level is expected to be 114,000 acres under 2,300 agreements with a funding requirement of $20 Million.

CLEAN WATER AND WATERSHED RESTORATION INITIATIVE

The Clean Water and Watershed Restoration Initiative is proposed to be funded under the new interagency Environmental Resources Fund for America. Funding of $23 million is designated for NRCS participation in this initiative.

Question. Which activities are proposed to be funded through the "Clean Water and Watershed Restoration Initiative"?

Answer. NRCS funding for the Clean Water and Watershed Restoration Initiative in fiscal year 1999 is proposed at $23 million. This includes a requested increase of $20 million for partnership grants and $3 million for natural resources inventory evaluation needs.

Question. Please describe each one and provide the cost of each activity.

Answer. The activities proposed to be funded include partnership grants designed to comprehensively improve water quality to be funded at a level of $20 million. The partnership grants will enable State and local organizations to hire non-federal watershed coordinators. Also included in the increased funding is $3 million for improved natural resource inventory evaluation needs. This will enable the develop-

ment of baseline assessments, integration of compatible inventories, and the evaluation of program impacts and will fund an additional 30 FTE's.

DEBT FORGIVENESS

Question. Mr. Secretary, you are proposing that the Congress pass "emergency legislation" to modify the 1996 Farm Bill prohibition on loans to allow farmers with past debt problems and restore creditworthiness to once again be eligible for USDA loans. What is the pressing need for this legislation?

Answer. There are several thousand family farmers who may need USDA farm loan assistance but are prohibited from obtaining it because they received a debt forgiveness on loans that were made to them in the past. This isn't fair. Even the bankruptcy code allows borrowers restore their credit worthiness. Moreover, much of the debt USDA has forgiven over the last several years traced back to the mid-1980's when an accumulation of too much debt coupled with a decline in farm income and land prices produced an credit crisis. These were circumstances beyond the control of borrowers. Further, USDA actually encouraged borrowers to restructure their loans in ways that lead to the debt forgiveness, and borrowers did so without knowing that it would mean they would not be eligible for new loans. In fact, these borrowers were eligible for new loans until the 1996 Farm Bill changed the ground-rules.

Question. Should this legislation be passed by the Congress, how many farmers in your estimation would then be eligible for farm loans?

Answer. Since 1989, USDA provided debt forgiveness to about 73,000 farm borrowers. About 11,000 of these borrowers still have active accounts. There is no information available on the status of the rest of these borrowers. A sizable number may no longer be farming; however, the Department has heard from many former borrowers who are still in business and could use new loans. The legislative proposal would also affect those borrowers who receive a debt forgiveness in the future.

Question. Does the fiscal year 1999 President's Budget assume that these farmers with past debt problems would be eligible for loans? If so, what number of farm loans are estimated?

Answer. The President's 1999 budget is based on current law, which includes limits on the authorized levels for both farm operating and farm ownership loans. With the enactment of the proposed legislation, the additional demand for these loans would be accommodated within the authorized levels. In general, this would mean that there would be increased competition for direct loans, which would most likely affect applicants who do not qualify for targeted assistance as beginning farmers or members of socially disadvantaged groups. Borrowers who do not receive direct loans may, however, be able to obtain a guaranteed one.

COUNTY OFFICE CLOSINGS

Question. Mr. Secretary you have committed not to close any county offices without Congressional input beyond those already named. At the same time, the Department is currently streamlining and collocating offices at the state level.

A. Is there an employee reduction number each State Director is required to meet as a result of the streamlining and collocation of offices.

B. Is staff being reduced on a state-by-state or county-by-county basis? Please explain the rationale used to decide where staffing reductions occur.

C. What are you doing to make reductions in staffing at the state level do not predetermine further county office closures.

Answer. USDA has been downsizing its county-based program delivery offices since 1994 when Congress passed major reorganization legislation. Pursuant to commitments made when that legislation was passed USDA developed a plan to close or consolidate USDA field offices into service centers. We have reduced the number of offices from 3,700 to approximately 2,700 and will be down to below 2,600 by the end of the year. Beyond these office closures we have no specific actions identified at this time.

No employee streamlining plans have been established in relation to the service center collocation effort. However, individual service center partner agencies are managing within their assigned resources and budgets which may impact staffing levels in the field and require further office closures. In addition, we are awaiting the outcome of the Departmental study on the structure and delivery systems of FSA, NRCS, Rural Development and the Risk Management Agency.

WORKLOAD STUDY

Question. USDA has an outside consulting firm conducting a workload study of the farm and rural program delivery system of county-based agencies (FSA, NRCS,

and RD) to be completed on September 18, 1998. What has the consulting firm been told to look at specifically?

Answer. We have contracted with Coopers and Lybrand to conduct a study of the farm and rural program delivery system of FSA, NRCS, and RD. The study will evaluate the county office workload and resources of these agencies in relation to their program responsibilities and customer needs. It will also review ongoing efforts to improve efficiency and identify, assess and, as appropriate, recommend alternative approaches for the organization and staffing of the county based agency delivery system. The results will be drawn upon in developing budget and operational plans for subsequent years.

Question. Are streamlining and collocating of offices postponed until the study is completed?

Answer. We have proceeded with the closure of FSA county offices according to the 1994 plan. The current target for the number of service centers is 2,554. The number of field office locations has been reduced from 3,726 in 1994 to 2,775 at the end of calendar year 1997. Under current plans, office moves and closures will reduce our locations by 221 service centers. However, staffing reductions proposed for 1999 may require a reexamination of our county office structure. Because there is a point at which an office can be too small to function effectively, it may become necessary to further consolidate offices where staffing reductions take place. Results of the study should be useful in any such reexamination of further restructuring and consolidation of field offices. I will consider any closure decisions in light of cost effectiveness and quality of service to the producer, and I will keep the Committee apprised of any prospective closures.

COUNTY COMMITTEE CONVERSION TO FEDERAL STATUS

Question. Much concern exists regarding the impact of converting county committee workers to federal status. Please explain this conversion process of federal employees and county employees. Is this process also postponed by the workload study?

Answer. As you know, I favor converting FSA non-Federal county committee employees to Federal civil service status. Conversion would eliminate the challenges we face in operating two different personnel systems for FSA employees in county offices. We are working with Congress to enact changes in authorization needed to implement the conversion, and the process has not been postponed by the study being carried out by Coopers and Lybrand.

Question. What criteria is being used in this conversion?

Answer. We have proposed that current employees with 3 years of permanent county committee service be given career civil service appointments. Employees with less than 3 years of permanent county committee service would be given career-conditional civil service appointments and the period of current permanent county committee service would be counted when determining the 3 years of service necessary for converting to career civil service status. Temporary county and area office employees with appointments of 1 year or less could be converted to temporary Federal civil service appointments. Former permanent county committee employees would retain reemployment rights resulting from a reduction-in-force. Other provisions would facilitate certification of agreements between labor organizations and USDA concerning bargaining units and their representation.

Question. How does this conversion process play a role in the streamlining and collocation of offices?

Answer. The conversion process is intended to enhance management capabilities and office productivity which should facilitate office streamlining and collocation initiatives. Equitable re-employment procedures are central in both conversion and streamlining activities.

Question. Please explain this Common Computing Environment (CCE) implementation. Why is CCE exempt from the Department's current moratorium on purchases of information technology?

Answer. The county-based field offices are being restructured into Service Centers to improve customer service. At the core of this initiative is a shared information system built on a Common Computing Environment (CCE) that will provide Service Center staffs access to customer, program, technical, and administrative information, regardless of the agency they represent. The CCE is based on identified business needs and will provide the enabling technology for implementing reengineered business processes to provide one-stop service to customers.

The CCE will enable USDA to: optimize the data, equipment, and staff sharing opportunities at the service centers; overcome the extreme limitations of the current legacy systems; and enhance customer service into the 21st Century.

In fiscal year 1998, a business integration center has been established to facilitate the development of reengineered business applications and pilot testing at nine USDA Service Centers, as well as, test and evaluate information technology alternatives. Depending on the availability of funding, the plan is to achieve complete migration from legacy systems to the identified CCE by 2002.

CCE is not exempt from the current moratorium on purchases of information technology. OCIO is working closely with the Service Center Implementation Team and will review any contract actions requiring waivers, as necessary.

LOWER MISSISSIPPI DELTA

Question. The fiscal year 1999 budget proposes a $26 million increase in the Interior budget for a new economic development program for the lower Mississippi Delta.

Does the Rural Development Agency have the existing structure to implement a new economic development program in the lower Mississippi River Delta? If so, why is this proposal not under USDA's jurisdiction?

Answer. I cannot answer the question as to why the proposal for the new economic development initiative for the lower Mississippi Delta was in the budget as it was. The proposal was not discussed with the Department. However, USDA does have a structure in place that could administer the program and we have been working on an effort involving the lower Mississippi Delta Center and the Empowerment Zone and Enterprise Communities in the Delta to pool their resources and efforts to more comprehensively address the economic and community development problems in the Delta. A Memorandum of Agreement between these parties is scheduled to be signed in March of this year.

SALARIES AND EXPENSES

Question. The fiscal year 1999 budget includes $529 million for the administration of USDA's rural development programs, including the Alternative Agricultural Research and Commercialization Corporation (AARC). This amount includes funding for 7,138 staff years, which is a decrease of about 150 staff years below the fiscal year 1998 level.

In what areas of Rural Development does the decrease of 150 staff years occur, and how will the reductions be accomplished?

Answer. The reductions occur throughout the Mission Area; 80 in the Rural Housing Service; 49 in the Rural Utilities Service; and 24 in the Rural Business-Cooperative Service. My policy is that the reductions will primarily come from administrative areas rather than program areas. I anticipate that administrative convergence will provide the reductions.

ENVIRONMENTAL RESOURCES FUND FOR AMERICA

Question. The fiscal year 1999 Budget proposes the Environmental Resources Fund for America which would include funding for the Rural Community Advancement Program (RCAP). Why did the Administration include the RCAP in its proposal for the Environmental Resources Fund? What areas of the RCAP are included in this fund?

Answer. The Environmental Resources Fund is an attempt to show all environmental expenditures in one area. Only the Water and Waste funding for Water 2000 is included in the Fund.

BOLL WEEVIL ERADICATION LOANS

Misinformation regarding the interest rate in calculating the boll weevil eradication loan program was given last year, resulting in a shortfall of $250,000 in appropriated funds which would have supported approximately $22 million in guaranteed loans.

Question. How many loans were made to farmers and what as the total of those loans in fiscal year 1997?

Answer. Three loans were made in fiscal year 1997 totalling $39,999,500.

Question. What is the anticipated number of loans that will be made this year?

Answer. The 1998 budget assumes that five boll weevil loans will be made this year. However, there are no applications on hand at this time, so it is difficult to tell what will happen.

Question. How much is needed in additional funds to fully meet the demand for these loans in fiscal year 1998?

Answer. As I mentioned, we do not have any applications on hand at this time, and it is very difficult to predict the demand for this program because the amount

requested per application is relatively large. The $30 million included in the 1999 budget should, however, be adequate to meet the demand.

1998 SUPPLEMENTAL APPROPRIATIONS

I understand the administration will be proposing supplemental funding for fiscal year 1998 to increase the Departmental Administration budget by $4.8 million and the Office of the General Counsel budget by $235,000 to enhance funding for the Department's Civil Rights. To offset these amounts, the Department has proposed to reduce the largest USDA salaries and expenses accounts across the board. In particular, the Farm Service Agency's salaries and expenses account has been targeted to be cut by $1,080,000.

Question. Currently, the FSA has had to RIF 170 people this year. What additional reductions in force, if any, will be required if this proposed rescission to cut salaries and expenses in FSA funding is enacted?

Answer. The Farm Service Agency (FSA) is anticipating a reduction in force of 152 people in fiscal year 1998. The proposed rescission of $1.080 million is not expected to result in any additional staff reductions beyond the expected 152. Instead, the impact of this cut will mainly affect the non-salary portion of FSA's budget which includes funds for equipment, travel, supplies and contracted services.

Question. In Rural Development, the budget reflects a 153 staff year reduction from fiscal year 1998 to fiscal year 1999. What additional reduction in staff will be required if this proposed rescission to cut salaries and expenses in RD funding is enacted?

Answer. There will be no further staff year reductions resulting from the proposed rescission. Rural Development will defer planned expenditures in information systems to compensate for the proposed rescission.

Question. What will be the impact of each of the other proposed rescissions in salaries and expenses funding, by account, on each agency activities?

Answer. The proposed rescissions are based upon total FTE's and the use of the Department's civil rights resources, and in total, represent about one-tenth of one percent of the total appropriations, The rescissions will not have a noticeable impact on the involved programs. The agencies affected by the rescissions will be making small across-the-board reductions.

Question. What is the urgency of providing the supplemental funding requested for the Department's civil rights efforts?

Answer. These resources are needed to meet the Department's strategic objective of ensuring that all customers are treated fairly and equitably with dignity and respect. The funds will support additional staffing to improve personnel services and assistance to USDA agencies, including ethics compliance; to improve outreach to USDA customers including support for the new USDA Office of Outreach that will ensure all customers, especially under served populations, have full access to USDA programs and services; and to enhance management employee relations that support early resolution of employee grievances and conflicts within USDA.

It is hoped that these supplementals will be enacted by the end of March.

An increase of $4.8 million is requested for Departmental Administration consisting of:

—$1,123,000 for Human Resources Management activities,

—$1,004,000 for outreach to USDA customers, institutions, and businesses,

—$273,000 for conflict resolution,

—$1,900,000 for ongoing policy, oversight,and program activities conducted by Human Resources Management, Office of Operations, Procurement and Property Management, Office of Administrative Support, and Small and Disadvantaged Business Utilization,

—$500,000 to establish a commission on civil rights.

An increase of $235,000 is requested for the Office of the General Counsel which would staff the newly created Civil Rights Division and continue to reduce the backlog of complaints pending.

AGRICULTURAL RESEARCH SERVICE BUILDINGS AND FACILITIES

The President used his line-item veto authority to cancel funds appropriated for fiscal year 1998 for planning and design of two ARS replacement facilities: (1) the Biocontrol and Insect Rearing Facility in Stoneville, Mississippi (−$900,000), and (2) the Poisonous Plant Laboratory in Logan, Utah (−$600,000).

The rationale given for cancellation of funding for each project was: (1) the funds weren't requested by the President; (2) additional appropriations would be required in the future; and (3) the need for additional research facilities is under review by the Strategic Planning Task Force, due to report in April 1999.

Funding for the Biocontrol and Insect Rearing Facility in Stoneville, Mississippi, was initiated on the basis of a USDA report on insect rearing capabilities which the Committee requested in fiscal year 1997. While the President's cancellation message notes the fact that ARS conducts insect rearing at nearly 30 locations as a reason for removing the funding for the new insect rearing facility, the ARS report notes that "most of these operations are not of major concern * * * as they are location specific and produce only a small number of insects for limited use." The USDA report indicates that the only three major facilities that produce large numbers of insects in support of many important projects that are in Starkville and Stoneville, MS, and Honolulu, Hawaii—the Starkville facility being ARS' primary insect rearing laboratory.

A copy of the report is submitted for inclusion in the record.

INSECT REARING FACILITIES

INTRODUCTION

Senate Report No. 104–317, accompanying the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriation Act for fiscal year 1997, contained the following request by the Senate Committee on Appropriations:

> The Committee is informed of the critical importance of the role of ARS in terms of insect rearing capabilities for purposes of the development of new technology in crop production. The Committee is interested in obtaining a summary of the capabilities of FIRS to meet present and future needs for insect rearing, and specifically requests that a proposal be submitted to the Committee outlining these needs prior to the submission of the fiscal year 1998 budget. The Committee further directs ARS to refrain from closing any existing facilities or programs aimed at insect rearing until the results of this study have been reviewed by the Congress.

In response to this directive, an internal Agricultural Research Service (ARS) assessment of insect rearing facilities was conducted with input acquired from external location review committees. Based on these assessments, this report outlines facility needs in support of two primary areas of crop production. The proposed facilities will support new insect and weed control technologies for the southern U.S., California, and Hawaii.

BACKGROUND

ARS conducts research on, and pilot scale production of, many different insects in support of Integrated Pest Management (IPM) programs in a variety of crops. Efficient production of high quality insects is essential for their successful use. Mass reared insects are used as test organisms when developing resistant host plants, biorational/chemical controls and in basic biological studies, or are used directly in biologically-based control strategies such as the release of sterile insects or biological control agents. Application of these technologies using mass reared insects has allowed the eradication of the screwworm fly from North America; aided in the elimination of the Mediterranean and/or other fruit flies from California, Florida, and Texas; and many similar successes with pests from various crops.

A number of new technologies now being developed by ARS are dependent on the release of large numbers of beneficial insects, however, the efficiency of insect rearing has been identified as a limiting factor that needs additional research. Examples of biologically-based technologies in this category include, but are not limited to, viruses that control Heliothis, parasites that control the boll weevil, beetles capable of killing leafy spurge, parasites that search out and attack fruit flies, and many of the pests themselves that can be used directly in sterile insect release programs for control. These organisms are typically grown under controlled environmental conditions, packaged and distributed by the insect producer, and then taken to the field where they are applied to control the target pests. Unfortunately, mass rearing technology and facilities within ARS are based on 1960's (or earlier) technology, and thus are severely outdated and no longer capable of fulfilling the current or anticipated research and development needs.

THE ROLE OF MAJOR INSECT REARING FACILITIES IN ARS

Mass rearing facilities fulfill two primary roles in ARS research programs. First, they produce large quantities of test organisms to supply researchers with adequate amounts of products to test new control strategies at realistic levels of operation. This is extremely important in the development and evaluation of new area-wide

IPM technologies prior to full implementation by action agencies or farmers. Second, they allow limited laboratory rearing methods to be scaled up for mass production using industrial-sized equipment and handling techniques. Making the step from the laboratory bench to production scale operations is a significant component of ARS research that involves designing new equipment, improving handling methods, and evaluating product quality.

CURRENT ARS INSECT REARING FACILITIES

ARS conducts insect rearing at nearly 30 locations in support of local research and action programs. Most of these operations are not of major concern for this report as they are location specific and produce only a small number of insects for limited use. ARS, however, operates three major facilities that produce large numbers of insects in support of many important projects. These facilities are located in Starkville and Stoneville, Mississippi, and Honolulu, Hawaii, and are the focus of this report.

Mississippi

The facility in Starkville (Robert T. Gast Insect Rearing Facility) is housed in a 24,000 sq. ft. State owned building adjacent to ARS laboratories on the campus of Mississippi State University. Although the Gast Facility is ARS' primary insect rearing laboratory, it is severely limited in its production capabilities as the building, supporting utilities, air handling capabilities, and existing equipment are inadequate to meet production requirements and also do not meet existing safety specifications. Future expansion of the University campus is expected to displace the existing Gast Facility building.

Insect rearing in Stoneville is temporarily and inadequately housed within the main laboratory building at the ARS Jamie Whitten Delta States Research Center. Several different species of insects important for corn and cotton production and an insect pathogenic virus being used in a 201,000 acre area-wide management program for Heliothis are produced in this temporary housing. The building in which insects are reared was built for biology research and is not properly designed to handle insect rearing or microbial production which needs to be conducted under highly sanitary conditions, with specialized air, water and waste handling systems.

ARS proposes to combine the two facilities from Stoneville and Starkville into a new 50,000 sq. ft. laboratory and pilot plant that will be located adjacent to the main laboratory at Stoneville.

Hawaii

The ARS fruit fly rearing facility is located on University of Hawaii property in a residential area of Honolulu and is housed in old World War II Quonset huts. Being surrounded by a densely populated residential area has caused ARS problems of compatibility with the local community due to odor and waste disposal. Several species of fruit flies and parasites are mass produced in this facility that is in severe need of replacement. The State has requested that ARS vacate this facility in the near future.

NEED FOR NEW FACILITIES

Despite hundreds of millions of dollars spent by agricultural producers on insect and weed control, and millions of pounds of pesticides being applied to vast areas of the U.S. each year, pests continue to cause severe losses to a large number of crops. In two recent reports, the National Academy of Sciences (1996) and the Congressional Office of Technology Assessment (1995) called for increased research and development of new biologically-based pest control technologies to improve control effectiveness and reduce the use of chemical pesticides. One of the primary factors limiting the development of new biologically-based technologies (biological control, sterile insect release, etc.) is our lack of ability to mass produce high quality and effective agents at economically acceptable costs. The proposed new facilities should eliminate this constraint.

Laboratory and Pilot Plant Facility at Stoneville, Mississippi

Although ARS has developed and successfully demonstrated augmentative biological control technology and products on a small scale, specific scale-up research and pilot plant production needs to be investigated and improved so that industry can further develop and commercialize these new technologies for U.S. producers. The proposed mass propagation facility will include both developmental laboratories and a pilot plant to address these needs. The pilot plant concept was created to allow co-development of commercial scale equipment, improve operational level processing systems, to develop and test other scientific advances in insect mass rearing, and

to accelerate technology transfer in cooperation with industry. The projected cost of construction for a new 50,000 sq. ft. facility is estimated to be $10 million ($200 per sq. ft.).

Laboratory and Quarantine Facilities in Hawaii

The fruit fly rearing laboratory in Hawaii is needed to provide adequate facilities and equipment in support of evaluating new fruit fly strains for use in action agency programs; to develop new rearing/handling methodologies to improve the quality, longevity, competitiveness and economics of mass reared fruit flies for use in sterile insect release programs; and to develop new cost-effective means of mass producing beneficial parasites of fruit flies that can be released into the environment to control these pests. Due to the quarantine status of many fruit flies in the U.S., this facility must maintain a limited number of quarantine laboratories and small scale rearing rooms. The projected costs of construction for a new 20,000 sq. ft. facility are estimated to be $5 million ($250/sq. ft. due to quarantine needs). The proposed ARS Fruit Fly Rearing Research Laboratory will be located adjacent to the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS) and the California Department of Food and Agriculture facilities in Waimanalo, Hawaii. This facility will address research needs for fruit fly control in fruit and vegetable crops supporting implementation programs conducted by the States of California and Hawaii. This facility will complement the existing APHIS mass production facility in Hawaii which collectively will support fruit fly suppression and eradication in Hawaii to prevent mainland infestation and greatly enhance the agricultural production and export potential from Hawaii.

CONCLUSION

The need for new insect mass rearing facilities within ARS that support research and control efforts for major pests such as the boll weevil, cotton bollworm, European corn borer, Mediterranean fruit fly and other pests is clear. By combining two old and inadequate facilities in Mississippi into a single new facility at Stoneville, ARS will be better able to develop and support USDA and grower action programs in field crop pest control. This facility Will be linked with private industry through pilot plant operations for scale-up production of organisms of commercial value. Operations at the proposed Stoneville facility will be housed in a new 50,000 sq. ft. building that is projected to cost $10 million. The proposed ARS Fruit Fly Rearing Research Laboratory in Hawaii will address research needs for fruit fly control in fruit and vegetable crops supporting implementation programs conducted by the States of California and Hawaii, and USDA-APHIS, and is estimated to cost $5 million. A small section of the Hawaii facility will be constructed to maintain pest and beneficial insects under quarantine conditions.

Question. Does the Department recommend new insect rearing facilities, as the USDA report to the Committee submitted by Dr. Woteki indicates?

Answer. The Department still believes that two new high production, modern insect rearing facilities will need to be constructed as described in the USDA/ARS Insect Rearing Facilities Report submitted to Congress in fiscal year 1997. This will require combining the two facilities at Stoneville and Starkville into a new 50,000 square feet laboratory and pilot plant in Stoneville to address corn and cotton pests. Also required is construction of a new fruitfly rearing facility in Hawaii to develop new rearing/handling methodologies to improve the quality, longevity, competitiveness and economics of mass-reared fruitflies for use in sterile insect release programs, as well as to develop new cost-effective means of mass producing beneficial parasites of fruit flies than can be released into the environment to control these pests in Hawaii and in the continental United States.

Question. When will each of these new facilities be needed?

Answer. Although the need is not immediate, ARS will eventually need to move forward with construction and completion of these projects to fulfill the Department's and the nation's long-range IPM goals, to furnish new biologically-based replacements for chemical pesticides that will be removed in the next several years as a result FQPA, and to fulfill the needs of USDA and grower action programs in field crop pest control. Decisions on when to make these investments in new facilities will be reviewed annually as system-wide facility needs are considered and priorities established for the annual budget.

Question. The President's fiscal year 1999 budget again proposes to closed down the ARS Prosser, WA; Mandan, ND; Orono, ME; and Brawley, CA facilities and to transfer the Melaleuca, FL facility from the Corps of Engineers to USDA and initiate construction funding for this facility in fiscal year 1999. Why isn't the Administration proposing to wait for the Task Force conclusions before making these proposals?

Answer. The President's budget requires the reallocation of existing resources to finance new, high priority research needs. A number of projects carried out in ARS research stations at Prosser, Washington; Mandan, North Dakota; Orono, Maine and Brawley, California, were identified as less critical. Given these programmatic decisions, management considerations lead to recommendations to terminate and redirect resources to new research initiatives and close the mention research stations. We believe there is adequate information for Congress to act on these relatively straight forward recommendations at this time without formal input from the Strategic Planning Task Force.

Question. Please give the Department's assessment of the adequacy of the current ARS Poisonous Plants Laboratory office and laboratory space.

Answer. The structure that currently houses the 20 staff of the ARS Poisonous Plants Laboratory in Logan, Utah, is inadequate. The patch-work building is too small and outmoded to fill the needs of the current research program. The original metal building was constructed in 1962. Four additions were constructed, the latest in 1984, but the building is again too small to provide sufficient office and laboratory space. The design is inefficient and awkward to utilize, difficult to manage, and expensive to maintain. The building has 7,725 sq. ft. of floor space, including laboratories and offices. The heating, ventilation, and air conditioning (HVAC) system does not properly heat and cool the building, causing personal discomfort and analytical instruments to malfunction. The HVAC system is marginal in terms of meeting OSHA laboratory standards for air quality. Corrective measures have been taken, but expensive repairs and replacement of HVAC equipment on this old structure are not justified.

Question. Why didn't the reasons given by the President for cancellation of the Stoneville, MS, and Logan, Utah, ARS replacement facilities also apply to the unrequested funds provided for fiscal year 1998 for planning and initial construction of the Western Human Nutrition Research Center in Davis, CA, replacement facility, and the Jornado Range Research Center in Las Cruces, NM?

Answer. Funding provided for the construction projects in Utah and Mississippi was vetoed by the President under the line-item veto authority for the following reasons: (1) the projects were not requested in the fiscal year 1998 budget; (2) the funding was for planning only and would require future additional resources for construction costs; (3) the need for additional research facilities is currently under review by the Strategic Planning Task Force mandated by the 1996 Farm Bill to review potential consolidations of Federal agricultural research facilities. The Task Force report is due in late spring of 1999. In addition, ARS conducts insect rearing at nearly 30 other locations.

Because of other factors, funding for the Davis and Jornado projects was not vetoed. In the case of the Davis, CA project, relocation of the WHNRC from San Francisco, is necessary due to the likelihood of substantially increased leasing costs at the current site. This facility is one of six ARS Human Nutrition Research Centers and the only Center responsible for testing the biological efficacy of nutrition intervention programs. Research conducted at the Jornado Research Center in Las Cruces, NM is a key component of the ARS grazing lands program. ARS scientists, and collocated collaborators from NRCS, EPA, and NSF are currently housed in a temporary facility. Both relocations will foster continued cooperation between ARS and university scientists by co-locating the ARS lab with university facilities.

FOOD RECOVERY AND GLEANING

Question. Mr. Secretary, last year we spoke about the Department's food recovery and gleaning efforts. You commented at the time that this is an area "where government can be a facilitator, without costing any money."

The fiscal year 1999 budget proposes $20 million for a new community-based food recovery and gleaning program. Would you please explain this proposal and why federal funding is now required for what you last year described to be a "no-cost" federal effort?

Answer. Senator Cochran, you are correct. Last year I noted that government can be a facilitator without costing any money. Government can also take a more active role. And in this case, an active role is warranted. We can multiply the value of the money we provide to local charities working on food rescue, and dramatically increase the amount of food that they can safely acquire distribute to the needy.

As you may know, the Department estimates that 96 billion pounds of foods was lost in 1995. Not all of this is wholesome and nutritious, or food that could be economically recovered by volunteer groups. However, with a little bit more effort, we can rescue a whole lot more than we are today—currently we rescue less than one half of one percent—and we can use that food to feed hungry people. A key impedi-

ment is one-time ramp up expenses that local organizations and charities must incur as they take on the challenge of safely acquiring and distributing perishable foods. Our proposal will help local communities pay for vans and trucks, specialized containers to pick up usable food, other supplies, and training for both staff and volunteers in how to safely handle the food.

FOOD AND NUTRITION PROGRAM RESEARCH

Question. Would you please explain how the Economic Research Service is executing the nutrition research and evaluation program for fiscal year 1998 and why the Administration believes the Food and Nutrition Service can better oversee and administer these research funds?

Answer. I understand that ERS has consulted with many government agencies, private and non-profit organizations, universities, and the Food and Nutrition Service to solicit input for program development. A recent conference under the auspices of the National Academy of Sciences was sponsored by ERS to help design and focus the program. ERS plans to operate a nationally diverse program which draws on the research capabilities of the public and private sectors, including the nation's academic institutions.

Despite the excellent work that ERS has done, the Administration believes this research and evaluation program should be overseen and administered by the Food and Nutrition Service. FNS has detailed knowledge of the country's food programs and, because they administer and have oversight responsibility for the programs, they better understand the research and evaluation needs of the food programs.

Question. Would you please describe this initiative, its importance, and long-term cost?

Answer. The National Food Genome Initiative (NFGI) is an essential component of USDA's Research Agenda. It will vastly expand our knowledge of the genetic make-up for species of importance to the food and agricultural sectors. This knowledge is the key that will permit the U.S. to develop and use new genetic technologies for improvement in yield, pest resistance, production, and quality of the domestic agricultural output. The Initiative will focus on mapping, identifying, and understanding the function and control of genes responsible for economically important traits in the major agriculturally important species of plants and animals and associated microbes. The Initiative expands the scope of the National Plant Genome Initiative (NPGI)—a long term project of the National Science Foundation, the National Institute of Health (NIH), the Department of Energy, USDA, and the international research community. NPGI is described in the recently published report from the National Science and Technology Council (NSTC). (A copy of the NSTC report is being provided to the committee.)

The research for NFGI will build upon the foundation established in the current USDA genetic research programs. In this way, USDA will continue to acquire a full understanding of the genetics of economically desirable plants, animals, and microbes, and will simultaneously enhance the employment of new and developing genomic technology needed to achieve a safe and secure food supply. It will build upon current genomic research, such as the Human Genome Initiative and the Arabidopsis Genome Research Project, to understand gene structure and function which is expected to have considerable payoff in crop species ranging from corn to soybean to cotton and animal species ranging from cattle to swine to poultry.

In fiscal year 1999, the Department proposes investing $40 million in the NFGI. The funds would be used primarily for whole genome sequencing for rice and Arabidopsis; expressed sequence tag (EST) analysis for corn, soybean, cattle and pig; data base enhancement and interface for species data bases; and functional genomics. In fiscal year 2000 and 2001, it is envisioned that the Initiative will increase to $70 million and $100 million respectively, and then continue at $100 million per year, adjusted as appropriate for advances in technologies and scientific knowledge, and as funds are available within overall spending limitations.

I understand that the Department's fiscal year 1999 request includes $30 million increase in discretionary appropriations for this initiative and proposes legislation to provide for an additional $10 million.

Question. What authorization is needed for this proposed research initiative and is the additional $10 million proposed an authorization for appropriations or direct spending?

Answer. The fiscal year 1999 budget proposes new legislation to establish a Food Genome Competitive Research Grants Program to support the Federal investment in NFGI and to authorize annual appropriations to finance the program. The budget recommends $10 million in discretionary spending for the Initiative under this new authority to support competitively awarded projects.

COMMISSION ON 21ST CENTURY PRODUCTION AGRICULTURE

The fiscal year 1999 budget request an increase of $350,000 to fund the Commission on 21st Century Production Agriculture authorized by the Federal Agriculture Improvement and Reform Act. Last year, the budget request a separate appropriation of $1 million for the Commission. The Committee did not approve that request but left it to the Department to make funding available for the Commission within the overall limitation on obligation for activities of advisory committees, panels commissions, and task forces.

Question. Why has the request for the Commission fallen from $1 million last year to $350,000 for fiscal year 1999?

Answer. Last year's request assumed the Commission would employ a staff of several persons, hold an ambitious schedule of meetings and hearings, award research contracts, and publish the reports. Since that request was submitted, the Commission members have been appointed and met. This year's request was developed in consultation with the Commission. Given the lack of appropriations last year, the Commission has scaled down their planned activities. Current plans for fiscal year 1999 call for the employment of only one staff person, no research contracts, less frequent meetings, and limited distribution of printed copies of the reports.

Question. Is funding being made available for the Commission for fiscal year 1998 within the overall $1 million limitation on obligations for such activities? If so, how much is being provided and which agency is bearing the cost?

Answer. The Commission is being provided up to $50,000 for fiscal year 1998. The $50,000 will be made available within the overall $1 million limitation on obligations for such activities. At this time, no funds have yet been made available to the Commission and the decision has not been made as to which agency is bearing the costs.

CHIEF ECONOMIST: AGRICULTURAL WEATHER SERVICES

Increased funding was provided to the Office of the Chief Economist for fiscal year 1998 to improve weather and climate data for agricultural areas.

Question. Would you please explain the agricultural weather initiative more fully. Also, how are the fiscal year 1998 funds being spent and what additional resources will be required in fiscal year 1999 and each future fiscal year to fully carry out this program and for what specific purposes will these funds be required?

Answer. Weather data is a key input to agricultural production forecasts, disaster assessments, fire and flood control, conservation and natural resource programs, global change analysis, environmental monitoring, and drought mitigation. Program and budget cuts underway in the National Weather Service (NWS) have significantly curtailed meteorological data and services formerly available to USDA. For example, as a cost cutting measure, NWS recently announced it will cease delivery of weather charts and satellite imagery used extensively by USDA.

The Office of the Chief Economist (OCE) is using a portion of the fiscal year 1998 funding to purchase computer hardware and software compatible with that being adopted by NWS. When fully implemented, this will be USDA's only source for obtaining NWS data products.

The remainder of fiscal year 1998 funds are being used to collect, quality control, and disseminate weather and climate data in agricultural regions no longer covered by the NWS. In fiscal year 1998, USDA is acting to mitigate NWS data losses in the southeastern United States, a prime agricultural area where weather and climate data gaps in agricultural areas have been well documented. A data collection center is being staffed at Stoneville, Mississippi which will concentrate on improving data collection in key agricultural states including, Mississippi, Florida, Alabama, Georgia, and South Carolina.

For fiscal year 1999, OCE is seeking additional modernization funds and staff to continue software development to improve access to and delivery of NWS data and forecasts to additional USDA field sites.

Also during fiscal year 1999, data collection efforts will expand beyond the southeastern United States. The staff at Stoneville will be increased, and additional cooperative agreements will be established to acquire agricultural weather and climate information in Texas, Louisiana, and parts of the southern and central Plains.

Beyond fiscal year 1999, initiatives will be directed at completing data acquisition activities across the remainder of the nation's agricultural areas, specifically, the Plains, Great Lakes, and Midwest. The exact funding requirements will vary depending on the extent of weather data collected and the agricultural areas covered.

CIVIL RIGHTS

Question. Mr. Secretary, at your request, additional funds were provided for fiscal year 1997 and again for the current year for the Office of Civil Rights to address the backlog of pending equal employment opportunity and program discrimination complaint cases. However, the backlog of cases seems to have grown, not diminish. Is any progress being made in this area?

Answer. Significant progress has been made with both program complaints and employment complaints. Experience by others has shown that when an agency starts to address complaints after a period of time in which they were not acted upon there is a sudden flood of complaints filed by those who are hopeful that their case will be seriously considered. Once these complaints are filed, the filing rate diminishes.

Question. How many cases were closed at the end of fiscal year 1997, how many were pending in the courts; and how many had not been addressed?

Answer. When the Department focused on addressing complaints filed with USDA in late fiscal year 1997 and early fiscal year 1998, we discovered that the basic case load information was confused and incomplete. Some complaints that were submitted over the past few years had not been properly logged into the system, and others were inaccurately included in the case file with similar cases instead of being counted as new ones. The backlog of program complaints were not updated and verified until November 1, 1997, and employee complaints until January 1, 1997. As of these dates, 1,129 of the 3,179 complaints filed were closed, and 2,050 were active. Normally there would be no active program complaints pending in court. However, the latest amended list in the Pigford class litigation contains 351 names of which 143 have complaints filed with the Office of Civil Rights. Of these, 43 were filed before February 21, 1997.

Question. Please provide this same information for fiscal year 1998 to date.

Answer. Two hundred eighty new cases have been filed since the backlog was verified. Fifteen of these cases have been closed and two hundred sixty five are active cases.

Question. How many of the above cases are employee complaints and how many are complaints by farmers?

Answer. Out of the 3,459 complaints that we have on file, 1,118 are program complaints and 2,341 are employee complaints. Of the program complaints, 155 are from farmers. USDA has closed 229 of the program complaints and 915 of the employee complaints.

Question. What are the Department's plans to address the pending cases?

Answer. In addition to re-establishing the program complaints investigations unit this year, the program complaint process is being accelerated through contracts with 10 investigative firms, 14 temporary investigators, more than 20 part-time law students, 10 temporary support staff, and about 10 detailed employees to resolve the entire backlog in a methodical and organized manner. New cases that have been received are being addressed using a re-engineered process that should process and resolve each new complaint within 180 days under normal circumstances.

Backlogged employee complaints are being resolved to the extent possible through a mediation process that uses USDA employees and mediators outside the Department. For example, the Forest Service resolved 75 percent of its backlog cases through mediation during a special initiative this past fall and winter. New cases that are relatively clear cut are being quickly addressed by in house staff to reduce the time and cost to resolve them.

Question. Last year, you indicated to Senator Robb that the most pressing need for the Office of Civil Rights was to establish the civil rights investigative unit and that unit was critical to addressing the backlog of cases and ensuring timely resolution of future complaints. Why wasn't that unit funded from the funding increase the Department received for fiscal year 1997, and has that unit now been established?

Answer. We did not want to simply hire more employees until we had examined and understood the extent of the workload and how past procedures used by USDA to handle these cases had contributed to the backlog. Consequently, most of last year's funds were used for these purposes. We also concentrated on addressing those cases which had a potential to be quickly resolved.

Our intention is to improve both how we deal with the complaint process and how we can make institutional changes in USDA policy and employee attitudes and actions that will prevent future situations that lead to complaints. The program complaints investigations unit has been established and is responding to the program complaints that have been made against the Department. At the same time, other oversight, policy and program actions have been proposed to further ensure that fair

and equitable treatment is provided to USDA customers through services to the public.

Question. Of the increased funding requested for fiscal year 1999 for civil rights related, how much of this is for the processing and resolution of complaints?

Answer. The increased funding requested for civil rights activities will be used to strengthen the Office of Human Resources Management, the Office of Outreach and conflict resolution capabilities, so we can serve USDA customers and employees better and prevent future discrimination complaints.

About $170,000 of the total proposed increase for fiscal year 1999 would be used to cover increased pay and operating costs for the Office of Civil Rights to process and resolve complaints.

Question. How does this compare with the current level of resources devoted to these activities?

Answer. About $3.5 million will be spent to resolve program complaints in fiscal year 1998 and nearly $3.7 million will be needed for fiscal year 1999.

The fiscal year 1999 budget proposes $250 million for civil rights-related activities. This is an increase of $150 million above the fiscal year '98 level.

Question. Please list the individual activities for which increased funding is requested in the fiscal year 1999 budget and indicate the fiscal year 1998 funding level and staffing levels for each activity compared with those requested for fiscal year 1999.

Answer. We will provide this information for the record.

[The information follows:]

USDA CIVIL RIGHTS INITIATIVE—BUDGET AUTHORITY

[Dollars in millions]

Program	1998 current estimate	1999 budget
Fund Civil Rights Activities in DA	$12.8	$17.8
Improve Outreach to USDA Customers and Socially Disadvantaged Farmers and Ranchers	3.0	10.0
Civil Rights Division Within OGC	0.2	0.9
Fund Small Farms Initiative	.....	4.0
Address Disparities in Funding of Institutes of Higher Education:		
1890 Facilities	8.0	12.0
Extension Services—1994 Institutions	2.0	3.5
Hispanic Serving Institutions Education Grants	2.5	2.5
Extension Indian Reservation Program	1.7	5.0
Farm Ownership and Farm Operating Loans:		
Farm Ownership at $85 million level in 1999	6.0	13.0
Farm Operating Loans at $500 million level in 1999	32.0	34.0
Farm Labor Housing Program:		
Subsidy for $32 million in loans in 1999	7.3	17.0
Farm Labor Housing Grant Level	10.0	13.0
Rural Rental Assistance Payments	5.0	10.0
Address the Needs of Farmworkers: Fund NASS Pesticide Use Survey	5.7	7.1
Provide Increased EQIP Funds to Low-Income Farmers and to Address Environmental Needs	.....	100.0
Total, Civil Rights	96.2	249.8

In addition to the request for funding, the budget also reflects increased staffing levels for some of the previously listed activities. These include the following:

Administration.—An increase of 62 staff years. This will improve civil rights related personnel services and technical assistance to agencies, increase outreach and assistance efforts to under represented customers and groups, enhance management-employee relations and support early resolution of complaints. The increase includes staffing for the newly established Office of Outreach within DA to assure that all eligible customers have access to USDA programs and services and for the Socially Disadvantaged Farmers Outreach Program, which is authorized by Section 2501 of the Food, Agriculture, Conservation and Trade Act of 1990.

An increase of 8 staff years is proposed to facilitate the processing and adjudicating of civil rights complaints by expanding the civil rights division in OGC.

Research, Education, Extension and Statistics.—Funds are requested to support an integrated research, extension, and education competitive grants program through CSREES for new technology adoption and transfer to small farms. This initiative is intended to foster greater diversity in small farm enterprises as well as enhance current small farms production capabilities.

Additional funds are requested to address disparities in funding and enhance the Department's cooperative efforts with institutions of higher education that are primarily devoted to the needs of minority students. Funds will also be targeted to improve outreach to socially disadvantaged farmers and ranchers in cooperation with these institutions to help stem the reduction of minority small farmers. The Extension Indian Reservation program will be expanded to meet the need for greater outreach by Extension Agents. One additional staff year is included for the Small Farms initiative. The NASS proposal to support collection of data on pesticide usage in nursery and greenhouse crops, where the potential for farmworker exposure is high reflects an increase of 10 staff years.

Farm Credit.—Funds are proposed to support farm ownership and operating loans at the levels recommended by the CRAT report. Direct farm ownership loans would be increased from $46 million in 1998 to $85 million in 1999. This funding increase will allow over 1,000 family farmers to either acquire their own farm or to save an existing one—nearly 500 more than in 1998. Roughly 60 percent of these loans are provided to limited resource borrowers.

Farm Labor Housing.—Funds are provided to support a total of $55 million in loans and grants to construct housing for some of the Nation's neediest families. This is over an 80 percent increase from the 1998 level.

Environmental Quality Incentives Program.—An increase of $100 million is requested to address CRAT recommendations and Clean Water Initiative goals. While this will not be used to support an overall increase in staff for NRCS, we expect up to 50 staff years will be devoted to CRAT related activities.

FORECLOSURES

Question. In April 1997, USDA halted foreclosures on USDA farm loans, pending civil rights reviews. As a result, 116 foreclosures were postponed. In each state USDA office, a Civil Rights Independent Review Group has been created to review these foreclosures. Have these Civil Rights Independent Review Groups reported that discrimination contributed to any of these foreclosures? If so, how many and in which states?

Answer. The 116 cases mentioned were reviewed by the Independent Review Team in the National Office. The Review Team was established to review all cases in the foreclosure process only to determine whether a question of discrimination was raised, not whether it occurred. Upon the completion of their review, twenty-eight of the 116 cases were referred to the USDA Office of Civil Rights, Program Complaint Adjudication Division (PCAD). Of the twenty-eight cases referred to PCAD, only eighteen discrimination complaints were filed, while the other ten were determined to need additional loan servicing. Of the 18 discrimination complaints filed, one has been closed by settlement and not foreclosure. Seventeen discrimination complaints remain open until a decision is made whether discrimination occurred. Based on the twenty-eight cases reviewed none have been foreclosed. With respect to 88 cases remaining from the 116 reviewed, additional servicing needs are being carried out and none have been foreclosed. The Independent Review Team was disbanded on September 12, 1997.

Question. How were these conclusions about discrimination determined?

Answer. The Independent Review Group was given guidance through a National written directive that includes a detailed checklist to assist in the review. The checklist, when completed, provides a history of the servicing actions taken and any documentation submitted by the borrower that alleges discrimination. However, as indicated earlier, the Independent Review Team did not make any determination that discrimination occurred.

DEPARTMENTWIDE OBLIGATIONS

Question. Please provide a summary of obligations, Departmentwide, for each of fiscal years 1997–1999, for the following object classifications: salaries and benefits; travel; ADP hardware/software purchases; contracts, grants, and other extramural agreements; and equipment (other than ADP related).

Answer. The following table provides an estimate of the obligations for 1997, 1998, and the 1999 budget in millions of dollars, excluding Forest Service:

Object class	1997 estimate	1998 estimate	1999 estimate
Salaries and benefits	$3,424	$3,576	$3,617
Travel	159	166	170
ADP hardware/software purchases	65	123	152
Contracts, grants and other extramural agreements	1,537	1,623	1,396
Equipment (other than ADP related)	107	93	98

Question. Please provide the Committee with a consolidated listing of obligations for fiscal years 1997–1999 for the following crosscutting program activities:

—civil rights activities;
—support for 1890 Institutions and Historically Black Colleges and Universities;
—pest management;
—food safety;
—nutrition (excluding benefits);
—USDA information activities;
—Congressional relations and legislative affairs offices; and
—natural resources and environmental programs.

Answer. The following table contains the information. Please note the amounts are dollars in millions.

Activities	1997 estimate	1998 estimate	1999 estimate
Civil rights activities	$23	$34	$37
1890 Institutions and HBCU's	95	92	96
Pest management and related programs	231	260	266
Food safety	631	654	721
Nutrition	411	421	457
Information activities	46	47	48
Congressional relations and legislative affairs offices:			
USDA (w/o FS)	3	3	3
FS	1	1	1
Natural resources and environment programs	3,310	3,298	3,223

ADMINISTRATIVE STAFFING

Question. What is the total number of administrative staff for USDA broken out by headquarters, regional, State, and field office levels?

Answer. The following table contains the information.

USDA Administrative Staff

Location	*1997 estimate*
Headquarters	4,298
Regional	4,353
State	1,457
Field Offices	4,600
Total	14,708

EMPLOYEE DETAILS/ASSIGNMENTS

Question. The fiscal year 1998 appropriations Act specifies that "No employee of the Department of Agriculture may be detailed or assigned to an agency or office funded by this Act to any other agency or office of the Department for more than 30 days unless the individual's employing agency or office is fully reimbursed by the receiving agency or office for the salary or expenses of the employee for the period of assignment."

Please provide the Committee with a list, by agency, of each employee detail or assignment (by employing agency, title, and position) in each of fiscal years 1997 and 1998 for a period up to 30 days, and identify the agency to which that detail or assignment was made, its length, and the purpose of the detail assignment. Provide this same information for employee details/assignments made for a period of more than 30 days, and indicate the dollar amount of reimbursement made to the employing agency for such detail/assignment.

Answer. The following table contains the information.

DETAILED FOR LESS THAN 30 DAYS—FISCAL YEAR 1998

Position/agency	Detailed to	Date/length	Purpose	Reimbursed
William Digdo (GIPSA)	APHIS	15 days	APHIS Medfly	$3,837
Michael Haley (GIPSA)	APHIS	15 days	APHIS Medfly	3,934
James Ledoux (GIPSA)	APHIS	20 days	APHIS Medfly	2,993
Bradley O'Neal (GIPSA)	APHIS	15 days	APHIS Medfly	3,118
Robert Simpson (GIPSA)	APHIS	2 days	APHIS Medfly	411
Dan White (GIPSA)	APHIS	2 days	APHIS Medfly	441
Sylvia Magbanua (NASS)	Office of Civil Rights	28 days	Civil Rights training program	
N. Blair (FS)	Office of the Secretary	10/6/97 to 11/6/97	Civil Rights Action Team	
G. Renteria (FS)	Office of the Secretary	11/3/97 to 11/20/97	Civil Rights Action Team	
M. Warren (FS)	Natural Resources and Environment	10/01/97 to 10/24/97	Support	

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1998

Position/agency	Detailed to	Date/length	Purpose	Reimbursed
Special Assistant to Adm. (FSA)	White House	10/01/97 to 09/30/98	Personnel liaison for all White House personnel of Cabinet agencies and Boards and Commissions within assigned portfolio.	$73,638 Est. (Reimb. limited by 3 U.S.C. 112).
Computer Specialist (FSA)	OSEC/Modernization of Admin. Processes Program (MAPP).	1/19/98 to 05/09/98	To provide Agency expertise to MAPP project managers	$20,519 est.
Management Analyst (FSA)	U.S. Environmental Protection Agency	10/01/97 to 11/22/97	Assisted in the Information Resources Management Policy area involving contract resources.	$15,409.
Confidential Assistant to Administrator (FSA).	Rural Development, Office of Community Development.	10/01/97 to 09/30/98	To assist the Empowerment Zone initiative in helping the program/communities achieve economic and sustainable development.	$88,500 est.
Confidential Assistant to Administrator (FSA).	Office of Communications, Photography Division.	10/01/97 to 09/30/98	Provide Agency expertise to the Photography Division	$52,000 est.
Director, Performance Engineering and Analysis Group (FSA).	NASA, Ames Research Center	2/01/98 to 05/23/98	Provides assistance on the planning, technical guidance, and direction of the Independent Verification and Validation (IV&V) facility operations.	$33,000 est.
Robert Cummings (FAS)	Office of the U.S. Trade Representative	2 years 6/97–6/99	Work on agricultural trade issues	Non-reimbursable.
Nancy Hirchhorn (FAS)	The World Bank	1 year 7/97–7/98	Articulate USDA interests on project activities	Non-reimbursable.
Stephen Huete (FAS)	Inter-American Development Bank	1 year 8/97–8/98	Articulate USDA interests onproject activities	Non-reimbursable.
David Schoonover (FAS)	Office of the U.S. Trade Representative	2 years 6/97–6/99	Work on agricultural trade issues	Non-reimbursable.
Ragiv Rastogi (RUS)	Foreign Agricultural Service	39 months		$252,549.

Thomas Bennett (RHS)	Natural Resources Conservation Service	1 yr. to date Temporary Promotion.	Test Laboratory (Peoplesoft)	None.
LaJaycee Brown (RHS)	White House	180 days	Communications—Schedule C	None.
Marylan Chapman (RHS)	Under Secretary's Office	120 days	Women in Agriculture Initiative	None.
Cheryl Cook (RHS)	Office of the Secretary, Assistant Secretary for Administration.	45 days	Administrative Convergence—Schedule C	None.
Carolyn Cooksie (RHS)	Farm Service Agency	2 years	Minority Farming	None.
Stan Gray (RHS)	Office of the Secretary, Chief Information Officer.	3 months to date	Business Process Reengineering	None.
Debbie Matz (RHS)	Farm Service Agency	2 years	Loan Resolution Task Force—Political Appointee	$110,000.
Debbie Matz (RHS)	Office of the Secretary, Assistant Secretary for Administration.	5 months	Deputy Assistant Secretary for Administration—Political Appointee.	$96,411.
Mary McNeil (RHS)	Office of Congressional Relations—Intergovernmental Affairs.	2 years to date	Communications—Schedule C	$120,089.
Angela Morrall (RHS)	Office of the Secretary, Assistant Secretary for Administration.	40 days	Civil Rights Implementation Team (CRIT)	None.
Charles Wehrwein (RHS)	Housing and Urban Development	90 days	Housing Initiative	$25,000.
Karen Murray (RBS)	Extension Service	9 months to date	Partnering	$52,000.
Carolyn Parker (RBS)	Office of the Secretary, Assistant Secretary for Administration Office of Outreach.	2 months to date	Civil Rights Outreach	$73,733.
Carolyn Parker (RBS)	Deputy Administrator, Office of Assistant Secretary.	9 months	Civil Rights Implementation Team	None.
Vivian Peters (RBS)	Foreign Agricultural Service	120 days to date	Scheduler—Schedule C	$50,997.
Samantha Speight (RBS)	White House	180 days	Scheduler	None.
K. Basu (FSIS)	Food and Ag Council	2/98–2/99	Civil Rights Assistance	Agreement developed.
P. Cohen (FSIS)	DOJ/Criminal Division	12/97–6/98	Assistance in the development of strategic plans for projects.	None (determining if detail benefits FSIS).
M. Eldakdoky (FSIS)	FAS	3/96–5/31/98	Food technology support	Detail benefits FSIS.
J. Gettleman (FSIS)	DA: Appeals and Grievances Staff	1/98–4/7/98	Senior Staff Assistance	None—just received SF–52—determiningif detail benefits FSIS.
F. Gwozdz (FSIS)	ARS	1/97–5/98	Staff Assistance	Detail benefits FSIS.
C. Romeo (FSIS)	Office of Under Secretary for Food Safety	10/97–3/98	Unclassified Duties	Detail benefits FSIS.
L. Wright (FSIS)	Departmental Administration	3/97–12/97	To work on a CRIT	Detail benefits FSIS.
Stephen Balson (FNS)	USDA/OCFO	10/01/96 to 09/30/98	FISVIS	$118,362.
Lawrence Blim (FNS)	USDA/OCFO	10/1/96 to 9/30/98	FISVIS/Accounting Standards Manual	$105,593.
Renee Brown (FNS)	Under Secretary/FNCS	10/6/97 to 1/13/98	Secretarial Support	$5,732.
Kathleen Crampton (FNS)	USDA/OCFO	10/1/96 to 9/30/98	FISVIS	$91,752.
Daniel Dager (FNS)	Under Secretary/FNCS	10/1/96 to 3/24/98	Budget and Legislative Support	$33,582.
Bruce Klein (FNS)	U.S. Congress/Joint Econ. Committee	10/20/97 to 2/20/98	Analytical Support	$30,152.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1998—Continued

Position/agency	Detailed to	Date/length	Purpose	Reimbursed
Jane Manley (FNS)	Under Secretary/FNCS	10/6/97 to 12/20/97	Secretarial Support	$8,537.
Sharon Phillips (FNS)	USDA/FSIS	4/21/97 to 1/17/98	Secretarial Support	$16,711.
Ismael Tercero (FNS)	DHHS	10/1/96 to 10/13/97	Tribal Health Programs	$1,542.
Velma Brooks (NRCS)	FISVIS	10/1/97 to 9/30/98	To provide clerical assistance	$38,703.
Rebekah Davis (NRCS)	FAS	1/20/98 to 5/20/98	To provide research and writingsupport	$7,000.
Pam Folson (NRCS)	USDA/DAMS	6/29/97 to 9/3/98	Provides support to the Office of the Senior Policy Advisor for Service Implementation and to serve on Team I of the Admin. Convergence.	$37,417.
Lois Loser (NRCS)	USDA/NSD	9/29/97 to 6/20/98	Provides technical support and is Acting Branch Chief	$68,032.
Robert Reaves (NRCS)	USDA/Administrative Management Service	6/22/97–3/1/98	Provides leadership and direction to staff, assign work, set goals, participates in Departmentwide and Governmentwide multi-organization project.	$43,427.
John Sutton (NRCS)	FAS/ICD/DRD	8/21/97 to 8/31/99	Detailed to acting Branch Chief NTE 2 years	$95,529.
Joan Conway (ARS)	FAO	9/97–present	Special Management Intern Program	
Robert Harmon (ARS)	FSIS	7/96–present	Training and to provide support to Microcomputer Support Section.	$25,613.
Stephen Heller (ARS)	NIST	10/97–present	To exchange high level expertise and knowledge related to leading edge technology.	$59,228.
Al Kemezys (ARS)	MAPPS	8/96–12/97	Provide support for MAPPS	$75,222.
Adrienne Labega (ARS)	Metro Area Reemployment Center	8/97–present	Nonreimbursable—medical accommodation	None.
Carl Momberger (ARS)	MAPPS	11/96–present	Provide technical expertise on MAPPS	$96,033.
Anne Riordan (ARS)	USDA, Procurement Policy Division	11/97–present	Provide support to Phase II of USDA Procurement Modernization Project.	None.
Charlotte Sorrentino (ARS)	Office of the Secretary	7/97–present	Provide administrative support	Reimbursement being requested.
James Spurling (ARS)	Under Secretary for Research, Education, and Economics.	8/97–present	Mission Support	None.
Mitch Geasler (CSREES)	Under Secretary for Research, Education, and Economics.	10/97–present, half time	Mission Support	None.
Mary Humphreys (CSREES)	Under Secretary for Research, Education, and Economics.	10/97–9/98	Secretarial support, Secretary, Research, Education, and Economics.	Reimbursement requested.
Dafina Williams (CSREES)	Under Secretary for Research, Education, and Economics.	11/97–11/98	Secretarial support, Under Secretary, Research, Education, and Economics.	Reimbursement requested.
Audrae Erickson (ERS)	USTR Office of Agricultural Affairs (White House).	3 months	Agricultural Trade	None.

Paul Flaim (ERS)	President's Council on Sustainable Development (White House).	8 months	White House Committee on Sustainable Development	None.
Christian Foster (ERS)	FAS	9 months	To work as an agribusiness policy analyst with USAID/Global Bureau.	$111,490.
Keith Fuglie (ERS)	Council of Economic Advisers (White House).	9 months	Senior Economist for Agriculture and Natural Resources	None.
Carl Mabbs-Zeno (ERS)	USDA/FAS/ICD	1 month	To work under the Environment and Natural resources project.	$10,650.
Sara Mazie (ERS)	USDA/REE/OSEC	10/1/96–present	Mission Support/Budget Coordination	None.
Toni Bradly (NASS)	Office of Civil Rights	120 days	Civil Rights enforcement support	None.
Jorge Garcia-Pratts (NASS)	CSREES	261 days	USDA Liaison to the University of Puerto Rico	$95,000.
Craig Kirby (AMS)	Assistant Secretary—MRP	9/22/97 to present	Provide support to the Asst. Secy	None.
Mark Kreaggor (AMS)	MAP, then PACC	10/1/97 to 3/28/98	Assist MAP and PACC with Time and Attendance BPR Project.	$8,000.
Kevin Clarke (APHIS)	OCIO	10/1/97 to present	USDA Enterprise Network designteam	None.
Evelyn Davis (APHIS)	OCIO	11/1/97 to 9/30/98	Assist with USDA Program	$69,909.
Walter Moczydlowsky (APHIS)	OCIO	10/1/97 to present	USDA Enterprise Network designteam	None.
Karen Murray (APHIS)	OCFO	10/1/97 to 9/30/98	Assist with USDA financial systems development	$77,382.
Patricia Peer (APHIS)	Assistant Secretary—MRP	12/21/97 to present	Provide support to the Assistant Secretary	None.
Frank Sanders (APHIS)	OCFO	10/1/97 to 9/30/98	Assist with USDA financial systems development	$61,999.
Joe Taylor (APHIS)	OPPM	2/97 to 9/98	VISA card implementation	None.
Mary Carmouche (GIPSA)	APHIS	73 days	APHIS Medfly	$7,340.
Michael Caughlin (GIPSA)	FAS	10/1/97–7/1/98	Agribusiness Advisor	$97,500.
John Cox (GIPSA)	APHIS	115 days	APHIS Medfly	$6,183.
Roy Johnson (GIPSA)	APHIS	147 days	APHIS Medfly	Still on detail.
William Napoleon (GIPSA)	APHIS	73 days	APHIS Medfly	$13,642.
Wanda Pitiman (GIPSA)	APHIS	73 days	APHIS Medfly	$7,976.
Steve Reams (GIPSA)	APHIS	147 days	APHIS Medfly	Still on detail.
Mark Reimer (GIPSA)	APHIS	73 days	APHIS Medfly	$8,686.
George Wright (GIPSA)	APHIS	37 days	APHIS Medfly	$2,425.
Marci Hilt (OC)	DA	5 months	Civil Rights Action Team (CRAT)	$38,995.
Barnedia Talley (OCFO)	ASA	3 months	Civil Rights Implementation Team	$9,000.
Frances Trout (OCFO)	OSEC	Being Negotiated	Travel Assistance	None.
Jeff Knishkowy (OGC)	Office of Acting Assistant Secretary for Administration.	1/13/97 to 1/31/98	Provide assistance to the Civil Rights Action Team to include implementation of recommendations.	None.
John Lom (OGC)	U.S. Trade Representative Office	10/20/97 to 3/19/98	To better serve USDA in dealing with international trade disputes and related matters.	None.
Lauretta Miles (OIG)	USDA/Office of the Secretary	1/18/98 to 6/20/98	To provide six month detail assignment to perform clerical duties.	$17,000.
Robert Franco (DA)	OPM	2/17/97 to NTE 2 yrs	Develop SES Recruitment Strategies	$116,495.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1998—Continued

Position/agency	Detailed to	Date/length	Purpose	Reimbursed
J. Phelps (DA)	OCFO	12 months	Financial Info. Systems Vision project (FISVIS)	$48,000.
C. Bailey (FS)	Office of the Secretary	10/1/97 to 1/2/98	Civil Rights Action Team	None.
A. Brown (FS)	Office of the Chief Financial Officer	10/1/97 to 9/30/98	FS Liaison	$71,000.
J. Comanor (FS)	Natural Resources Conservation Service	10/1/97 to present	Support	$70,000.
J. Dudley (FS)	Office of Operations	10/1/97 to 3/27/98	FS Liaison	$47,116.
M. Fletcher (FS)	Office of the Secretary	10/12/97 to 1/2/98	Civil Rights Action Team	None.
C. Franz (FS)	Modernization of Administrative Processes.	10/1/97 to 1/2/98	Civil Rights Action Team	$88,000 est.
J. Gavin (FS)	Office of the Chief Information Office	10/1/97 3/31/98	Support	$31,000.
M. Hamilton (FS)	Office of the Secretary	10/1/97 to 11/30/97	Civil Rights Action Team	None.
T. Harwood (FS)	Hazardous Waste Management	10/1/97 to present	FS Liaison	$123,300.
J. King (FS)	Office of the Chief Financial Officer	10/1/97 to present	FS Liaison	$88,000.
Z. Okrak (FS)	Office of the Chief Financial Officer	10/1/97 to present	FS Liaison	$74,000.
B. Preston (FS)	Natural Resources and Environment	10/1/97 to present	FS Liaison	None.
C. Pytel (FS)	Assistant Secretary. (ADM)	10/1/97 to 1/3/98	Acting Deputy Assistant Secretary for Administration	$38,212.
V. Ross (FS)	Office of the Secretary	10/1/97 to 12/31/97	Civil Rights Action Team	None.
G. Sundstrom (FS)	Hazardous Waste Management	10/1/97 to present	FS Liaison	$85,860.
B. Velde (FS)	Hazardous Waste Management	10/1/97 to present	FS Liaison	$96,484.
K. Waldvogel (FS)	Hazardous Waste Management	10/1/97 to present	FS Liaison	$83,656.
S. Yaddof (FS)	Cooperative State Research, Educ. And Ext. Srvc.	10/1/97 to 1/31/98	Support	$25,000.
J. Zeller (FS)	Office of the Secretary	10/1/97 to 11/7/97	Civil Rights Action Team	None.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1997

Position/agency	Detailed to	Dates	Purpose	Reimbursed
Special Assistant to Administrator (FSA)	White House	10/01/96 to 09/30/97	Personnel liaison for all White Housepersonnel of Cabinet agencies and Boards and Commissions within assigned portfolio.	$71,071 (Reimb. limited by 3 U.S.C. 112).
Supervisory Computer Specialist (FSA)	OSEC/Modernization of Administrative Processes Program (MAPP).	10/01/96 to 09/30/97	To provide Agency expertise to MAPP project managers	$85,042.
Supervisory Systems Accountant (FSA)	Alternative Agricultural Research and Commercialization Corporation (AARC).	3/09/97 to 05/03/97	To develop the format for the AARC financial statements for fiscal year 1997 and provide guidance on accounting principles as they relate to government corporations.	$17,816.

Confidential Assistant to Adm. (FSA)	Rural Development Office of Community Development.	4/11/97 to 09/30/97	To assist the Empowerment Zone initiative in helping the program/ communities achieve economic and sustainable development.	$31,025.
Computer Specialist (FSA)	OSEC/Modernization of Administrative Processes Program (MAPP).	1/19/97 to 09/30/97	To provide Agency expertise to MAPP project managers	$45,748.
Management Analyst (FSA)	Office of the Chief Information Officer	2/24/97 to 08/18/97	To assist in the development and implementation of USDA's Information Systems Technical Architecture and Information Technology Capital Planning, and Investment Control projects.	$45,270.
Robert Cummings (FAS)	Office of the U.S. Trade Representative	6/97–6/99	Work on agricultural trade issues	Non-reimbursable.
Nancy Hirschhorn (FAS)	The World Bank	7/97–7/98	Articulate USDA interests on project activities	Non-reimbursable.
Stephen Huete (FAS)	Inter-American Development Bank	8/97–8/98	Articulate USDA interests on project activities	Non-reimbursable.
David Schoonover (FAS)	Office of the U.S. Trade Representative	6/97–6/99	Work on agricultural trade issues	Non-reimbursable.
Ragiv Rastogi (RUS)	FAS	39 months		$252,549.
David Adams (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Victor Agresti (RHS)	Department of Justice	90 days	In advance of his permanent reassignment	$20,000.
Joyce Allen (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Steve Anaya (RHS)	Office of the Secretary, Assistant Secretary for Administration.	90 days	Civil Rights Action Team (CRAT)	None.
Tracey Anderson (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Mark Brad Benson (RHS)	Center for Rural Pa.	3½ years	Partnering (Intergovt Pers Act—IPA)	None.
Terry Bishop (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Edith Brown (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Rhonda Brown (RHS)	Office of the Secretary, Assistant Secretary for Administration.	5 weeks	Civil Rights Implementation Team (CRIT)	None.
Helen Cordero (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Angela Corley (RHS)	Office of the Secretary, Assistant Secretary for Administration.	120 days	Civil Rights Implementation Team (CRIT)	None.
Mary Fox (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Leonard Hardy, Jr. (RHS)	Office of the Secretary, Assistant Secretary for Administration.	90 days	Civil Rights Action Team (CRAT)	None.
Carlton Lewis (RHS)	Office of the Secretary, Assistant Secretary for Administration.	90 days	Civil Rights Implementation Team (CRIT)	None.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1997—Continued

Position/agency	Detailed to	Dates	Purpose	Reimbursed
Jacquiline Micheli (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
Mary Parker (RHS)	Office of the Secretary, Assistant Secretary for Administration.	60 days	Civil Rights Implementation Team (CRIT)	None.
S. Leanne Powell (RHS)	White House	180 days	Women's Issues Program—Schedule C	None.
John Soles (RHS)	Rural Center, NC	4 years	Partnering (Intergovt Pers Act—IPA)	None.
Joseph Taggert (RHS)	Office of Congressional Relations—Intergovernmental Affairs.	11 months	Communications—Schedule C	None.
Quinton Wilform (RHS)	Office of the Secretary, Assistant Secretary for Administration.	150 days	Civil Rights Implementation Team (CRIT)	None.
James Coyle (RBS)	USDA National Service	7 months	America Reads and Gleaning	None.
Amy Donoghue (RBS)	Extension Service	120 days	Partnering	$11,000.
Stephen Balsan (FNS)	USDA/OCFO	10/1/96 to 9/30/98	FISVIS	$108,424.
Jordan Benderly (FNS)	DOJ	10/1/96 to 1/3/97	Financial Crime Enforcement	None.
Lawrence Blim (FNS)	USDA/OCFO	10/1/96 to 9/30/98	FISVIS/Accounting Standards Manual	$77,420.
Gail Brown (FNS)	Under Secretary FNCS	10/1/96 to 10/5/97	Deputy Under Secretary Administrative Support	$3,754.
Donna Buntrock (FNS)	Under Secretary FNCS	10/1/96 to 2/24/97	Administrative Support	None.
Kathleen Crampton (FNS)	USDA/OCFO	10/1/96 to 9/30/98	FISVIS	$83,316.
Daniel Dager (FNS)	Under Secretary FNCS	10/1/96 to 3/24/98	Budget and Legislative Support	$29,120.
Dorothy Ford (FNS)	Under Secretary FNCS	10/1/96 to 9/21/97	Legislative Support	None.
Donna Hines (FNS)	USDA/Office of Comm	10/1/96 to 9/30/97	Americorp Program Activities	None.
Kelly Jackson (FNS)	Under Secretary FNCS	10/1/96 to 8/9/97	Secretarial Support	$16,698.
Sharon Phillips (FNS)	USDA/FSIS	4/21/97 to 1/17/98	Secretarial Support	$21,667.
Ismael Tercero (FNS)	DHHS	10/1/96 to 10/13/97	Tribal Health Programs	$40,111.
C. Baker (FSIS)	DA: Policy Analysis and Coordination Center.	2/97–8/97	Honor Awards Ceremony	Agreement developed.
D. Barnes (FSIS)	Office of the Secretary	11/95–4/97	Clerical Support	Unsure if agreement developed—Resigned.
M. Eldadoky (FSIS)	FAS	3/96–5/31/98	Food technology support	Detail benefits FSIS.
F. Gwozdz (FSIS)	ARS	1/97–5/98	Staff Assistance	Detail benefits FSIS.
A. Kirk (FSIS)	DA: Policy Analysis and Coordination Center.	2/96–8/97	Clerical Support	Detail benefits FSIS—Resigned.
M. Penner (FSIS)	NRCS	12/96–2/97	Office of Civil Rights Work Group	Detail benefits FSIS.
T. Powell (FSIS)	OP	5/12/97–9/30/97	Clerical Support	Agreement developed.
Dawn Frobish (ARS)	USDA–OIRM	8/96–1/97	Provide fiscal and accounting support	$42,185.

Robert Harmon (ARS)	FSIS	7/96–present	Training and to provide support to Microcomputer Support Section.	$25,613.
Eliot Herman (ARS)	National Science Foundation	10/96–5/97	Cell Biology and Molecular Biology Program Manager—to gain skills in competitive grant process.	$64,560.
Al Kemezys (ARS)	MAPPS	8/96–12/97	Provide support for MAPPS	$75,222.
Adrienne Labega (ARS)	Metro Area Reemployment Center	3/97–7/97	Nonreimbursable—medical accommodation	None.
Carl Momberger (ARS)	MAPPS	11/96–10/98	Provide technical expertise on MAPPS	$96,033.
Michelle Snowden (ARS)	Purchase Card Implementation Team	4/96–3/97	Response to an EEO settlement agreement	$62,369.
Charlotte Sorrention (ARS)	Office of the Secretary	7/97–Present	Provide administrative support	Reimbursement being requested.
James Spurling (ARS)	Under Secretary for Research, Education, and Economics.	8/97–Present	Mission Support	None.
Linda Wilson (ARS)	MAPPS	Fiscal year 1997	Provide support for MAPPS	None.
Tammara Wright (ARS)	USDA—Office of the Secretary, Civil Rights Task Force.	Fiscal year 1997	Civil Rights Task Force	$21,938.
Josephine King (CSREES)	Office of the Secretary	10/96–9/97	Secretarial Assistance	Fiscal year 1997, $38,352; fiscal year 1998 $2,694.
John Dunmore (ERS)	FAS	9/96–2/97	Technical Assistance—Turkey	$39,860.
Lowell Dyson (ERS)	ARS/NAL	2/97–8/97	File Automation	None.
Ann Effland (ERS)	USDA Civil Rights Task Force	12/96–2/97	Civil Rights Task Force	None.
Audrae Erickson (ERS)	USTR Office of Agricultural Affairs (White House).	3 months	Agricultural Trade	None.
Paul Flaim (ERS)	President's Council on Sustainable Development (White House).	4 months	White House Committee on Sustainable Development	None.
Keith Fuglie (ERS)	Council of Economic Advisors (White House).	3 months	Senior Economist for Agriculture and Natural Resources	None.
George Gardner (ERS)	USDA/FAS/ICD	1 year	To work under the Africa RSSA project	$84,575.
Carl Mabbs-Zeno (ERS)	USDA/FAS/ICD	1 year	To work under the African RSSA Project	$119,921.
Sara Mazie (ERS)	USDA/REE/OSEC	10/1/96–present	Mission Support/Budget Coordination	None.
Sharon Sheffield (ERS)	USDA/FAS	5 months	To provide research and analysis of trade and agricultural policy developments in the countries of the NiS/Baltic region, pertaining to their accession to the WTO.	$40,375.
Teri Wray (ERS)	USDA/PACC/MAP	6 months	To serve as Customer Service Liaison, Executive Order on Customer Standards for MAP.	$26,347.
Sylvia Magbanua (NASS)	Office of Civil Rights	137 days	Civil Rights training program	None.
Linda Becker (APHIS)	FSIS	4/97–7/97	Assist with Merit Promotion	$11,409.
Phuong Callaway (APHIS)	BAD	7/29/97 to 10/29/97	Learning Assignment	$11,000.
Joyce Key (APHIS)	ASA–CRAT	4/14/97–6/6/97	Complaints Backlog	None.
Craig Lambert (APHIS)	ASA–CRAT	4/1/97 to 7/31/97	Complaints Backlog	None.
Kevin McGrath (APHIS)	ASA–CRAT	4/14/97 to 5/30/97	Complaints Backlog	None.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1997—Continued

Position/agency	Detailed to	Dates	Purpose	Reimbursed
Doris McLaughlin (APHIS)	ASA–CRAT	7/1/97 to 8/31/97	Complaints Backlog	None.
Linda Moore (APHIS)	ASA–CRAT	6/97–7/97	Environmental Justice/Native American Programs	None.
Ed Psaltis (APHIS)	ASA–CRAT	4/7/97–8/1/97	Complaints Backlog	None.
Mary Royster (APHIS)	OHRM	9/1/97 to 10/10/97	Assist with USDA Ethics Program	None.
Christopher Sikes (APHIS)	ASA–CRAT	4/7/97–8/1/97	Complaints Backlog	None.
Joe Taylor (APHIS)	OPPM	2/97 to 9/98	VISA card implementation	None.
Rosemary Witcoff (APHIS)	ASA–CRAT	9/1/97 to 10/10/97	Complaints Backlog	None.
Clerance Abrom (GIPSA)	APHIS	92 days	APHIS Medfly	$5,796.
Mary Carmouche (GIPSA)	APHIS	95 days	APHIS Medfly	$9,423.
Michael Caughlin (GIPSA)	FAS	10/1/96 to 9/30/97	Agribusiness Advisor	$127,000.
Stuart Conser (GIPSA)	APHIS	90 days	APHIS Medfly	$9,385.
John Cox (GIPSA)	APHIS	115 days	APHIS Medfly	$6,183.
William Digdo (GIPSA)	APHIS	86 days	APHIS Medfly	$20,621.
Robert Fuller (GIPSA)	APHIS	70 days	APHIS Medfly	$7,438.
Michael Haley (GIPSA)	APHIS	116 days	APHIS Medfly	$28,518.
Ray Hollis (GIPSA)	APHIS	47 days	APHIS Medfly	$8,820.
David Johnson (GIPSA)	APHIS	45 days	APHIS Medfly	$7,817.
Roy Johnson (GIPSA)	APHIS	99 days	APHIS Medfly	Still on detail.
Jeff LaHaie (GIPSA)	APHIS	109 days	APHIS Medfly	$14,117.
James Ledoux (GIPSA)	APHIS	103 days	APHIS Medfly	$14,679.
Phillip Meachem (GIPSA)	APHIS	63 days	APHIS Medfly	$7,739.
William Napoleon (GIPSA)	APHIS	95 days	APHIS Medfly	$17,513.
Bradley O'Neal (GIPSA)	APHIS	99 days	APHIS Medfly	$19,294.
Wanda Pitiman (GIPSA)	APHIS	88 days	APHIS Medfly	$9,485.
Steve Reams (GIPSA)	APHIS	116 days	APHIS Medfly	Still on detail.
Mark Reimer (GIPSA)	APHIS	88 days	APHIS Medfly	$10,329.
Linda Remondet (GIPSA)	APHIS	63 days	APHIS Medfly	$7,537.
Larry Rice (GIPSA)	APHIS	91 days	APHIS Medfly	$14,835.
Rayfield Riley (GIPSA)	APHIS	63 days	APHIS Medfly	$13,329.
Robert Simpson (GIPSA)	APHIS	116 days	APHIS Medfly	$15,908.
Howard Suter (GIPSA)	APHIS	92 days	APHIS Medfly	$10,722.
Gregory Tomas (GIPSA)	APHIS	54 days	APHIS Medfly	$14,096.
Vince Volpe (GIPSA)	APHIS	84 days	APHIS Medfly	$15,747.
Dan White (GIPSA)	APHIS	116 days	APHIS Medfly	$17,041.
James Winters (GIPSA)	APHIS	84 days	APHIS Medfly	$12,764.
George Wright (GIPSA)	APHIS	103 days	APHIS Medfly	$6,574.

Marci Hilt (OC)	DA	7 months	Civil Rights Action Team (CRAT)	$50,337.
Albert Jaeger (OC)	DA	7 months	G–7 Conference	$66,058.
Dale Alling (OCIO)	RHS	180 days	Program Analysis	$30,000.
Franklin Johnson (OCIO)	MAP	1 year	TOBI Project	None.
Chris Arrington (OCFO)	ASA	6 months	Modernization of Admin. Processes project	$19,000.
Gary Barber (OCFO)	ASA	6 months	Civil Rights Action Team	None.
Martha Joseph (OGC)	NRCS	10/1/96 to 3/31/97	Assist with Wetlands Reserve Program	$23,362.
Jeff Knishkowy (OGC)	Office of Acting Associate, Assistant Secretary for Administration.	1/13/97 to 1/31/98	Provide assistance to the Civil Rights Action Team to include implementation of recommendations.	None.
Vincent Vukelich (OGC)	GSA,OGPA	5/5/97 to 9/4/97	Assisting in developing governmentwide guidance regarding implementation of policies in statutes, Executive Orders and regs.	$22,184.
Joyce Fleishman (OIG)	Department of Transportation Office of the Inspector General.	10/1/96–4/11/97	To serve as Principal Deputy Inspector General for Department of Transportation.	$79,864.
Robert Franco (DA)	OPM	2/17/97 to NTE 2 yrs	Develop SES Recruitment Strategies	$116,495.
J. Phelps (DA)	OCFO	4 months	Financial Info. Systems Vision project (FISVIS)	$20,600.
Pam Folson (NRCS)	USDA/DAMS	6/29/97–9/3/98	Provides support to the Office of the Senior Policy Advisor for Service Implementation and to serve on Team I of the Admin. Convergence.	$37,417.
Lois Loser (NRCS)	USDA/NSD	9/29/97–6/20/98	Provides technical support and is Acting Branch Chief	$68,032.
Robert Reaves (NRCS)	USDA/Department Administrative Management Service.	6/22/97–3/1/98	Provide leadership and direction to staff, assign work, set goals, participates in Departmentwide and Government-wide multi-organization project.	$43,427.
John Sutton (NRCS)	FAS/ICD/DRD	8/21/97–8/31/99	Detailed to Acting Chief NTE 2 years	$95,529
C. Bailey (FS)	Office of the Secretary	3/27/97 to 9/30/97	Civil Rights Action team	None.
C. Brannon (FS)	Office of the Secretary	4/1/97 to 6/30/97	Civil Rights Action Team	None.
A. Brown (FS)	Office of the Chief Financial Officer	10/1/96 to 9/30/97	FS Liaison	$69,000.
J. Dudley (FS)	Modernization of Administrative Processes.	10/1/96 to 9/30/97	FS Liaison	$95,266.
M. Fletcher (FS)	Office of the Secretary	4/1/97 to 6/6/97	Civil Rights Action Team	None.
C. Franz (FS)	Modernization of Administrative Processes.	10/1/96 to 9/30/97	FS Liaison	$86,000 est.
J. Frey (FS)	Office of the Secretary	7/1/97 to 8/8/97	Civil Rights Action Team	None.
D. Gentry (FS)	Office of the Secretary	8/4/97 to 9/30/97	Civil Rights Action Team	None.
L. Goldman (FS)	Office of the Secretary	4/1/97 to 6/30/97	Civil Rights Action Team	None.
R. Grand (FS)	Natural Resources and Environment	3/16/97 to 8/8/97	FS Laison	None.
S. Hague (FS)	Natural Resources and Environment	2/2/97 to 9/30/97	FS Laison	None.
M. Hamilton (FS)	Office of the Secretary	7/1/97 to 9/30/97	Civil Rights Action Team	None.
T. Harwood (FS)	Hazardous Waste Management	1/5/97 to 9/30/97	FS Liaison	$81,734.

DETAILED FOR MORE THAN 30 DAYS—FISCAL YEAR 1997—Continued

Position/agency	Detailed to	Dates	Purpose	Reimbursed
F. Johnson (FS)	Office of Information Resource Management.	10/1/96 to 11/24/96	Computer Specialist	None.
J. King (FS)	Office of the Chief Financial Officer	10/1/96 to 9/30/97	FS Liaison	$86,000.
S. McCourt (FS)	Natural Resources and Environment	10/1/96 to 3/14/97	Communications Liaison	None.
B. McDonald (FS)	Office of the Secretary	6/1/97 to 8/31/97	Civil Rights Action Team	None.
S. Medlyn (FS)	Public Affairs Specialist	10/1/96 to 12/7/96	Office of Communication	None.
J. Morris (FS)	Office of the Secretary	4/1/97 to 7/19/97	Civil Rights Action Team	None.
Z. Okrak (FS)	Office of the Chief Financial Officer	10/1/96 to 9/30/97	FS Liaison	$72,000.
B. Preston (FS)	Natural Resources and Environment	10/1/96 to 9/30/96	FS Liaison	None.
C. Pytel (FS)	Assistant Secretary (ADM)	3/16/97 to 9/30/97	Acting Deputy Assistant, Secretary for Administration	$70,563.
G. Renteria (FS)	Office of the Secretary	6/2/97 to 8/1/97	Civil Rights Action Team	None.
V. Ross (FS)	Office of the Secretary	3/27/97 to 9/30/97	Civil Rights Action Team	None.
S. Segovia (FS)	Office of the Secretary	7/1/97 to 9/30/97	Civil Rights Action Team	None.
G. Sundstrom (FS)	Hazardous Waste Management	10/1/96 to 9/30/97	FS Liaison	$83,544.
T. Sherwood (FS)	Office of the Chief Financial Officer	10/1/96 to 9/30/97	FS Liaison	$56,000.
F. Shon (FS)	Office of the Secretary	3/27/97 to 6/27/97	Civil Rights Action Team	None.
P. St. Peter (FS)	Office of the Secretary	7/1/97 to 11/21/97	Civil Rights Action Team	None.
D. Stennis (FS)	Office of the Secretary	4/1/97 to 7/19/97	Civil Rights Action Team	None.
L. Turner (FS)	Natural Resources and Environment	10/1/96 to 7/17/97	Support	$15,000.
B. Velde (FS)	Hazardous Waste Management	10/1/96 to 9/30/97	FS Liaison	$93,909.
K. Waldvogel (FS)	Hazardous Waste Management	10/1/96 to 9/30/97	FS Liaison	$79,239.
M. Warren (FS)	Natural Resources and Environment	10/1/96 to 11/8/96	Support	$4,127.
S. Yaddof (FS)	Coop. State Research, Educ. and Ext. Service.	5/1/97 to 9/30/97	Support	$31,000.
J. Zeller (FS)	Office of the Secretary	7/7/97 to 8/23/97	Civil Rights Action Team	None.

DETAILS UNDER 30 DAYS—FISCAL YEAR 1997

Position/agency	Detailed to	Dates	Purpose	Reimbursed
Reginald Pasteur (AMS)	ASA–CRAT	3/97–4/97	Complaints Backlog	
Charles Rush (AMS)	FAS	6/30/97 to 7/29/97	Career Enhancement opportunity	
Judy Hawkins (GIPSA)	APHIS	29 days	APHIS Medfly	$2,929
Kenny Layne (GIPSA)	APHIS	28 days	APHIS Medfly	2,827
Lynn Luster (GIPSA)	APHIS	28 days	APHIS Medfly	3,078

Robert Starr (GIPSA)	APHIS	30 days	APHIS Medfly	4,263
Lauretta Miles (OIG)	USDA/Office of Small and Disadvantaged Business Utilization.	10/14/97–11/14/97	To provide 30-day detail assignment to perform clerical and administrative duties.	
Ghulan Sambal (RHS)	Office of the Secretary, Assistant Secretary for Administration.	30 days	Civil Rights Implementation Team (CRIT)	
Cherry Smith (RHS)	Office of the Secretary, Assistant Secretary for Administration.	21 days	Civil Rights Implementation Team (CRIT)	
Vermell Wheeler (RHS)	Office of the Secretary, Assistant Secretary for Administration.	30 days	Civil Rights Implementation Team (CRIT)	
Jada Johnson (FNS)	OSEC	1/21/97–2/21/97	Secretarial Support	
G. Crawley (FS)	Office of the Secretary	6/1/97 to 6/30/97	Civil Rights Action Team	
J. Comanor (FS)	Natural Resources Conservation Services	9/1/97 to 9/30/97	Support	
G. Dyer (FS)	Office of the Secretary	6/1/97 to 6/3/97	Civil Rights Action Team	
S. Dykes (FS)	Office of the Secretary	4/28/97 to 5/25/97	Civil Rights Action Team	
G. Edmondson (FS)	Assistant Secretary, ADM	10/1/96 to 12/26/96	Support	
J. Gavin (FS)	Office of the Chief Information Office	9/29/97 to 9/30/97	Support	
N. Hall (FS)	Office of the Secretary	3/24/97 to 4/18/97	Civil Rights Action Team	
S. Hooper (FS)	Office of the Secretary	3/27/97 to 3/31/97	Civil Rights Action Team	
L. Lewandowski (FS)	Policy Analysis and Coordination Center	10/1/96 to 10/31/96	Purchase Card Automation Project	
L. Lewandowski (FS)	Policy Analysis and Coordination Center	3/3/97 to 3/31/97	Purchase Card Automation Project	
L. Peressini (FS)	Office of the Secretary	6/1/97 to 6/30/97	Civil Rights Action Team	
C. Reynolds (FS)	Office of the Secretary	5/1/97 to 5/30/97	Civil Rights Action Team	
S. Risbrudt (FS)	Office of the Secretary	10/1/96 to 10/18/96	Support	
J. Synder (FS)	Natural Resources and Environment	10/1/96 to 10/31/96	Support	
J. Synder (FS)	Office of the Deputy Secretary	11/1/96 to 11/12/96	Support	
M. Warren (FS)	Natural Resources and Environment	9/29/97 to 9/30/97	Support	
J. Worley (FS)	Office of Civil Rights	10/1/96 to 10/31/96	Support	
J. Zeller (FS)	Office of the Secretary	9/15/97 to 9/30/97	Civil Rights Action Team	

SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)

The Administration is seeking an increase of $145.5 million for fiscal year 1999 to "meet the long-standing bi-partisan commitment to funding in the WIC Program at a full participation level of 7.5 million." Further, the budget indicates that this requested increase for fiscal year 1999 mainly offsets expected food and administrative cost increases.

Question. On what basis has the Administration determined that 7.5 million represents the "full participation" level for the WIC program?

Answer. Our estimate is based on Census data and medical evidence which suggests that 9 million women, infants and children were fully eligible for WIC in 1996, the most recent year for which we have figures. In a fully funded program we would not expect that all eligibles would participate. However, with funds available, participation reached 7.5 million last January, and has hovered just below that figure ever since. On that basis, the Administration has determined that 7.5 million represents the full participation level for WIC.

Question. The fiscal year 1998 appropriations Act granted the Secretary of Agriculture the authority requested in the President's budget to allocate WIC funds outside the regulatory funding formula. How are WIC funds made available for fiscal year 1998 being allocated to states and how does that allocation differ, by state, from the statutory/regulatory WIC funding distribution formula?

Answer. At this point, we have not used the flexibility granted to us by the Appropriations Act. We requested it as a contingency to ensure that WIC funds went where they were most needed. We estimate that the total available fiscal year 1998 funds will be adequate to bring States to stability funding with only a small amount left over for distribution to States that have received less than their fair share of funds. Therefore, we do not anticipate that it will be necessary to utilize the additional flexibility.

Question. Mr. Secretary, you indicate in your prepared testimony that efforts continue to reduce the overall cost of WIC food packages by 10 percent by 2002. When did this effort begin and what reductions have we achieved to date in the overall cost of WIC food packages?

Answer. We established this goal in the Government Performance and Results Act Strategic Goals development process. This goal was mentioned in those sent to the Congress last fall.

As far as specific reductions to date, WIC cost containment is one of the more remarkable success stories in government. In fact, food costs were lower in 1997 (at $31.66 per person) than they were in 1987 (at $32.68 per person). This is true despite 10 years of general inflation in the economy and immense growth in the program. This was achieved in large part because, in 1997 nearly $1.3 billion was saved from infant formula rebates.

Our efforts to improve WIC management and to reduce food package costs are expected to help improve the overall quality of WIC. Many States have achieved notable successes in efficient and effective management, and as their practices are adopted and adapted by other States, program quality will improve along with cost efficiencies. WIC is a mature program and simply needs some fine tuning. If we can keep food costs low we can serve more participants with the same money. That is our strategic goal.

Question. You also indicate in your testimony that the Department is working with states to expand other promising cost control activities and is undertaking a series of management reforms to improve WIC program integrity. Would you summarize the cost control activities and management reforms which have been implemented?

Answer. We are committed to improving WIC management and have several initiatives underway to reduce errors and save money. For example, now that WIC is a mature program we are beginning to see evidence of errors in eligibility determinations similar to food stamps and school lunch. Therefore we are proposing to require that all States obtain income documentation before certifying individuals to participate. That is not currently a Federal requirement and not all States ask for income documentation at certification. We are also reviewing our income verification requirements to see if they need strengthened or brought in line with food stamps and school lunch. Another area that we are working on concerns nutrition risk. We are working with the States and the medical community to standardize enforcement of WIC nutritional risk criteria. WIC statute allows only individuals at nutritional risk to participate in the program. Finally, we know WIC has some problems with unscrupulous vendors, the same stores trying to cheat the Food Stamp Program. We will be issuing regulations to improve vendor management and reduce overcharging.

Our efforts to improve WIC management will be coordinated with the Administration's government wide error reduction initiative.

INTEGRATED PEST MANAGEMENT

The fiscal year 1999 budget requests increased funding in support of the Department's commitment to encourage the adoption of Integrated Pest Management (IPM) on 75 percent of the Nation's crop land by the year 2000.

Question. Where do we stand in meeting this goal? When did this initiative begin and what percent of the Nation's crop land was under IPM at that time? What percent was under IPM at the end of fiscal year 1997? What percent is projected to be under IPM practices at the end of fiscal years 1998 and 1999?

Answer. Consensus has emerged that IPM systems should be measured along a continuum, ranging from no to high levels of IPM adoption. The Department's 1994 report, Adoption of Integrated Pest Management in the United States, measured adoption along a continuum, and this approach was refined by Consumers Union in its 1996 report, Pest Management at the Crossroads. These analyses estimated that 70 percent of crop acreage is managed using IPM systems. However, according to the Consumers Union estimates, 38 percent of these systems were at the low end of the IPM continuum. Our goal is to develop and help growers implement IPM strategies that permit them to move from the low end of the continuum to the high end of the continuum, moving incrementally toward biologically based IPM systems.

The overall percentage of U.S. crop acres under IPM in 1997 remained at the 70 percent level, and will likely remain constant in 1998. However, we remain convinced that the increased investments proposed in the President's budget request for fiscal year 1999 will permit us to reach the 75 percent adoption goal by 1999 or 2000. More importantly, we believe that these investments will accelerate the adoption of IPM systems at the medium and high end of the continuum. We believe that increasing adoption of pest management systems at the high end of the IPM continuum will benefit all Americans by increasing profitability, protecting water quality and farm worker safety, and enhancing the wholesome quality of our Nation's food supply. We believe that an accelerated effort is warranted to develop and help growers implement pest management strategies that will help them reduce reliance on high-risk pesticides and enhance the sustainability of their operations.

Question. Please provide a summary of the total USDA appropriations, by agency and account, invested in the Integrated Pest Management Initiative in each of fiscal years 1993 through 1998 and included in the fiscal year 1999 budget request.

Answer. Three agencies provide direct support for the Integrated Pest Management Initiative (IPM): the Agricultural Research Service (ARS), the Cooperative State Research, Education, and Extension Service (CSREES), and the Economic Research Service (ERS). Funding amounts from fiscal year 1993 to fiscal year 1999 are as follows:

INTEGRATED PEST MANAGEMENT INITIATIVE

[Dollars in millions]

	1993	1994	1995	1996	1997	1998 estimate	1999 budget
ARS Area-wide IPM Research	$3.100	$3.800	$3.801	$3.772	$5.915	$5.944	$6.444
CSREES:							
Research and Education Activities:							
IPM Research Grants	4.457	3.034	2.731	2.731	2.731	2.731	8.000
Pest Management Alternatives	.....	.....	.....	1.623	1.623	1.623	4.200
Expert IPM Decision Support	.....	.....	.....	0.177	0.177	0.177	0.260
Extension Activities: IPM Application	8.200	8.459	10.947	10.783	10.783	10.783	15.000
ERS IPM Research	0.200	0.200	0.500	0.500	0.500	0.500	0.500
Total, IPM Initiative	15.957	15.493	17.979	19.586	21.729	21.758	34.404

INTEGRATED PEST MANAGEMENT

Question. Please prioritize the fiscal year 1999 proposed funding increase for integrated pest management (IPM) and IPM-related activities.

Answer. The increases proposed for IPM and related activities reflect USDA's goal of helping U.S. agriculture implement IPM practices on 75 percent of the nation's crop acreage by the year 2000, and to help producers respond to the challenges they will face as the result of Food Quality Protection Act (FQPA) implementation. Each research and extension program that supports IPM activities is coordinated to support major IPM goals. To further the development of a coordinated and integrated effort, USDA has created a new Office of Pest Management and Policy (OPMP) to serve as the focal point within the Department for pest management and pesticide regulatory issues.

Proposed IPM and IPM-related activities in the fiscal year 1999 Budget focus on this integrated and coordinated approach are summarized below. All of these would be considered high priority within the Department's 1999 budget.

IPM Initiative.—Activities proposed under this multi-faceted initiative are built around producer-identified needs for applied research and education projects using pest control technologies that are ready for large-area trials and adoption. These regional or area-wide projects will be supported by proposed increases of approximately $10 million for CSREES and ARS.

The initiative also include a proposed increase of $2.7 million for research on alternatives to pesticides that may be lost to producers as EPA proceeds to implement FQPA and on a decision support system that will help identify crop-pest combinations where alternative controls are most critical.

Pesticide Use Data Collection and Analysis.—Net increases of $2.7 million are proposed for pesticide use and food consumption data. USDA is the sole or primary source for this data. Information on actual use and consumption patterns is needed to conduct more accurate risk assessments. These programs include the Continuing Survey of Food Intakes by Individuals (CSFII) carried out by ARS, the Pesticide Data Program under AMS, and pesticide use survey and analysis conducted by ERS and NASS, respectively.

Pesticide Registration, Clearance, Assessment, and Training.—Net increases of $4.8 million are proposed for programs to support the registration process with information and analyses on the costs and benefits of current and alternative pest management strategies at the local, regional, and national scales; programs to gather data on pesticide residues for new and safer minor-use products, and for applicator training to build confidence in the system that relies on well informed pesticide applicators. Accurate data and analysis are essential to help policy-makers understand the implications of pest-control decisions.

Question. For fiscal year 1998, the appropriations Act establishes a $1 million limitation on activities of advisory committees, panels, commissions, and task forces, excluding panels to comply with negotiated rulemaking or to evaluate competitively-awarded grants. Please provide a listing of advisory committees, panels, commissions and task forces funded in each of fiscal years 1997 and 1998, by agency, and the amount of funds allocated for each.

Answer. I will provide for the record a listing of those advisory committees, panels, commissions and task forces that are subject to the $1 million limitation. Final decisions have not been made with regard to funding for each advisory committee in fiscal year 1998. We will submit further cost estimates by committee when they become final.

[The information follows:]

USDA Advisory Committees

Policy area and committee title	*1997 actual*
Food, Nutrition and Consumer Services: National Advisory Council on Maternal, Infant and Fetal Nutrition	.....
Food Safety:	
National Advisory Committee on Meat and Poultry Inspection	$26,060
National Advisory Committee on Microbiological Criteria for Foods	22,213
Total, Food Safety	48,273
Research, Education and Economics:	
Forestry Research Advisory Council	5,337
National Agricultural Research, Extension, Education, and Economics Advisory Board	299,149

Policy area and committee title	*1997 actual*
Strategic Planning Task Force on Research Facilities	99,200
USDA/Hispanic Association of Colleges and Universities	.....
USDA/American Indian Higher Education Consortium	.....
Subtotal, CSREES	403,686
National Nutrition Monitoring Advisory Council	17,420
National Genetics Resources Advisory Council	4,140
Dietary Guidelines Advisory Committee	5,376
Subtotal, ARS	26,936
Census Advisory Committee on Agriculture Statistics	37,900
Total, REE	468,522
Marketing and Regulatory Programs:	
Advisory Committee on Foreign Animal and Poultry Diseases	20,385
General Conference Committee of the National Poultry Improvement Plan	7,511
National Animal Damage Control Advisory Committee	17,928
USDA/1890 Task Force	12,000
Subtotal, APHIS	57,824
National Organic Standards Board	.....
Subtotal, AMS	.....
Federal Grain Inspection Advisory Committee	17,472
Total, MRP	75,296
Farm and Foreign Agricultural Services:	
Agricultural Policy Advisory Committee for Trade	14,119
Ag. Tech. Adv. Comm. for Trade in:	
Animals and Animal Products	14,110
Fruits and Vegetables	14,110
Grains, Feed and Oilseeds	14,110
Sweeteners	14,110
Tobacco, Cotton and Peanuts	14,110
Technical Advisory Committee for Edward R. Madigan Agricultural Export Excellence Award Board	14,110
Subtotal, FAS	98,779
Advisory Committee on Beginning Farmers and Ranchers	.....
Emerging Markets Advisory Committee	.....
Subtotal, FSA	.....
Total, FFAS	98,779
Natural Resources and Environment:	
Task Force on Agricultural Air Quality Research	40,707
National Commission on Small Farms	77,245
Total, NRE	117,952
Office of the Chief Economist: Commission on 21st Century Production Agriculture	.....
Total, Advisory Committee Limitation	808,822

Question. Why is the Department proposing to eliminate this limitation for fiscal year 1999?

Answer. The Department has proposed that this limitation be lifted in order to provide greater flexibility in managing advisory committees to support the efficient operation of USDA programs.

Question. Please provide a list of the advisory committee, panel, commissions, and task forces, by agency, included in the fiscal year 1999 budget request, and the amount assumed for each.

Answer. The advisory committees, panels, commissions and task forces proposed for fiscal year 1999 are similar to those already funded and includes at least one new committee, the Secretary's Small Business Advisory Committee. Final decisions have not been made regarding the proposed funding for each advisory committee. I will provide the cost estimates by committee when they become final.

OFFICE OF THE INSPECTOR GENERAL

Question. What amount has been deposited in the Department of Justice and/or Treasury Department Assets Forfeiture Fund in each of fiscal years 1996, 1997, and 1998 as a result of investigation in which the USDA Office of Inspector General (OIG) participates?

Answer. The Department of Justice and Treasury do not inform us of how much has been actually deposited in their funds as a result of our investigative actions. We do know that over $11 million in assets has been seized for the funds as a result of our actions since receipt of our authority—over $7 million for the Treasury Fund and approximately $3.5 million for the Justice Fund.

Question. Why isn't a memorandum of understanding between the OIG and the U.S. Department of Justice and/or Treasury in place to allow USDA to receive an equitable share of these resources?

Answer. The memorandum of understanding between the Office of the Inspector General and the U.S. Department of Treasury has been finalized and is currently in the process of being signed.

Question. The fiscal year 1999 budget requests and increase of $21.7 million for a law enforcement initiative to allow the Office of Inspector General to crack down on fraud and waste in Food Stamps and other USDA programs. Would receiving payments from forfeited assets reduce the need for increased appropriations for these activities? If so, by how much?

Answer. OIG is authorized to receive proceeds from asset forfeitures as an additional tool in carrying out our law enforcement mission. Payments received from forfeiture assets would not reduce the need for the increased appropriations as detailed in the initiative because the laws on the use of forfeiture funds limit their use and specifically prohibit them from being used for personnel compensation which is about 80 percent of our agency's costs.

Question. The fiscal year 1999 budget requests increased funding for the Office of Inspector General to crack down on fraud and abuse in USDA programs, particularly the Food Stamp and nutrition programs. Is a funding increase also proposed for the Food and Nutrition Service compliance activities? If not, why?

Answer. A funding increase of $150,000 is being proposed for the Food and Nutrition Service to enable the compliance branch to conduct "sweeps" in 8 States.

BRUCELLOSIS

Question. The Department's fiscal year 1999 explanatory notes indicate that APHIS anticipated that all 50 States will reach brucellosis Class "Free" Status by the end of 1998. Will bison carrying brucellosis and wandering beyond the Yellowstone National Park boundaries affect the achievement of this class "free" status?

Answer. As long as the surrounding states comply with the conditions of the Interim Bison Management Plan (which requires States and the National Park Service to prevent the movement of bison from Yellowstone National Park and Brucellosis Management Areas) and maintain active brucellosis surveillance programs, the Yellowstone bison should not affect the achievement of Class "Free" status in all 50 states.

INFORMATION TECHNOLOGY SERVICES

Question. We understand USDA continues to have in place its moratorium on significant information technology investments that was established back in November 1996 with a waiver process to make acquisitions. Also restrictions under this moratorium have been tightened to allow for IT investments to be made only for Year 2000 projects and emergency needs.

With only about half of fiscal year 1998 remaining, what impact will the moratorium have on USDA's IRM expenditure plans this fiscal year?

Answer. According to the Chief Information officer the moratorium has caused agencies to redirect their fiscal year 1998 expenditures from non-mission-critical systems towards Year 2000 compliance. The moratorium may not affect the total IRM expenditures for USDA because of this redirection towards Year 2000 programs and the continued need for operations and services for existing systems.

Question. As of this hearing, how many waivers were requested under the moratorium for fiscal year 1997 and fiscal year 1998, and what was the total dollar amount of waivers approved each fiscal year?

Answer. Agencies can and do submit waiver requests which cover expenditures in more than one fiscal year because the waivers are submitted for multiple year projects. Since the moratorium began in November 1996, 127 waivers were requested in fiscal year 1997 for approximately $283.7 million and approximately $210.5 million was approved for fiscal years 1997, 1998 and 1999 expenditures. We have received 36 waivers during fiscal year 1998 for $143.6 million and approved approximately $133 million for fiscal years 1998 and 1999 expenditures.

Question. In light of the IT moratorium, what major investments have been pushed back to fiscal year 1999 and beyond?

Answer. Because of the moratorium, agencies have made the decision to come forward only with those investments which meet the emergency or Year 2000 criteria for approval. The Office of the Chief Information Officer cannot categorically state which investments have been deferred because of the moratorium.

Question. We are hearing that USDA may have spent more than $200 million in fiscal year 1997 with plans to spend about $250 million in fiscal year 1998. If the numbers are anywhere near this, the confidence we have in the moratorium may be eroded.

If USDA continues to spend hundreds of millions on IT investments even while under a strict moratorium on such investments, how effective in your opinion has the moratorium been? Please elaborate on your answer.

Answer. While USDA has continued to make some investments while under the IT moratorium, those investments have been scrutinized carefully by the Office of the Chief Information Officer to ensure that they met the requirements of the moratorium. Any investments made were to support mission-critical programs. Since the moratorium has become more stringent, IT investments are made only for emergency situations or to support USDA's Year 2000 program. The CIO assures me that the moratorium has been effective in ensuring that our expenditures for IT were limited to those that are absolutely necessary to carry out USDA programs.

USDA has had its moratorium on IT purchases in place since November 1996. Originally this moratorium applied to all IT acquisitions over $250,000, with exceptions for renewals to existing contracts and support services contracts for existing systems to become Year 2000 compliant. However, waivers were being granted. We understand that more recently that the threshold was lowered to all IT acquisitions over $25,000, and that starting at the end of fiscal year 1997, waivers were only being granted for emergencies and those directly related to ensuring Year 2000 compliance.

Question. What was the total number of moratorium waiver requests submitted in fiscal year 1997 and what was the total dollar amount of these?

Answer. During fiscal year 1997 there were 127 waivers requesting approximately $283.7 million.

Question. What was the total amount dollars and number of waivers approved in fiscal year 1997?

Answer. During fiscal year 1997, 113 waivers requesting expenditures of approximately $210.5 million were approved for fiscal years 1997, 1998 and 1999.

Question. With tighter restrictions put in place for fiscal year 1998, what has been the total number of waivers requested, in terms of numbers and dollars, in fiscal year 1998 to date?

Answer. Since October 1, 1997, we have received 36 waiver requests totaling $143.6 million.

Question. Also, what has been the total number of waivers approved, in terms of numbers and dollars, in fiscal year 1998 broken out by those granted to meet emergencies, those directly related to ensuring Year 2000 compliance and others?

Answer. Ten waivers have been approved in fiscal year 1998 for emergencies, totalling $6.7 million in fiscal year 1998 funding and $1.4 million in fiscal year 1999 funding.

Eighteen waivers have been approved for Year 2000 compliance, totalling $122.4 million for fiscal year 1998 funding and $2.9 million in fiscal year 1999 funding. The waivers for year 2000 compliance include incremental costs for making systems compliant, as well as costs for upgrading systems, for which a portion of those costs can be attributable to year 2000 compliance.

Since no other grounds for approval of waivers exist, all waivers granted fall into the above categories.

Question. In light of the waivers granted for Year 2000 compliance, how do these waivers compare to what the agencies estimate they will need to spend to fix systems and make them year 2000 compliant?

Answer. USDA agencies estimate that the incremental cost for Year 2000 repairs for fiscal year 1998 will be $58 million. This total is less than the amount of waivers approved for Year 2000-related work because the Forest Service Project 615 initiative has been granted a waiver for Year 2000 compliance in fiscal year 1998, but only a portion of those costs can be attributed solely to year 2000 compliance.

Question. What are the Department's overall planned expenditures for information technology in fiscal year 1997, fiscal year 1998, and fiscal year 1999? Please provide specific expenditures, by agency and account. What are the Department's actual expenditures in each of fiscal years 1997 and 1998 by agency and account? What planned expenditures were not made in each of fiscal year 1997 and 1998 as a result of the moratorium?

Answer. In February 1996, based on the 1997 proposed President's Budget, USDA estimated that it would spend $1.253 billion in information technology during fiscal year 1997. The February 1998 report indicated that during fiscal year 1997, $1.080 billion was actually spent on IT. We believe that this reduction is in large measure due to the impact of the moratorium.

In February 1997, USDA estimated that it would spend $1.239 billion in information technology during fiscal year 1998. The February 1998 report indicates that USDA plans to spend $1.211 billion during fiscal year 1998. Our experience indicates that this estimate will further decline after the fiscal year is complete and actual expenditures are reported. We believe that this reflects the effectiveness of the moratorium in reducing USDA expenditures for IT.

The Chief Information Officer has issued a call letter to the agencies, asking them to update last year's report "USDA Agency Information Technology Expenditures by Budget Account". I expect to be able to provide this information to the Committee in early April.

Question. Identify what each agency plans to spend in total during fiscal year 1998 and fiscal year 1999, and of that what it plans to spend under the following information technology spending categories; (1) equipment purchases and leases, (2) software purchases and leases, (3) supplies, (4) personnel costs, (5) commercial support services, (6) other services (i.e. primarily commercial telephone and data service), and (7) Intra-Governmental Services?

Answer. I will ask the Chief Information Officer to provide the information for the record.

[The information follows:]

The following information is from the Department's OMB Circular A–11 report. This report includes actual expenditures for fiscal year 1997, and estimated expenditures for fiscal year 1998 and fiscal year 1999. The estimated expenditures are subject to review and approval according to requirements of the moratorium.

Question. Provide a list of major technology initiatives underway or planned at the Department. In doing so, provide what has been spent to date on the initiative, what will be spent on the initiative in fiscal year 1998 and fiscal year 1999, and the total estimated life-cycle costs of the initiative.

Answer. The following table outlines our major technology initiatives. Specific spending and life-cycle costs will be provided to the Committee by early April.

Integrated Systems Acquisitions Project (ISAP).—ISAP will establish a strategic framework for implementing the next generation of information systems in the Animal and Plant Health Inspection Service (APHIS). In the fall of 1995, a contract for computer products and services was awarded. APHIS has begun a five-year phased transition to the new environment of software, hardware, telecommunications and support services. Before starting formal implementation, APHIS is sponsoring transition activities to prepare for the new architecture. Total obligations from fiscal year 1997 through fiscal year 1999 are estimated to be $26 million.

Project 615.—Through hardware and software acquisition, Project 615 will refresh the Forest Service's (FS) office automation technology and provide that agency with geographical information systems (GIS) technology. This will give FS the infrastructure to change its management of forests and rangelands from a single timber focus to a multiple ecosystem focus. Through Project 615's series of contracts, FS will establish an open systems environment. The full application phase began in fiscal year 1997, and by the end of fiscal year 2000 all FS employees are expected to be on line with the new technologies. Total obligations from fiscal years 1997 through 1999 should reach an estimated $400 million.

Food Stamp Program Integrated Information System (FSPIIS).—In the Food and Consumer Service (FCS), the FSPIIS is a comprehensive, integrated, on-line, menu-driven information system to support administration of the Food Stamp Program. Through GSA's Federal Information System Support Program and the Small Business Administration's 8(a) Program, the FCS is acquiring software development and maintenance for the system. FSPIIS extensions and interfaces are being implemented to support Electronic Benefits Transfer (EBT) and Electronic Data Interchange (EDI). Business Process Reengineering (BPR) methodologies were employed to determine requisite business functions during fiscal year 1994. These business functions are currently supported by EDI and EBT. From the BPR came also an initiative to consolidate food stamp forms, which should dramatically reduce State and project area reporting burdens, in terms of both the number of reporting points—sites—and events. Total obligations from fiscal year 1997 though fiscal year 1999 should equal about $17 million.

Service Center Implementation.—Under the leadership of the Service Center Implementation Team, initiatives are underway to consolidate county offices into local USDA service centers equipped with communications and computer-related technology to save costs, improve program delivery, and provide one-stop service to customers. This is a joint effort by the Farm Service Agency, Natural Resources Conservation Service and Rural Development. The implementation will support integrated voice and data communications infrastructures, reengineered business processes, data sharing within current agency systems, and a common computing environment to serve all agencies operating in any given service center. The communications systems currently being installed will cost approximately $100 million. The reengineering efforts are underway and will continue next year. The estimate of the cost for the first phase of the common computing environment at the field level to be approximately $30 million in fiscal year 1998 and $70 million in fiscal year 1999. Approximately $10 million will be required for pilot and demonstration sites in fiscal years 1998 and 1999.

Field Automation and Information Management (FAIM).—The Food Safety and Inspection Service's FAIM initiative is a project to automate improved business processed for the agency and to provide an agency-wide information management and sharing network. Total obligations from fiscal year 1996 through fiscal year 1999 should equal about $45 million.

Dedicated Loan Origination and Servicing System (DLOS).—In amending the Housing Act of 1949, Congress in 1988 mandated that the then Farmers Home Administration escrow taxes and insurance. To comply, the Rural Housing Service has purchased a commercial mortgage loan origination and servicing system known as the Dedicated Loan Origination and Servicing System. It has an estimated total obligation from fiscal years 1996 through 1999 of $20 million.

The Foundation Financial Information System (FFIS) is a major initiative sponsored by the Office of the Chief Financial Officer to replace USDA's core accounting system. FFIS implementation is underway. FFIS is designed to help us meet a strategic departmental objective: implementing a single, integrated financial management information systems in USDA, in compliance with OMB guidance and USDA financial standards. We are looking at costs, planned schedules, performance and management to ensure that FFIS is successfully completed. We will provide the Committee cost information as we complete this review.

This Committee has been trying to get the Department to develop an information systems architecture for the last several years and do so prior to making major investments. We understand that early last year the Department developed the initial version of such an architecture, but one that needed much additional work.

CCC ADP

Question. Section 161 of the FAIR Act of 1996 amended the Commodity Credit Corporation (CCC) Charter Act to significantly limit the use of CCC funds. CCC spending for equipment or services relating to automated data processing (ADP), information technologies, or related items (including telecommunications equipment and computer hardware and software) was limited to $170 million in fiscal year 1996, and $275 million for the six-year period including fiscal years 1997 through 2002. What was the total amount of CCC funds used in fiscal year 1997 for ADP?

Answer. Fiscal year 1997 CCC ADP obligations were $36,146,007, leaving a balance of $238,853,993 from the authorized cap of $275 million.

Question. What is the total amount of CCC funds USDA plans to spend in fiscal year 1998 and fiscal year 1999 for ADP?

Answer. Fiscal year 1998 and fiscal year 1999 CCC ADP budget obligations in the President's fiscal year 1999 budget are estimated to be $106,549,000 and $76,401,000, respectively.

Question. What ADP initiatives will be supported in fiscal year 1998 and fiscal year 1999 with the CCC funds?

Answer. During fiscal year 1998 one initiative partially funded by CCC is the USDA Service Center Initiative. fiscal year 1998 funds will be used to complete Phase I of the LAN/WAN/Voice project. Phase I, carried over from fiscal year 1997, will provide integrated phone and local and wide area data communications for the State and county offices. Phase II LAN/WAN/Voice activities funded in fiscal year 1998 include e-mail, satellite dishes for distance learning and circuit upgrade equipment for the Service Centers. CCC funds for the Common Computing Environment (CCE) pilot demonstration sites, hardware and software, digital orthophotography, and Business Processes Reengineering/Improvement projects, training, and studies are also included in the fiscal year 1998 budget. NRCS and RD will also be using their funds to support the CCE.

Several initiatives are funded in both fiscal year 1998 and fiscal year 1999. Contractor support is needed for application development and programming, including Year 2000 modifications, in support of continued FSA State and county office program delivery. Funds are also included for the continuing implementation of FSA's portion of the FFAS integrated financial management system, CORE, which will feed the Department's Foundation Financial Information System for preparation of consolidated financial statements and reports. Hardware and software maintenance, upgrades, replacement and operational support for FSA legacy systems remain a need.

Assuming successful pilot installations in fiscal year 1998, CCC funds are included with funds from other Service Center agencies, in late fiscal year 1998 and fiscal year 1999 to procure, deploy, and install the initial components of the nationwide implementation of CCE, including employee training to use the new equipment and software. Procurement priorities of actual CCE components will be consistent with business requirements resulting from reengineered business processes and supportive of administrative convergence.

Question. What has the Department done since last year to build its information systems architecture into a tool that USDA could use to plan Information Technology(IT) investments and ensure that any new systems meet the Department's business and information needs of the 21st century?

Answer. The USDA Information Systems Technology Architecture was reviewed by a contractor under the OCIO's Independent Verification and Validation (IV&V) Program. While the IV&V findings were generally positive regarding USDA's first effort, there were several recommendations that USDA will incorporate into the implementation and management of the architecture. OCIO developed a high-level project plan which currently is being expanded with detailed tasks and milestones.

Last Year, USDA received a grade of "D" from the House Government Reform and Oversight Subcommittee on Government Management, Information and Technology for its efforts to address the Year 2000 problem and bring systems into compliance.

Question. What steps has the Department taken to improve its grade and ensure that it will be ready with its information systems to move into the next millennium?

Answer. I have taken strong management action to effectively respond to the challenges of year 2000 remediation. During the past year, USDA has established a Year 2000 Program Office, under the Chief Information Officer, with Senior Executive Service leadership to manage the Year 2000 issues Department-wide. The Chief Information Officer (CIO), Under and Assistant Secretaries have been given the responsibility for ensuring that USDA's mission-critical systems nationwide are Year 2000 compliant by March 1999. I directed each Agency Administrator to appoint a Year 2000 Senior Executive Sponsor who reports directly to the Administrator and establish Year 2000 project teams. Year 2000 is a critical element in the performance standards of the Senior Executive Sponsor in order to establish accountability

Additionally, USDA has issued a procurement moratorium requiring CIO approval of any IT procurement over $25,000; under this moratorium, purchases can only be approved on an emergency basis or when the acquisition is directly related to Year 2000 remediation. The CIO has sole signatory authority under the moratorium, which will remain in place throughout fiscal year 1998 and fiscal year 1999 to assure that the Year 2000 is the Department's information technology priority.

Question. What is the status of the Department's efforts in readying the systems to be Year 2000 compliant?

Answer. USDA continues to make steady progress in the remediation of mission critical systems. Currently, 41 percent of USDA's 1,319 mission critical systems are Year 2000 compliant and we anticipate that the remaining mission critical systems,

which will be required for use in the Year 2000, will be compliant by no later than March 1999. All agencies have reassessed their systems to ensure compliance with the new deadlines, and some agencies have redirected or reprogrammed resources to accelerate completion of the remediation effort.

Question. How much does USDA plan to spend, by component agency, this fiscal year and in fiscal year 1999 to fix the Year 2000 problems at USDA?

Answer. USDA plans to spend $58 million this fiscal year and $27 million in fiscal year 1999 to fix the Year 2000 problem.

I will provide the agency information for the record.

[The information follows:]

[Cost in thousands]

Agency	Fiscal year—	
	1998	1999
Foreign Agricultural Service	$170	$170
Farm Service Agency—KC	6,190	1,580
Farm Service Agency—HQ	200	200
Risk Management Agency	380	380
Farm and Foreign Agricultural Services	6,940	2,330
Food and Nutrition Service	2,200	670
Food, Nutrition and Consumer Services	2,200	670
Food Safety and Inspection Service	400	200
Food Safety	400	200
Agricultural Marketing Service	1,500	790
Animal and Plant Health Inspection Service	7,407	3,962
Grain Inspection, Packers and Stockyards Administration	1,100	300
Marketing and Regulatory Programs	10,007	5,052
Forest Service	11,700	3,500
Natural Resources Conservation Service	7,849	8,611
Natural Resources and Environment	19,549	12,111
Agricultural Research Service	1,521	1,171
Cooperative State Research, Education and Extension Service	.....	.....
Economic Research Service	260	260
National Agricultural Statistics Service	120	60
Research, Education and Economics	1,901	1,491
Rural Development	1,950	1,000
Support Programs: Departmental Administration [1]	540	500
Offices:		
National Appeals Division	.....	.....
Office of the Chief Financial Officer—NFC	8,980	1,000
Office of the Chief Information Officer—NITC	5,942	2,490
Office of Communications	50	200
Office of the Chief Economist	3	4
Office of the Inspector General	.....	.....
Office of Budget and Program Analysis	.....	.....

[Cost in thousands]

Agency	Fiscal year—	
	1998	1999
Office of the General Counsel	.....	.....
Subtotal	14,975	3,694
Totals	58,462	27,048

[1] Includes: Administrative Law Judges, Board of Contract Appeals, Civil Rights, Human Resources, Office of the Judicial Officer, Operations.

Question. Who is charged with the overall responsibility and accountability at USDA for ensuring that the Department's mission critical information systems are Year 2000 compliant and what are the Department's Year 2000 milestones.

Answer. The Chief Information Officer and the Year 2000 Program Executive have the overall responsibility for the planning, oversight, and evaluation of USDA's effort to achieve Year 2000 compliance. The Under and Assistant Secretaries and Agency Heads have been empowered with the programmatic, budgetary, managerial, and technical responsibility for ensuring that USDA's mission-critical systems nationwide are Year 2000 compliant by March 1999 in their respective areas.

Milestones for completion of the various phases of remediation have been established based on guidance from the General Accounting Office and the Office of Management and Budget. September 1998 is the milestone for completion of the renovation phase for repaired systems; January 1999 is the milestone for completion of validation for all mission critical systems; and, March 1999 is the milestone for completion of the implementation phase for all mission critical systems.

Question. What assurances can you give this Committee that the Department will fix its mission-critical information system Year 2000-related problems in sufficient time for adequate testing and validation to occur, and that the necessary steps can be taken in sufficient time so that USDA's operations and customers are not adversely affected?

Answer. As I mentioned previously, responsibilities for Year 2000 compliance have been firmly designated at multiple levels within USDA. Plans have been developed to achieve compliance by March 1999. In addition, the Office of the Chief Information Officer is establishing a verification and validation process to bring independent third party review of selected critical systems in terms of Year 2000 compliance.

A USDA-wide mainframe testing environment is being established at the National Information Technology Center in Kansas City. The test environment is expected to be fully operational in July 1998. An additional mainframe test environment has been established and is currently operational at the National Finance Center (NFC) in New Orleans. It will be used to test NFC based applications.

Question. Obviously, one of the Department's biggest efforts in the IT area is the Service Center Procurement effort.

A. How much has the Department obligated each fiscal year since fiscal year 1995 for this effort? Please show it by funding source for each fiscal year.

B. How much is the Department requesting in fiscal year 1999 for the Service Center IT procurement by funding source and how much in additional funding will it cost to fully fund this effort?

Answer. The Department's investment in achieving a shared information system for the USDA Service Center agencies includes: Business Process Reengineering (BPR), which defines the business requirements for enabling technology; telecommunication infrastucture, better known as the Local area network/Wide area network/Voice (LAN/WAN/Voice) Project; Base data acquisition, digital ortho photography and soils digitization; and a capital investment in hardware and software, the Common Computing Environment (CCE). The total investment in each of these areas for fiscal year 1996 through fiscal year 1999 is shown in the table that follows.

Most of the costs for these initiatives are being funded from base level agency resources. However, an increase of $30 million is requested in fiscal year 1999 under the salaries and expense account of the Farm Service Agency. Based on the BPR Business Case, the Department's Executive Information Technology Investment Review Board (EITIRB) approved a $350 million investment for the Service Center CCE be added to the IT investment portfolio of the Department. The $110 million investment in fiscal year 1998 and 1999 includes approximately $100 million for the CCE "procurement". Approximately $250 million will be needed between fiscal year

2000 and fiscal year 2001 to complete the acquisition of the CCE equipment and software for the Service Centers. The funding sources for future years have not been determined at this time.

[The information follows:]

USDA SERVICE CENTER SHARED INFORMATION SYSTEM

Activity	Fiscal year—			
	1996 actual	1997 actual	1998 planned	1999 proposed
I. Business Process Reengineering (BPR):				
Unallocated	.....	.....	.....	$10,800
CCC	.....	$6,542	$4,900	.....
FSA	.....	468	950	.....
NRCS	.....	1,500	2,897	3,000
RD	.....	118	1,150	.....
OSEC	$800	.....	.....	.....
Subtotal	800	8,628	9,897	13,800
II. LAN/WAN/VOICE (L/W/V):				
Unallocated	.....	.....	.....	6,637
CCC	68,500	.....	20,257	2,275
FSA	1,800	743	269	88
NRCS	.....	8,530	2,300	.....
RD	2,400	1,400	541	.....
Subtotal	72,700	10,673	[1] 23,367	9,000
III. BASE DATA ACQ:				
CCC	22,000	.....	6,000	.....
NRCS	8,000	17,500	13,750	15,050
Subtotal	30,000	17,500	19,750	15,050
IV. Common Computing Environment (CCE):				
CCC	4,200	.....	20,500	15,000
FSA	.....	.....	500	30,000
NRCS	.....	.....	17,200	16,250
RD	.....	.....	4,100	7,000
Subtotal	[2] 4,200	.....	[2] 42,300	68,250
Total:				
Unallocated	.....	.....	.....	17,437
CCC	94,700	6,542	51,657	17,275
FSA	1,800	1,211	1,719	30,088
NRCS	8,000	27,530	36,147	34,300
RD	2,400	1,518	5,791	7,000
OSEC	800	.....	.....	.....
Grand total	107,700	36,801	95,314	106,100

[1] The $9 million in fiscal year 1999 include $4 million to complete the installation phase by December 1998. The remaining $5 million are to cover maintenance costs.

[2] Of these amounts, $4.2 million in fiscal year 1997, $9.3 million in fiscal year 1998, and $1.25 million in fiscal year 1999 are for pre-acquisition studies, evaluations, and pilot testing.

Question. We understand that the Department has turned to contractors to perform oversight responsibilities for IT projects, the Independent Verification and Validation (IV&V) process. Given the change in philosophy to contract out for oversight of IT projects using the IV&V process:

A. What savings have been achieved for the Department in terms of reduced staff since contractors now have some of the workload?

B. What other quantifiable benefits have resulted from these IV&V's?

C. What has been spent to date and is obligated for conducting IV&V's, and what projects have been reviewed to date?

Answer. Please let me make an important clarification. Oversight responsibilities for IT projects remain in the Department, specifically in the Office of the Chief Information Officer, and are not contracted out. The purpose of our Independent Verification and Validation program is to conduct un-biased reviews and analyses of IT plans, management approaches, technical alternatives, requirements and cost-benefit studies. We feel very strongly that these independent reviews, conducted before we make multi-million dollar investments in IT, will assist us in identifying strengths and weaknesses, alternatives or requirements which we did not consider, or alternative courses of actions which may help us to maximize benefits and minimize risks.

The IV&V program is designed to help us acquire, on a short-term basis, expertise which is not readily available internally. Typical task length is 45–90 days. We look at the breadth of both the government and private sector experience when we select an IV&V contractor.

A table identifying costs and benefits of the IV&V Projects will be submitted for the record.

[The information follows:]

IV&V project/benefits	*Dollars obligated*
Service Center Implementation—LAN/WAN/Voice Initial Review (fiscal year 1997). Completed. Identified problem areas and suggested resolutions which, when applied, allowed USDA to lift the nation-wide suspension on installations	$50,000
Service Center Implementation—LAN/WAN/Voice Follow-On Review (fiscal year 1997). Completed. Evaluated USDA's implementation of suggestions from initial review. Verified that new approaches are working	10,000
Service Center Implementation—Review of Year 2000 Plans (fiscal year 1997). Completed. Evaluation of service center agency Y2K plans, based on contractor-developed criteria, consistent with GAO guidance. Conducted in conjunction with USDA Y2K program office	45,000
Service Center Implementation (fiscal year 1998). Completed. Evaluation of Service Center implementation plans to identify and rank candidate components for future IV&V studies	27,000
Service Center Implementation—Common Computing Environment (fiscal year 1998). Completed. Verified and validated cost/benefit analysis and technical alternatives. Provided additional insights, based on experience, which will be useful in conducting laboratory and pilot tests	115,000
USDA IT Architecture (fiscal year 1998). Completed. Contractor validated USDA's current baseline against industry standards and found no major problems; provided recommended future actions, based on an OMB-approved methodology	220,000
USDA Foundation Financial Information System (fiscal year 1998). Currently underway to: evaluate project plans, schedules and projected costs; evaluate USDA requirements versus software capabilities; review strategies and plans for future implementations and upgrades	150,000

Three years ago this Committee noted the growth in geographical information systems (GIS) technologies and their application in the private sector. As a result, the Committee encouraged the Secretary to pursue the possibility of a multi-agency, multi-disciplinary approach to better involve federal, state, and local governments in developing uniform GIS applications. We understand that USDA has several agencies involved in developing geographical information systems (GIS) and associated projects such as digital orthophotography and data digitization.

Question. Please provide a list of USDA agencies engaged in GIS projects, a description of these projects, and total estimated life-cycle costs for each project.

Answer. The agencies involved in GIS development are: Forest Service, Natural Resources Conservation Service, Farm Service Agency and Rural Development.

Question. What have each of these agencies spent over the last 5 individual years on GIS technologies and related expenditures?

Answer. Spending for GIS-related hardware, software, and geospatial data is integrated into the A–11 reports submitted by each agency without specific breakout.

Question. What does USDA plan to spend in fiscal years 1998 and 1999 on GIS systems?

Answer. The Chief Information Officer will provide you with information on expenditures and life-cycle costs by early April.

Question. What progress has USDA made to establish a multi-agency, multi-disciplinary approach to develop uniform GIS applications?

Answer. USDA is working with the Open GIS Consortium (OGC), which represents most of the major information technology companies. We have representation on the Board of Directors as well as management and technical committees and help guide industry in making decisions which foster interoperability and enable the development of common GIS applications. Recently the OGC issued a standard for representing point and line geographic features and they have demonstrated the ability for competing vendors to access and use each others geospatial data, over the internet, without having to go through a time consuming and expensive download and conversion process. We are working with industry to develop other standards for geographic features and GIS technology that will foster interoperability.

As industry completes and adopts these standards, various agencies and disciplines will be able to develop more uniform applications which make use of each other's information without having to recreate or convert that information.

Question. What steps has USDA taken to ensure that activities related to developing GIS are not duplicated across government agencies and are systematically accomplished?

Answer. The Federal Geographic Data Committee (FGDC) continues to be the primary committee which ensures that GIS activities are coordinated among government agencies. USDA is an active participant at the Steering Committee level as well as the many subcommittee and working group level. USDA also has an Agriculture Geographic Data Committee which meets periodically to coordinate GIS activities within the Department.

The three Service Center Agencies—Farm Service Agency (FSA), Natural Resources Conservation Service (NRCS), and Rural Development—have formed a partnership to develop and implement a uniform GIS solution for Service Center offices. This involves a common set of shared geospatial data layers, common hardware and GIS software, and joint training.

The Forest Service and NRCS periodically meet to coordinate their efforts in GIS and geospatial data development and data sharing. A number of projects are underway to development geospatial data and GIS applications in a uniform manner to avoid duplication of efforts.

MANAGEMENT

Question. In several places within the budget, the term administrative convergence is mentioned and that the Department is coordinating the functions of the different field service agencies to provide a more seamless and efficient delivery system. We see that this is being done only for the Service Center agencies, i.e., the Farm Service Agency, Natural Resource Conservation Service and Rural Development, but nevertheless USDA reports that by 2002, the proposal would result in a 22 percent reduction in administrative staffing from 1997. Savings by 2002 would equal $127 million/per year.

How many administrative staff did the USDA Service Center agencies have in 1997 broken out by headquarters, state, and field office level, and what did this staff cost?

Answer. I would be glad to provide that information for the record.

[The information follows:]

STAFF YEARS

Mission area	Headquarters	Finance Office [1]	Regional Office	Technical Center/Institute [2]	States	Total
NRCS	118	.....	91	171	613	993
FSA	393	940	.....	88	338	1,759

STAFF YEARS—Continued

Mission area	Head-quarters	Finance Office [1]	Regional Office	Technical Center/Institute [2]	States	Total
RD	224	472	.....	.....	404	1,100
Total	735	1,412	91	171	1,347	3,852

[1] The column headed Finance Office includes the St. Louis operations of Rural Development and the Kansas Operations of the Farm Service Agency.
[2] The column headed Technical Center/Institute includes the Aerial Photography unit of the Farm Service Agency in Salt Lake City.

The estimated savings of $127 million annually represents only the savings resulting from the reduction of 2,314 staff years between 1993 and the year 2002, assuming an average staff year cost of $55,000. It does not include the savings to be realized through the elimination of duplicate systems, business process re-engineering and better coordination of activities. Nor does it include the cost acquiring and installing the common computing environment, any relocation of personnel or other costs associated with consolidation. Assuming an average staff year cost of $55,000, the fiscal year 1997 cost of the 3,852 administrative positions in the three mission areas is a little over $200 million.

Question. What is the total number of administrative staff for USDA broken out by headquarters, state, and field office levels?

Answer. The following table contains the information.

USDA Administrative Staff

Location	*1997 estimate*
Headquarters	4,298
Regional	4,353
State	1,457
Field Offices	4,600
Total	14,708

Question. With the significant amount of savings estimated for the Service Center agencies alone, what would the amount of savings be if all USDA agencies were included in the administrative convergence initiative? Does the Department have any current plans for expanding the administrative convergence effort across the Department?

Answer. The administrative convergence initiative would be difficult to apply to other agencies that are not operating out of the USDA Service Centers. At this time we do not have plans to expand this effort across the Department. However, I would like to note that administrative units for each mission area were combined as part of the USDA reorganization a few years ago.

MODERNIZATION OF ADMINISTRATIVE PROCESSES PROGRAM

For years now, USDA has funded the Modernization of Administrative Processes (MAP) program, but now we see that USDA is no longer funding this program.

Question. What was spent in total on this program since its inception?

Answer. From fiscal year 1993 through fiscal year 1997, the MAP Program spent $13 million. For fiscal year 1998, $4.2 million have been planned which will bring the total MAP expenditures to $17.2 million.

Question. What were the results of this program?

Answer. Prior to it termination, the program had seven active projects to improve USDA's administrative functions: (1) Purchase Card/Convenience Check, (2) Procurement System Modernization, (3) Human Resources Management (personnel system) Modernization study, (4) Time and Attendance, (5) Telecommunication Services, (6) Information Resources Management Analysis, and (7) Civil Rights Complaints Processes to include both Program and Equal Employment Opportunity processes.

The Purchase Card project (an automated system for tracking, reconciling, and paying government credit card purchases up to $2,500) has begun implementation USDA-wide and is planned to be completed by March 1999. Both the Purchase Card/Convenience Check and the Procurement System Modernization projects have been combined. Cost avoidance is expected to exceed $29 million annually when

fully implemented. Pilot testing of the Telecommunication Services project (to automate and consolidate USDA's telecommunications needs to allow central billing, reconciling, and equipment inventory management) began in February 1998. This project has been expanded to include a baseline telecommunications inventory in support of Year 2000. This project is expected to complete its evaluation by July 1998. The IRM Analysis project (to analyze USDA's IRM program regarding those IRM business processes that support the Department's technology program) was completed September 1998. It will serve as the basis for future modernization projects. The Human Resources Management Modernization study was completed September 30, 1997, and provided recommendations for 10 different modernization projects. The Time and Attendance project was identified as a top modernization project. Currently, commercial-off-the-shelf software packages are being pilot tested to determine their application to USDA's time and attendance requirements. A final report on the results will be issued May 1998. A potential cost avoidance of $39 million is expected. The Civil Rights program and EEO complaint processes' redesign were completed September 1998 as part of the Civil Rights Implementation Team efforts. Currently, automated tracking systems are being developed to support these Civil Rights processes.

Question. Why did USDA terminate this program?

Answer. While it is true that USDA terminated the MAP program Office in Departmental Administration, the MAP projects were not terminated. All of the active modernization were transferred to the respective offices within Departmental Administration and to USDA's Office of the Chief Information Officer. These ongoing modernization projects are still funded by the Department's Working Capital Fund.

QUESTIONS SUBMITTED BY SENATOR GORTON

REGIONAL RESEARCH

Question. It is apparent from this budget that the President and USDA have not made regional research a priority. Using Washington state as an example, how can you explain the need to cut essential research for the nation's leading apple, hops, dry peas and lentils and second leading potato, grape and asparagus producers in the United States?

Answer. As a part of the Administration's efforts to balance the budget and direct spending to higher priority areas, projects earmarked for specific institutions were proposed for elimination. Research funding distributed by formula under the Hatch Act to Washington State University could be used to continue aspects of these projects if they are deemed to be of a high priority at State or local levels. Additionally, researchers could apply for funding under the National Research Initiative competitive research grants program or obtain funding from State and local governments and/or private sources, such as industry, to continue these projects.

Question. Last year USDA and the President cut regional research, much like we have witnessed in this budget. Why, after Congress reinstated all of the regional-based research our agriculture communities require, were these projects again eliminated?

Answer. The elimination of projects earmarked for specific institutions is consistent with the Administration's efforts to balance the budget and direct spending to higher priority areas and its policy of awarding research, education, and extension projects through a competitive, merit-review process. It is possible that funding distributed under the Hatch Act, or funding from the National Research Initiative competitive research grants program, State and local governments and/or private sources, such as industry, could be used to continue aspects of these projects if they are deemed to be of high priority at State or local levels.

ARS LOCATION CLOSURE

Question. Another specific question for the State of Washington—why was the Prosser Research Station zeroed out for the second year in a row?

Answer. The President's budget requires the reallocation of existing resources to finance new, high priority research needs. A number of projects carried out in ARS research stations at Prosser, Washington; Mandan, North Dakota; Orono, Maine and Brawley, California, were identified as less critical. As a result, a cost-effective decision was made to terminate and redirect resources to new research initiatives and recommend closure of these research stations.

QUESTIONS SUBMITTED BY SENATOR BURNS

U.S. AGRICULTURAL EXPORTS FOR 1998

Question. Now that I have launched into my sermon of what I consider to be the evils of this Administration's agricultural trade policy, I would appreciate it, Mr. Secretary, if you would provide the Committee with an outline of what you foresee in the export of American products for the coming year.

Answer. The current fiscal 1998 forecast for U.S. agricultural exports is $58.5 billion, up $1.2 billion from 1997 and second only to the 1996 record of $59.8 billion. Compared with 1997, the only major products expected to show a year-over-year drop in export value are soybeans and meal. U.S. export volumes for soybeans and products should rise due to strong foreign demand; however, prices are down sharply reflecting a strong recovery in domestic and foreign oilseed stocks.

A large increase in sales to Latin America is forecast. Little change is expected for exports to Europe, Canada, the Middle East, and the Newly Independent States of the former Soviet Union. The forecast for Asia reflects slower export growth to Japan and reduced prospects for U.S. exports due to the financial crisis. The adverse impact of the Asian crisis on U.S. agricultural exports in 1998 was conservatively estimated at $500 million in December. We will be releasing a revised export forecast for 1998 on February 23, which should include a more thorough assessment of the effects of the Asian financial crisis on this year's export performance.

EXPORT ENHANCEMENT PROGRAM

Question. Would you please outline what you see as the standards by which you would consider using Export Enhancement Program (EEP) funds for the coming year?

Answer. There is no single standard for deciding when to use EEP. Congress has given guidance that it should be used both for trade policy reasons, such as responding to EU subsidies, and for market development. We will use EEP when we believe it's the appropriate tool to meet those objectives. With the recent developments in Asia, credit guarantees under the GSM–102 program seem to be the most useful tool to protect U.S. export markets. We are aware of EU subsidy actions, and we are watching them closely. But, we don't think the situation warrants use of EEP at this time.

FOREIGN MARKET DEVELOPMENT PROGRAM

Question. Would you provide the Committee with the exact amount that has been allocated in this budget for the Foreign Market Development Fund? I would like it broken down in terms of the amount appropriated for this coming year and for any dollars considered to be carry over from previous fiscal years.

Answer. The budget includes $22.0 million in new appropriated funds for the Foreign Market Development Cooperator Program in fiscal 1999. It is currently estimated that an additional $6.7 million of carryover funds also will be available to support Cooperator marketing activities in 1999. Thus, the total USDA contribution to support the program is currently estimated at $28.7 million. While the level of new appropriated funding requested in the budget is somewhat lower than in previous years, the budget assumes a higher level of cost-share contributions from Cooperator organizations which will help to offset the reduced Federal contribution.

ASIAN FINANCIAL REFORMS

Question. Taking into account the fact that many of the Asian countries which have recently experienced economic chaos will or have received funds from this country and your Department in particular. And considering that these same countries have a number of barriers in place against the importation of American agricultural products, could you give the Committee some idea of the talks that are proceeding between this Government and the governments of those countries which we have recently given funding to in order to stabilize their currencies and economies?

Answer. We are in frequent communication with many of the countries that have received IMF assistance in terms of assessing their credit needs and as part of ongoing bilateral discussions. We do not want to underestimate the fact that the Asian countries that have received the IMF assistance are also important U.S. agricultural export markets. To obtain IMF assistance, recipient countries agreed to improve market access and adopt more transparent trading regimes, steps which are also beneficial to U.S. agricultural exports.

For example, effective February 1, Indonesia reduced agricultural tariffs on over 500 agricultural items to five percent and on April 1, BULOG's monopoly on Indo-

nesian wheat imports ends. Regarding South Korea, the good news is that a condition of the IMF assistance package is that Korea adopt a more open and transparent trade policy. Korea notified the WTO of revision to its Food Additive Code which should bring Korea into more conformance with international codes. In addition, we understand that Thailand has also reduced tariffs on certain agricultural items.

WILDLIFE SERVICES

Question. Again this year Mr. Secretary, the budget proposes a redirection in funding for the Wildlife Services Agency, the former Animal Damage Control. For the past three years I have worked in the Interior Appropriations bill to get additional funds for the agency from the Fish and Wildlife Service. It is my feeling that if they are the reason the wolves have come into the area, then they need to pay additional dollars for control. Are you aware that in 1994 the Fish and Wildlife Service provided $100,000 for predation reports related to the wolves in the Yellowstone National Park in Idaho? Four years later and 10 times as many wolves in the area, Fish and Wildlife Service is continuing to provide that same level of funding.

Answer. Yes, I am aware of the funding situation. Cooperation between the Department of Interior's Fish and Wildlife Service (FWS) and APHIS' program for Wildlife Services (WS) in dealing with gray wolf recovery has been good. An interagency agreement between WS and the FWS calls for each agency to contribute $100,000 per year to support WS' Wolf Management Specialist and program efforts to deal with wolf predation on livestock.

Question. Could you explain the reasoning behind the reduction in the budget for Wildlife Services?

Answer. The 50/50 cost sharing proposal is made in an effort to encourage cooperators to contribute a fair share of funding toward cooperative Wildlife Services activities in each State. This proposal is made in consideration of States in which cooperator contributions are equal to or greater than Federal contributions, as this approach greatly enhances the value of Federal funds invested. By encouraging a minimum 50 percent cooperator contribution level, the Agency can accomplish a more equitable distribution of Federal funds, can accomplish the same level of program activity with less Federal funding, and can consider future needs and new cooperative agreement proposals on a more programmatic and equal basis.

Question. Do you see where the proposed change in the joint budgetary venture will have any affect on the important wildlife damage control program?

Answer. This proposal is made in anticipation of cooperators increasing their contributions to a minimum 50 percent cost sharing level. When this is accomplished, total cooperative funding levels and therefore cooperative program activities, would not be affected by this proposal. If, however, cooperative funding levels do not increase as needed to increase the 50 percent minimum, Federal contributions would be reduced to a 50 percent maximum contribution level. This action would affect a variety of cooperative program activities in 33 states, based on fiscal year 1996 Federal/cooperative contribution data.

Question. Are you aware Mr. Secretary, that the 1931 Act which provides you with the Authority for the Wildlife Services Agency, has set a ratio for these programs in the States? (If he is not aware of this, how can he proceed with this proposal for a 50/50 split?)

Answer. No, I am not aware of such restrictions. The 1931 Act authorizes control and related experiments and investigations regarding predatory and other wild animals, and provides that the Secretary of Agriculture may cooperate with States, individuals, public and private agencies, organizations, and institutions, but does not include specific details or ratios regarding this cooperation.

FOREST SERVICE ROADS

Question. Mr. Secretary earlier this year when you announced the moratorium on road construction in roadless areas in our National Forests, your web page announced that there would be a series of public hearings on this in the west. Yet just today I was informed that you have done away with these public meetings. Do you consider it sound public policy to propose a dramatic change of this nature, with only a thirty day comment period and with no public meetings involved in the public process?

Answer. As a result of early public and Congressional comment on the proposed interim rule establishing an 18 month moratorium on road construction in certain roadless areas and on the Department's advance notice of proposed rulemaking on road management, the Department has decided to extend the public comment period on the proposed road moratorium for an additional 30 days. There are also plans to hold at least 25 public forums across the country.

LAND ACQUISITION

Question. Your department, namely the Forest Service, has been discussing the possibility of purchasing a private property and a conservation easement north of Yellowstone National Park. In fact, 3 million has been included in the supplemental LWCF account for this property. (6.5 million within the Forest Service and 6.5 million within BLM) Last month, the White House Council on Environmental Quality hosted a meeting with livestock producers and animal health authorities from various states to discuss this issue and how it relates to the management of the brucellosis infected Yellowstone National Park Bison herd. At the meeting, federal authorities stated this land acquisition would be a major part of the solution to the bison situation. How does this land acquisition address eradication of the disease, something your department has advocated for decades?

Answer. Acquisition of portions of the Royal Teton Ranch is only one part of the solution of the bison management problem. Land acquisition does not specifically address eradication of brucellosis. Support for acquisition of the ranch goes far beyond benefits to bison management. The focus of this project is to protect key winter ranges and migration corridors for several species of wildlife that move across the Yellowstone National Park boundary. These lands provide habitat for bighorn sheep, mule deer, elk, antelope, grizzly bear, mountain lion and bison.

Question. Your agency's discussion about the land north of Yellowstone National Park do not simply deal with an acquisition of fee-title. The proposed package includes purchase of land, exchange of lands and an conservation easement for wildlife. The details of these are not clearly defined. I have two questions:

How is the Gallatin National Forest going to pay for the increased amount of responsibilities of the new land, especially in light of Region One's current budget constraints?

Answer. I understand that there will be additional costs associated with processing the land purchase and exchange cases. The Forest Service will pay for these costs through the current land acquisition management request. Future management costs are difficult to estimate. It is the agency's sense that the consolidated land ownership patterns will result in cost savings and the additional acreage will not have a major impact on the funding needs of the Gallatin National Forest.

Question. And: How do you plan on including the Montana Congressional Delegation and the Governor in these discussions?

Answer. The Department has been working with State agencies, other Federal agencies, the landowner and others to define the property to be acquired. It is my understanding that State officials clearly understand the proposal. We are certainly willing to meet with the Montana delegation to discuss details of the acquisition.

BRUCELLOSIS

Question. It is my understanding that APHIS agreed to move a trap for bison management in the West Yellowstone area (specially on Horse Butte). This would require a financial commitment for the relocation and operation of the trap. Please provide the Committee and update on this trap relocation efforts and the financial commitment management around this facility?

Answer. The State of Montana and the Forest Service (FS) have selected a site for relocating the trap to the West Yellowstone area. In December 1997, the State of Montana received a draft permit for setting up and operating the trap. To date, the draft permit has not been signed by the State. The State of Montana has several concerns with the permit. Conditions of the permit include the requirement of a 2 week-long survey on eagle nests in the area and restrictions on the trap's usage to certain days and hours of operation. The permit also requires the trap operations to cease in mid-April. Once the permit is signed, APHIS expects operations to commence within 3 weeks. Two weeks will be needed to conduct the survey on area eagle nests and 1 week will be needed to relocate the trap.

So far this winter, the demand for a trap in this area has not been great. The low level of demand is due to the mild winter and the absence of bison in the area. To date, only six bison have been located in this area and removed.

The cost of relocating the trap is estimated at about $11,000. APHIS will most likely contract this work. APHIS also expects to contract for trap maintenance and snow removal. It is expected that the State of Montana will have operational control over the facility with Forest Service providing site security and APHIS providing personnel. APHIS may decide to contract personnel coverage with the State. The cost of operating the trap is difficult to predict and would depend on a number of factors including the weather conditions in a given winter, the number of bison in the area, and the number of staff-hours needed to operate the trap. In a mild winter, operating costs at the trap could be close to $100,000 (assuming the work is

contracted to the State) and in a more severe winter, costs could total up to $150,000.

Question. As you know, restrictions or threat of restrictions by other State animal health authorities is becoming increasingly more important in terms of brucellosis. The National Eradication Program created not only a Federal position of eradication and management of the disease, but also encouraged State animal health authorities involvement. In fact, Montana has very specific State statutes on herds which are exposed to brucellosis. What role is your department taking in educating States about activities which relate to disease exposed herds (bison and elk) within the Greater Yellowstone?

Answer. To educate the states, APHIS has contracted with the Livestock Conservation Institute to issue newsletters to the states regarding the status of the National Eradication Program and activities within the Greater Yellowstone Area (GYA). In addition, APHIS recently sent a letter to all state veterinarians to inform them of the status of activities in the GYA.

Question. I am aware of the actions being taken to manage brucellosis disease within the Greater Yellowstone Area. However, please provide to the Committee a specific list of actions the federal agencies are taking to eradicate brucellosis within Yellowstone National Park and Teton National Park.

Answer. APHIS continues to work with and assist the National Park Service and the State of Montana with the implementation of the Interim Bison Management Plan and the development of a long-term bison management plan. APHIS participates on the Greater Yellowstone Interagency Brucellosis Committee and assists with preparing the Environmental Impact Statement (EIS) on brucellosis in the Park. The EIS is expected to be finalized in the third or fourth quarter of fiscal year 1998.

In addition, APHIS provides personnel to assist with liaison activities, planning, bison capture, testing and sampling, and research activities. Several ongoing research projects are being funded in fiscal year 1998 including projects to evaluate the transmission of brucellosis in bison within Yellowstone National Park and study the safety and efficacy of the RB51 vaccine on bison.

Question. In 1997, Secretary of the Interior Bruce Babbit commissioned a report by the National Academy of Science regarding brucellosis. What comments has the Department of Agriculture made about this document and did your department provide any comments during the public comment period by the National Academy of Science? Please provide those to the comment.

Answer. No comments have been provided by the Department of Agriculture on the National Academy of Science report regarding brucellosis in the GYA.

QUESTIONS SUBMITTED BY SENATOR STEVENS

WILDFIRE PROGRAMS

The Millers Reach Fire caused more private property damage than any previous rural fire on record in Alaska. 161 families were totally burned out of their primary homes. Over 260 families were forced to seek some form of temporary or permanent assistance to make it through the winter. When I visited fire fighters on the scene, I was told that at least one volunteer fire fighting unit close to the source of the fire was unable to roll out due to mechanical problems and concern voiced by the State over their level of training.

America's rural volunteer firefighters provide some $36.8 billion annually in estimated benefit to taxpayers. However the Administration's budget for this worthwhile program is the same as last year's level of only $2 million. Of that Alaska received only $40,000 to cover roughly one-fifth of the nation's land mass.

Question. Will your agency want to ensure that the Volunteer Fire Assistance program is equipped and capable of training volunteer fire departments so that they are able to contain fires in rural areas before the fires get out of control?

Answer. In addition to the $2 million Volunteer Fire Assistance Program, which provides technical and financial assistance directly to local organizations, the budget provides $21.5 million to State forestry departments for their wildfire programs. This includes an annual average of $115 million worth of Federal Excess Personal Property loaned to the States. Finally, the Forest Service and the Interior agencies devote substantial fire protection and suppression resources to the Federal lands in the State of Alaska.

BEAR CREEK FEES

Recently the Juneau Empire ran a story about your intention to raise fees associated with visiting Bear Creek, in Alaska, to $50 per person.

Question. Is there a Record of Decision on either an Environmental Assessment of an Environmental Impact Statement to implement these fees at Bear Creek?

Answer. I presume that this is a site in the Recreation Fee Demonstration Program which was authorized by the 1996 Interior Appropriation. I support the program as a means of providing funding for the maintenance and reconstruction needs of the recreation program. As you know the backlog in this area is much greater than we, or the Congress, have been able to fund. User fees provide a welcome supplement to annual appropriations. I am not familiar with the specific situation at the location you are concerned about and have asked the Forest Service to provide additional information.

[The information follows:]

By Bear Creek, we presume that the question refers to the Pack Creek Bear Viewing Recreation Fee Demonstration Area. An Environmental Assessment of the Pack Creek Bear Viewing Area was completed in 1989 which, among other management changes, initiated a reservation fee of $10 per permit. This fee was imposed to discourage people from obtaining permits and then not using them. Pack Creek has a very limited capacity of only 24 people per day. Thus, "no-shows" quickly limit the number of people who can actually visit this extremely popular area.

In 1996, with the advent of the Recreation Fee Demonstration Program, both the Forest Service and the Alaska Department of Fish and Game (which co-manages the area since they manage the adjacent lands) scoped the topic of a joint use fee with the public. Most State funds for managing the area had been withdrawn by the Legislature, and Forest Service funding was continuing to decrease. The scoping evaluated several different price structures and cost recovery possibilities through implementation of a use fee. Under the demonstration fee authority, we have adopted a fee of $50 per person per day for the peak viewing season with a lower rate in the off prime, or "shoulder" seasons of April and May. The agencies elected to phase in fee increases to the $50 level if initial visitor responses were favorable. The agencies signed a cost-share agreement in which the net receipts are split 50/50 after the cost of the reservation system is deducted. Visitors receive a permit that clearly identifies the two agencies and are told the funds go to both agencies for management of the site when they make their reservation.

In 1997, the first year in which the interagency fee was implemented at Pack Creek, the fee was $20 per person per day in the shoulder season and $36 per person per day in the peak season. Seniors and juniors receive a discount. The customer response cards showed very strong support for the fee and management of the area. Some customers expressed willingness to pay more due to their high satisfaction with their visit. Despite the new fee, site use went up 11 percent overall from 1996, with increases of 7 percent and 22 percent in the peak and shoulder seasons, respectively.

The current fee structure will remain in place in 1998 and is still below the target recovery rate of 70 percent. Current fees recover about 42 percent of the costs to manage the area. Positive customer service card responses indicated to both agencies that an increase to $50 per person per day for only the peak season was reasonable. Fees for the shoulder season will remain at $20 per person per day and senior and junior discounts will continue as before. The $50 fee will not take place until 1999 and will have been phased in over three years. Advance notice has been given our outfitter/guide permittees so that they will have ample time to incorporate the revised fees into their business plans. It appears that the $50 fee for the peak season is set at a level that provides reasonable returns to both agencies and it also appears to have solid support from the public.

Question. The fees are raised 500 percent—from $10 to $50—Have you raised fees a similar percentage in ALL National Forests?

Answer. Again, I am not familiar with the specific charges at each of the demonstration fee sites. I have asked the Forest Service to provide the information.

[The information follows:]

Nationally the Recreation Fee Demonstration Program is testing a wide variety of fees at a limited number of selected sites across the country. In fiscal year 1997, there were 40 projects charging fees. They ranged from single campgrounds to multi-State area trailhead parking fees. The Demonstration program is not an Agency-wide fee system at this time. It is testing an authority which expires on September 30, 1999 under current law. These fees are being tested on a very small fraction of the total National Forest System. In most cases, the fees being charged are new fees at locations or facilities which were previously free. Since these projects

increased from no fee at all to something, the percentage increase cannot be calculated. Fees are being determined at the project level using methods such as fair market value analysis, surveys of potential users, and cost recovery.

Fee demonstration prices vary widely from unique project to unique project. Most developed site projects and dispersed area parking fees include annual passes in the $20 to $30 range. Annual passes at a highly developed project in Arizona are $90. If the public is willing to pay an outfitter and guide company $1,700 for a one-week Heritage Expedition trip through Hells Canyon in Idaho, a modest Forest Service recreation fee would hardly be noticed.

Pack Creek is a unique experience with substantial costs associated with protecting both the people and the bears. The fees are a test and public comments are being gathered to provide Congress with the information necessary to evaluate the Recreation Fee Demonstration Program.

RURAL UTILITIES PROGRAMS

Question. Alaska's rural communities suffer from wide spread unemployment coupled with deplorable sanitation and water supply, and expensive diesel generated power issues. Recently key members of your staff visited Alaska to assess conditions first hand.

Please state for the record what is being done by your Department to help address Alaska's rural utilities and power generation problems?

Answer. I am aware of the sanitary conditions you spoke of and I understand that we are financing a significant number of projects in Alaska's rural communities and there are applications and plans underway for additional financing. I understand the recent visit of my staff was associated with oil spills related to fuel storage. I believe that we are going to be able to assist in correcting these problems through our community facilities program. I am told by my staff that discussions are underway to determine the most appropriate means of financing the effort in about 15 villages.

I understand that we are also currently reviewing applications totalling about $30 million for electric cooperatives in Alaska.

QUESTIONS SUBMITTED BY SENATOR BENNETT

RURAL CREDIT

Question. In your personal opinion and based on your research, how critical is the need for enhanced credit for rural non-agricultural activities?

Answer. Access to credit is vital to growth and development, and opportunities to provide greater access to credit for rural areas need to be explored. Several studies, including the rural credit study which the Department completed last year in response to a requirement of the 1996 Farm Bill, have concluded that rural financial markets are work reasonably well. However, these studies also note that there are gaps in the market, particularly for isolated rural areas. There are, as well, problems that many rural borrowers have in qualifying for credit. This is why the Department needs to maintain a strong role in helping rural borrowers obtain credit. For example, the Department's Business and Industry loan guarantee program offers rural borrowers access to credit by allowing private lenders to make loans they would otherwise be unwilling or unable to make because of the amount of perceived risk or lending limitations. The Department also provides technical assistance and outreach. In addition, it provides credit at rates and terms that can be met by applicants who lack the repayment ability for commercial loans. Where there are opportunities to make more credit available to rural areas, either by improving the Department's programs or through other means, I believe we should give serious consideration to at least exploring those opportunities.

Question. Do you agree that adequate credit for non-agricultural projects in rural localities is critical for the economic health of these areas?

Answer. It is absolutely a critical component of the economic health of rural areas.

Question. Do you and the United States Department of Agriculture support the three-year pilot proposal being considered by Senator Bennett to expand the authority of the Farm Credit System and Farmer Mac by allowing them to buy business and industry type loans from banks in rural areas?

Answer. We have not developed a position on the proposal, but I think it is certainly something worth exploring.

QUESTIONS SUBMITTED BY SENATOR CRAIG

REDIRECTION OF ARS FUNDING

As you know from the years we served together in the House of Representatives, I have long been a supporter of agricultural research. To your credit, since you took the helm at USDA, ARS has expanded its mission and continues to produce the highest quality research in the field. Producers in my state, and their suppliers, have grown dependent upon the work being done by ARS scientists to develop new crop varieties and pest resistance. This work is conducted around the country, including four ARS stations in Idaho. I was pleased to lean that the President's budget request includes a $32 million increase for ARS—pleased until I saw where the money was to be spent.

The President's budget request cuts important funding for ARS research in a wide range of crops, including: soybeans, potatoes, rice, cotton, small fruits, and sugar, among others. In place of these important research activities, ARS dollars are being siphoned off to fund environmental projects such as the Presidential Environmental Initiative for Global Change, the Presidential Initiative on South Florida Ecosystem Restoration, and programs in watershed health and environmental quality.

Question. How can this administration justify cutting important crop research—research directly responsible to the challenges facing America's farmers and producers—to fund "feel good" environmental programs? Are there not better sources of funding for these programs than ARS, such as EPA?

Answer. Environmental issues such as global change, watershed health, and environmental quality are directly relevant to crop production and are recognized by commodity groups as important concerns for the USDA research agenda. Because ARS does not have enough funds to address all the necessary required research, it became necessary to assign priority, and to redirect funds from projects which are less urgent. The projects proposed for closure are not limited to production agriculture, but also include certain environmental research projects that are less critical. ARS' strategic plan, gives a high priority to production agriculture. Part of the funds obtained through project closures would be redirected to environmental research that is directly relevant to crop production. ARS does not have direct influence on the budget and program of EPA. Although many EPA programs do concern agriculture indirectly and involve ARS research to varying degrees, much of the high priority environmental research ARS needs to undertake is not currently being pursued by EPA.

FOOD SAFETY INITIATIVE

The President's request for ARS also includes $8 million in support of the Presidential Initiative for Food Safety.

Question. Will the money be spent on new ARS facilities dedicated to food safety?

Answer. The $8 million for ARS in support of the Presidential Initiative for Food Safety will not be spent on new ARS facilities dedicated to food safety.

Question. How does USDA propose to incorporate this new work with the ongoing efforts being conducted at research universities across the nation?

Answer. ARS food safety research is coordinated with and complements that of ongoing efforts being conducted at research universities across the Nation.

ARS works closely with CSREES to explore how the two agencies can effectively coordinate the food safety research agenda, identify opportunities for collaborative research between Federal agency scientists and university scientists, and to identify unique research facilities and expertise of each set of performers.

The longer term nature of Federal funding complements that of the university research programs. The multi-year sustained programs of the Federal laboratories support research initiatives that establish the basis for the continued biological understanding of pathogens and the technological advances necessary to develop the means to assure food safety and meet the expectations of the American consumer. The combined efforts of both Federal Government and academia are necessary because food safety research must solve the problems resulting from a plethora of technological practices, an array of animal and plant species and varieties, a range of climatic and regional differences, and a vast array of food products and consumer practices.

Question. Has USDA considered the option of matching these ARS funds with CSREES monies to establish a series of national food safety research centers?

Answer. Because ARS already has facilities for conducting the necessary food safety research, and the critical mass of scientific expertise and structure to lead the necessary food safety research programs, ARS has not considered the option of

matching these ARS funds with CSREES monies to establish a series of national food safety research centers.

WILDLIFE SERVICES

Question. The President's request would decrease APHIS funding for wildlife services operations by more than $3.4 million or 17 percent. The Department's budgetary justification explains that this cut would bring the Federal/State cost sharing into "equilibrium" with each contributing 50 percent. I am reminded that in 1992 the funding was divided between the Federal and State governments at 75 percent Federal and 25 percent State, and 65 percent Federal and 35 percent State in 1997. I am disturbed by this trend and would like to know if any specific target cost share ratio is mentioned in the program's organic legislation, the Animal Damage Control Act of 1931. If not, would the Secretary explain how the Department reached the 50 percent figure?

Answer. The 1931 Act authorizes control and related experiments and investigations regarding predatory and other wild animals, and provides that the Secretary of Agriculture may cooperate with States, individuals, public and private agencies, organizations, and institutions, but does not include specific details or ratios regarding this cooperation.

The 50/50 cost sharing proposal is made in an effort to encourage cooperators to contribute a fair share of funding toward cooperative Wildlife Services activities in each State. It is more in line with cost sharing programs like brucellosis, boll weevil, and fruit fly eradication. This proposal is also made in consideration of States in which cooperator contributions are equal to or greater than Federal contributions, as this approach greatly enhances the value of Federal funds invested. By encouraging a minimum 50 percent cooperator contribution level, the Agency can accomplish a more equitable distribution of Federal funds, can accomplish the same level of program activity with less Federal funding, and can consider future needs and new cooperative agreement proposals on a more programmatic and equal basis. The specific activities and the degree to which activities would be affected, is dependent upon changes in funding levels in each affected state.

Question. Has the Department conducted any study into the impact this change would have in existing Wildlife Services operations?

Answer. This action could affect a variety of cooperative program activities in 33 States based on fiscal year 1996 Federal/cooperative contribution data. The specific activities and the degree to which activities would be affected is dependent upon increased cost-share funding levels in each affected state.

NUTRIENT ANALYSIS IN CHILD NUTRITION PROGRAMS

Question. As you know, authority for the bulk of child nutrition programs expires this year and each will need to be reauthorized. In light of this, and the Department's and Congress' strong past commitment to these programs, do you not agree that we should take steps to eliminate the requirement for the use of weighted averages when conducting nutrient analysis?

Answer. The School Lunch Act requires that schools serve lunches and breakfasts that are consistent with the goals of the Dietary Guidelines. However, how schools achieve this goal, and how we measure their success, is an somewhat technical matter. I understand that Under Secretary Watkins has waived the requirement to use weighted averages when conducting nutrient analysis through July 2000 while she reviews this issue.

Question. Does the Department support this fundamental change and can you commit to removing the use of weighted averages from future Departmental policies?

Answer. I prefer not to make any commitments at the present time until after I have seen the results of the Department's review of this issue.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FARM SAFETY NET

The 1996 Farm bill made substantial changes in farm programs and altered the government's role in the farm sector. Over the past couple of years, times have been good for farmers. Markets, for the most part have been strong. On top of that, taxpayers have been paying out billions of dollars in Freedom to Farm payments that farmers would not have earned under previous programs because assistance, then, was tied to the market.

Farm net income hit a record high of $60 billion in 1996. Estimates for the year just ended have already fallen by $5 billion from the year before. As the fixed Freedom to Farm payments glide to extinction and commodity prices regain their historical pattern of unreliability, I fear what may be on the horizon.

Question. The USDA Budget Summary and your remarks make several references to the need to improve the farm "safety net". Would you provide your thoughts on the short and long term stability of the farm economy?

Answer. Some perceive that the 1996 Farm Act will lead to increased volatility in grain markets. It is generally argued that increased planting flexibility, fixed payments, and the elimination of acreage reduction programs and the Farmer-Owned Reserve will contribute to more volatility in grain prices (and planted acreage). In the short term, absent a stocks policy, there is the potential for greater volatility. However, in the medium to longer term, increased planting flexibility afforded by the 1996 Farm Act provides the opportunity for producers to respond to market imbalances more quickly and in a more timely fashion than was possible under previous laws. Commodity loans, credit assistance, crop insurance and other elements of the farm safety net can help producers respond and adjust to these changes.

Question. What level of risk will farmers hold if the "safety net" items you propose are not enacted?

Answer. All of the proposals we have made involve some degree of risk reduction in several areas of the farming enterprise. Loan extensions would help reduce price risk in marketing, insurance proposals reduce yield and revenue risk, and loan proposals help in the area of asset acquisition during years of crop disaster and/or abnormally low market prices.

Question. Are some commodities, farm groups, or regions of the country at higher risk?

Answer. Areas of the country that have limited options for producing alternative crops when prices are low for a particular crop may face greater risks than regions in which alternatives are greater. Producers who can select among several crops have the opportunity to profit from favorable market conditions in several markets. A producer who has only one cropping alternative has less opportunity to avoid low-priced markets. For these producers, availability of risk reduction tools is essential.

Crops which are subject to higher risk may include those for which markets are very thin. For traditional producers of these crops, profitable market conditions may suddenly attract a significant temporary increase in acreage and a corresponding reduction in price, leaving those producers with lower than expected revenues during years in which the initial expected price is high. These producers are also in need of risk reduction tools, especially if cropping alternatives are limited.

Question. Of the "safety net" items you propose, which do you feel to be the most important and why?

Answer. Several proposals have been made to strengthen the safety net for farmers. Maintenance of an effective safety net to help our farmers and ranchers better manage risk has been a major priority for the past two years. Last year, we proposed some modest improvements in the safety net which were not acted upon by the Congress. These included provisions to permit extension of the terms of marketing assistance loans during periods of extraordinary market disruption, and the expansion of revenue insurance. These proposals deserve full consideration by the Congress.

Important proposals in this year's budget include full funding of crop insurance with a shift in sales commissions for agents from discretionary to mandatory spending. This would consolidate all program spending into a single account and eliminate the possibility of the program being restricted by a limited appropriation of discretionary funds. This change will make the program more reliable for those producers who depend on crop insurance as a tool to manage risk.

Another important proposal in the current budget is in the area of farm loan eligibility. Currently, once a farmer receives debt forgiveness, he/she is ineligible for future loans except annual operating loans in cases where the debt forgiveness was in the form of a write-down. This is a stricter standard than private lenders use. It's wrong, and I will send Congress emergency legislation as soon as possible to address the problem. This change would help some of the producers most in need of our assistance.

DIVERSITY IN PRODUCTION/INDUSTRY INFRASTRUCTURE

Question. Another feature of the 1996 Farm Bill was the planting flexibility it provided. It was recently reported that in your own state of Kansas, cotton production

has expanded by a fourfold increase. Do you see a radical change in crop planting patterns?

Answer. U.S. plantings of the principal crops in 1996 increased to the highest level since the mid-1980's—up about 16 million acres from 1995—and stayed at that level in 1997. The increase in plantings for 1996 primarily occurred for corn, wheat, sorghum and soybeans. Cotton, oats, and sunflower acreage declined. Plantings of principal crops in 1997 remained at 1996 levels. Producers adjusted the mix of crops on their farms, but, on average, did not expand acreage as they did in 1996.

The biggest acreage shifts in 1997 was the 6.7-million-acre increase in soybean planted acreage. Soybean producers never had any acreage controls associated with their crop, but to the extent that acreage limitations for other crops limited the expansion of soybean acreage, the 1996 farm law could have been partially responsible for the acreage increase. Very strong oilseed prices, modifications of farm rotations to include more soybeans, favorable planting conditions for soybeans, and problems getting other crops planted also led to this soybean acreage surge. Record acreage of soybeans in the Lake States, Corn Belt and Northern Plains displaced corn and wheat plantings in this region.

Plantings of sorghum declined in 1997 because the crop was not replanted after failed acres of other crops. Cotton acreage declined for the second consecutive year because a cool, wet spring limited plantings and more favorable net return prospects for several competing crops. Cotton acreage fell throughout the country, except for a small increase in the Southeast, as a recent buildup in the cotton infrastructure of the region has supported acreage there and some area planted to corn in 1996 returned to cotton.

Winter wheat acreage dropped to the lowest level since 1978. Most States that expanded their wheat acreage in 1996 in response to rising prices scaled back wheat plantings the following year. Also limiting winter wheat plantings were late soybean and sorghum harvesting in 1996, disease concerns in the eastern Corn Belt, and dry weather in other regions of the country. Farmers planted the second highest spring wheat crop in modern times following the 1996 60-year high.

These changes in cropping patterns over the last two years are probably the result of commodity prices, weather conditions, and new legislation. While the new legislation expanded flexibility from prior laws, changes in plantings such as those described here likely could have occurred under the more limited planting flexibility provisions of the 1990 law.

Question. Since, for example, cotton production requires cotton gins and other fixed facilities to further process the raw commodity, what are the economic implications in rural areas for increased diversification?

Answer. Increased economic diversification in rural areas is generally beneficial for rural economies. In a global economy, where rural communities are subject to the effects of large scale economic forces beyond local control, survival may depend on having a wider range of economic options. This is true within the agricultural sector as well as in the general economy. Using the example of cotton, if global events result in reduced cotton prices for an extended period, producers are in a better position to survive if they have cropping alternatives to provide income. The local economy is more stable if alternative income sources are available.

This does not mean all are better off in an increasingly diverse local economy. Excess processing capacity may develop in an area if crop production shifts occur in response to price changes. If these changes become permanent, investment in fixed facilities such as cotton gins would need to be re-evaluated. Investment risk may be higher for some processors, but on balance, rural communities are healthier if economic choices are available.

Question. Are changes in farmer planting decisions likely to have a lasting effect on supporting services and erosion of the existing agricultural industry infrastructure?

Answer. Farmers' planting decisions can affect supporting services if the services are tied to a specific crop. If decisions become permanent, this can cause an erosion of existing agricultural industry infrastructure along with expansion of new infrastructure to support alternative crops. However, acreage shifts tend to occur in response to price changes from year to year, and in agriculture it is unusual for prices to remain high or low for too long, so infrastructure often is not greatly affected. Two examples from the last two years are wheat and soybeans. Farm level wheat prices climbed to over $5.75 per bushel in the spring of 1995, and acreage increased by around 6 million acres in 1996. The resulting lower prices helped to reduce plantings by 4.5 million acres in 1997, and winter wheat seedings this fall were the lowest since 1973.

High soybean prices persisted through most of 1996 and 1997 and lead to the large increases in soybean acreage. Plantings in 1998 are expected to reach record

levels. However, prices are forecast to return to below $5.50 for 1998/99, a price level that will likely have a significant effect on plantings in 1999.

The new farm law, while giving farmers much greater latitude to shift to alternative crops, also provides the means to allow producers to respond quickly when prices signal a market imbalance, so it is unlikely that the new law will lead to a permanent shifting from traditional cropping patterns.

DISMANTLING OF FARM PROGRAM DELIVERY

Question. In light of the changes inherent in the 1996 Farm Bill, there has been an ongoing debate about the future of USDA's county-based delivery system. Every year, we see the number of Farm Service Agency staff positions fall and with them, obviously, the level of service to our farmers. Fears have been expressed that the 1996 Farm Bill and the related decline in USDA's delivery system contain a hidden agenda to make certain that once the system is seriously impaired, future farm programs won't even be possible. How many staff positions at the county level will be eliminated in fiscal year 1998 and how many do you plan to reduce in fiscal year 1999?

Answer. In fiscal year 1998 there has been an estimated reduction in non-Federal county office staffing of 564 staff years through buyouts, RIF's, voluntary early outs and attrition. Proposed staffing reductions for fiscal year 1999 would reduce county office staffing by another 855 staff years.

Question. Will your projected reduction in fiscal year 1999 change if the assumed user fees for FSA and NRCS are not adopted, and if so to what level?

Answer. Yes, if proposed user fees are not enacted in fiscal year 1999, the estimated total FSA non-Federal county staffing reduction would be 1,078—an increase of 223 staff years from the 855 estimated staff year reduction in the proposed budget. If direct appropriations were substituted in lieu of user fees to fund the 223 non-Federal county office staff years, then the reduction would remain at 855 FTE's. For NRCS, the staff year reductions in the absence of the budgeted user fee revenues would be in the range of 175 to 200 staff years.

Question. How much difficulty are you experiencing in managing staff reductions because some county offices contain both federal and non-federal positions?

Answer. FSA currently has in operation two different personnel systems for employees in county offices. One system covers employees with Federal civil service status and the other system covers non-Federal positions. Due to the difference in systems, there are a few obstacles that the agency faces in managing reductions. Non-Federal FSA employees cannot compete for FSA Federal vacancies on an equal footing with Federal employees. Non-Federal employees who are in RIF status are not entitled to assistance and priority placement under the Career Transition Assistance Program. At this time, FSA is required by law to establish separate supervisory reporting procedures for non-Federal and Federal employees located in the same county office. These differences combined with the varying levels of staffing reductions needed between Federal and non-Federal FTE's have created new types of personnel problems. As you know, I favor converting non-Federal county employees, with their career tenure, to Federal civil service status.

Question. Do you think all county positions should be federalized and why?

Answer. Yes, I favor converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status. Conversion of FSA non-Federal employees to Federal civil service status would eliminate the difficulties FSA currently has in operating two different personnel systems for employees in county offices. These difficulties include the fact that non-Federal FSA employees cannot compete for FSA Federal vacancies on an equal footing with Federal employees, non-Federal employees who are RIF'ed are not entitled to assistance and priority placement under the Career Transition Assistance Program, and FSA is required by law to establish separate supervisory reporting lines for non-Federal and Federal employees located in the same county office. I also favor conversion of these employees because I believe the accountability of these employees in the areas of civil rights and access to credit is not as direct as if they were Federal employees. We are working on that legislation.

Question. You have stated that you will not close any county offices until you have consulted with Congress, but doesn't the ongoing decline in county-level personnel affect the continued viability of certain county offices and therefore determine the closing of offices on a de facto basis?

Answer. The substantial decline in county office employment does affect the capacity or ability of certain county offices to remain open. As these situations become more apparent, a normal option for FSA is to combine two or more headquarters' offices into a shared management operation where one office remains the head-

quarters office while the other county office or offices become full or part time sub-offices. FSA will continue to close and consolidate county offices only with consultation of local FSA county committees, the Secretary, and Congressional delegations. We will consider any closure decisions in light of cost effectiveness and quality of service to the producer.

Question. To what extent do you think we can continue the decline of USDA services at the county level until we have reached a point of no return?

Answer. The Department has entered into a contract with an outside consulting firm to conduct a study of the farm and rural program delivery system of the county based agencies, FSA, NRCS, and RD, to be completed by September 1,1998. The study will clearly identify the purposes agency operations are intended to achieve, provide an independent assessment of agency workload estimates, consider the prospective impact of administrative convergence on county office operations, identify criteria for determining the highest value use of office staff, evaluate office operations efficiencies gained so far, and assemble a profile of the USDA customer base as defined by eligibility for program benefits. Finally, the study will identify alternative decision systems or organizational structures for matching USDA resources with customer needs and preferences. We will see what steps we can take, if any, to improve the efficiency of our program delivery system. That may involve further staffing reductions, but not beyond the point of providing producer service.

WATER RESOURCE CONSERVATION IN EAST ARKANSAS

For the past several years, this subcommittee has provided special funds for work on ground water resource issues in Eastern Arkansas. In the fiscal year 1999 budget proposal for the Corps of Engineers, $11.5 million and $2.5 million is provided for the Grand Prairie and Bayou Meto projects respectively. These two items are contained in the budget, I believe, in large part because of my personal appeal to the President and because of his knowledge of the dire crisis we are soon to face in the lower Mississippi River basin due to failing ground water supplies. These projects are sizable, which explains the need for the Corps of Engineers to participate. These is also a component for these projects which must rest with USDA. The funding we have provided to date moves us in that direction, but there is much more to do.

Question. Will you work with the Corps of Engineers to determine an adequate, shared level of participation regarding this project?

Answer. Yes, sir we will.

Question. Will you commit USDA resources to help insure that your Department will play a proper role in protecting these water resources?

Answer. USDA has been devoting considerable resources in this area over the past ten years. In addition, USDA recently established the South Central Water Management Center located in Little Rock, Arkansas as a National Water Management Center which demonstrates our commitment to protecting our water resources.

Question. Following consultation with the Corps, will you report back to this committee on appropriate levels of funding needed by USDA to work appropriately and timely with the Corps of Engineers?

Answer. Yes, when the information becomes available, we will report back to you. USDA has been working closely with the Corps on several studies over the past several years. We understand that the plans were recently completed for the Grand Prairie and Bayou Meto which will assist in identifying the work to be done and the resources needed to implement.

CIVIL RIGHTS

You and your staff appear to be receiving high marks in the area of civil rights. I notice that the budget request for fiscal year 1999 contains a number of items among various agencies designed to bolster your civil rights activities.

Question. What is the current backlog of civil rights cases and complaints?

Answer. There are currently 1,426 active employee complaints, and 889 active program complaints.

Question. How old are those pending cases?

Answer. Many of the backlog cases date back to the early 1990's because USDA disbanded the program complaints unit and there was no specific unit in existence with the responsibility to resolve these cases. We estimate that the median program complaint has been in the system for 710 days.

Question. What is the statute of limitations for civil rights cases regarding client and personnel complaints?

Answer. The statute of limitations is 2 years from the date of incident for cases under the Equal Credit Opportunity Act. Additional time can be allowed on a case by case basis if instructed by civil court action.

Question. Have any civil rights complaints been processed if the statute of limitations had expired, and if so, what standards are used to make the determination to proceed?

Answer. None have been processed since the Department of Justice made the decision.

Question. Are new complaints being filed at a more or less rapid rate than those of several years ago?

Answer. The annual number of cases varies from year to year. The average was about 350 cases from 1992 through 1994, and the 1995 and 1996 filings were 171 and 237 respectively. 447 cases were filed in 1997, which is the highest total in recent years.

Question. Is the rate of frivolous claims changing from previous levels, and if so, please explain?

Answer. USDA accepts and processes program complaints when it is determined that there is sufficient information and jurisdictional basis to process them. There is no evidence to suggest the new complaints to be any different from the older ones.

Question. Does the Office of Civil Rights have the authority to award program dollars related to a civil rights claim without the concurrence of the program agency or the Office of General Council?

Answer. Under the delegation of authority from the Secretary to the Assistant Secretary for Administration, the Office of Civil Rights has the authority to award any remedy a court could enter when discrimination has been found, including monetary damages. Agency concurrence is not required as the authority comes from the Secretary. However, OGC reviews all decisions of the Office of Civil Rights for legal sufficiency and must concur in legal authority and factual basis before an award of damages is given.

Question. Are the civil rights complaints that are filed with the national office being referred to the appropriate state or county offices for resolution in a timely manner?

Answer. When a program complaint is filed with and accepted by the Office of Civil Rights, a notification letter requesting an agency response is concurrently sent to the civil rights staff of the alleged agency, which is in turn responsible for referring the case to the appropriate state or county offices.

Question. Are there any pending civil rights claims in the national office of which the appropriate state agency head is not aware? If so, why?

Answer. To the best of my knowledge, no pending civil rights claims are in the national office that the appropriate state agency head is not aware of.

Question. How much coordination occurs between the Office of General Council and the Office of Civil Rights?

Answer. The Office of Civil Rights and OGC coordinate daily on matters regarding resolution of discrimination complaints. OGC reviews files and proposed decisions, participates in negotiation discussions, and gives feedback to the Office of Civil Rights. The Office of Civil Rights makes the determinations. OGC makes sure the determinations are in accordance with the law.

Question. Would you please provide an update of these activities at the end of June?

Answer. We will provide an update of these activities to you at the end of June.

ARS/RESEARCH/STATE PARTNERSHIPS

The budget request for fiscal year 1999 deletes all funding for ARS programs that was not included in the fiscal year 1998 budget request. I am concerned about the signal this might be sending research communities in our states who had anticipated a continuing partnership with USDA's research agency. For example, the University of Arkansas donated the land upon which the ARS Rice Germplasm laboratory was built and I know the University has plans of working with ARS on various research projects. In other cases, ARS scientists are commonly assigned to positions on the campuses of land-grant colleges.

Question. Do you think it is appropriate for ARS to continue its association with land grant research activities?

Answer. ARS values its long-standing collaboration with the land grant research system and believes that American agriculture is best served through this well-developed partnership. The two systems complement each other and, through various coordination and review mechanisms, minimize duplication. The missions of the two systems reinforce their distinctions i.e., ARS has a national mission, characterized by long-term, high risk research, while the land grant institutions generally focus on State and regional problems. This combined overall effort has demonstrated great effectiveness. Examples are the area-wide pest management programs and the

national water quality research initiatives. These ARS-led efforts have been highly successful because of ARS' ability to draw upon both Federal and State research resources and personnel.

Question. Do you agree that deleting funds that otherwise would have been added to the ARS base, which would have been the common practice, damage the expectations of the state research communities that ARS will continue to stand as a reliable partner?

Answer. Decisions to redirect ARS budget resources to higher priority areas can have negative effects on some ARS-State research cooperative arrangements. We try to minimize any disruptive effects on our university partners by providing advance notice of our plans and, when there are opportunities to do so, use the funds that will be redirected to higher priority work to enter into new ARS-university cooperative research projects.

Question. Since the fiscal year 1999 request includes an increase for plant germplasm research, why were the funds for the rice germplasm lab deleted?

Answer. All fiscal year 1998 fund increases that were not proposed in the President's budget are proposed for redirection in fiscal year 1999. If these reductions are approved, the funds will contribute to the increase proposed for ARS plant genome research, a program that will benefit crop production, including rice.

TRADE/ASIAN FINANCIAL CRISIS

Reports of the financial condition in Asia suggest trouble for U.S. exports to that region, including shipments of meat and poultry. Additionally, it is reported that some of our trade competitors claim that U.S. methods to hold onto Asian markets are unfair and use of the WTO has been threatened.

Question. What actions have you taken and expect to take to stabilize our position in Asian markets?

Answer. As serious as the Asian crisis' estimated trade impacts are, we must remember that they are projections, not a foregone conclusion. We are developing a comprehensive strategy for responding to the crisis to reduce its impacts on U.S. exporters and producers. USDA has already announced the first component of this strategy—a sharp increase in the availability of GSM–102 export credit guarantees to those countries most in need, namely South Korea and Southeast Asia. This will help ease the liquidity constraint that is at the heart of this crisis.

In addition, we are considering the possibility of offering concessional credits, under Title I of Public Law 480, to Indonesia to help them meet their food import needs. USDA has also been supportive of efforts by the IMF to promote structural reforms in these countries which we believe will ultimately strengthen their economies and make them better customers for U.S. agricultural products.

Question. What commodities are most at risk?

Answer. In fiscal 1998, two thirds of the export loss is projected to be in high-value products, led by horticultural products, red meats/poultry, and processed foods. These are the most price and income sensitive U.S. agricultural exports and will be affected first. In fiscal 1999, losses are expected to grow substantially in bulk commodities, such as grains and oilseeds, as Asian economies slow and competitors benefit from a stronger U.S. dollar.

Question. What is the U.S. response to threats that our practices in regard to Asia violate international trade laws?

Answer. We understand there has been some criticism of the CCC export credit guarantees made available for South Korea and Indonesia during the financial crunch. Frankly, we are surprised by this criticism as the urgent need for trade financing in Asia to support reform efforts and return the region to growth and stability is well understood. Our GSM–102 credit guarantee programs in the region are intended to provide adequate access to financing for imports of food and other critically important agricultural products—not to "grab" markets.

Further, there has been a long history of the use of GSM–102 program in the region. Our export credit guarantees support commercial bank financing at commercial interest rates. There are no subsidies involved. The credit guarantees available to South Korea represent about 25 percent of total U.S. agricultural exports to that market, while the guarantees extended to Indonesia represent about one-half of total U.S. agricultural exports.

TRADE/POULTRY/EU CHLORINE ISSUE

On October 28, 1997, Senator Cochran and I wrote you on the subject of poultry exports to the EU. In that letter we expressed concern that the EU was excluding our products due to the U.S. industry practice of using chlorine as an accepted antimicrobial treatment. We were further concerned by reports that some EU member

nations were accepting product from our competitors who did use chlorine and, even more blatantly, that some EU nations used it themselves. Your response of December 22 reported that no resolution on the chlorine issue had been reached, but that you were proceeding with a number of options, including establishment of a scientific study with the EU on the use of anti-microbial treatments.

Question. What is the status of the EU "Equivalency Agreement" on veterinary practices?

Answer. The EU Agriculture Council is scheduled to vote on the U.S.-EU Veterinary Equivalency Agreement on March 16. We are expecting a positive outcome.

Question. What is the status of working with the EU on the chlorine issue?

Answer. In the Veterinary Equivalency Agreement, the EU committed to undertake a scientific study on the use of anti-microbial treatments, including chlorine. The experts, which include a person from the United States, have begun their research, and we expect this study to be completed by mid-1998. If the results are positive, the Commission has agreed to submit legislation to Member States, reversing EU policy.

Question. When do you see U.S. poultry exports resuming normal access to the EU?

Answer. In the Veterinary Equivalency Agreement, we were successful in negotiating improved conditions for trade for poultry, although in the near future this will only benefit poultry producers who do not use anti-microbial treatments. Several U.S. establishments are in a position to meet the new conditions and could begin exporting poultry as soon as the Agreement is implemented. In addition, we are confident that the EU study will show that the use of anti-microbial treatments is an effective and safe method of lowering the bacteria counts for poultry.

Question. How is the poultry export problem with the EU comparing to other livestock product access?

Answer. The Agreement will open new opportunities for red meat exports and preserve most pre-existing trade in products such as petfood, dairy products, fishery products, and egg products. In addition, the United States may be able to recoup some of its lost trade in poultry despite the differences in the U.S. and EU positions on the use of anti-microbial treatments. The Agreement eliminates many of the onerous requirements that the poultry as well as other industries would have to meet to export to the EU. Without this Agreement, U.S. exports of certain products could be blocked from the EU market unless U.S. industries invested in costly adjustments to their facilities to comply with each EU internal market requirement.

TRADE/STEP 2 COTTON

Question. Language was contained in Section 728 of the conference report to accompany the fiscal year 1998 appropriations bill that allowed for adjustments to the Step 2 Cotton certificate program to help ease an unforeseen problem regarding import quotas for cotton. The Step 2 procedure was enacted in the 1996 Farm Bill and capped at $701 million over the life of the Farm Bill. Now that the problem is resolved, we note in the budget submission a proposal to reduce the amount available for the Step 2 procedure by $100 million in offsets for other administration priorities in the fiscal year 1999. Explain why this action would not be harmful to U.S. cotton producers given the volatility of foreign markets, especially in Asia?

Answer. It is quite possible that the proposed spending level of $140 million will not be appreciably below the amount that would otherwise have been spent in fiscal year 1999 without this cap.

We simply do not know how much money would have been required for payments under the upland cotton marketing certificate program without the cap. Based on the pricing estimates assumed in the budget projected marketing certificate expenditures would be about $250 million for fiscal year 1999.

However, history would be another guide in estimating the need for funding in this program. Over the life of the marketing certificate program, beginning in fiscal year 1992, the Commodity Credit Corporation has spent about $750 million on these payments. That averages about $125 million per year.

Thus, the proposed spending level of $140 million may or may not prove to be enough. If it is enough, i.e., if U.S. prices turn out to be not as far out of line with the rest of the world's cotton prices as we had assumed, then there will be absolutely no harm to farmers from the proposed reduction in authorized spending. If the original estimate of $250 million was closer to being right, then the program will be able to only partially address the non-competitive position in which we will find ourselves.

Should the latter prove to be the case, any harm to farmers will still be minimal. The effectiveness of these payments in stimulating export sales is quite low. A work-

ing assumption used by our USDA cotton estimates committee is that a 1-percent change in the cotton price will cause a change in cotton exports of about 1 percent. The certificate payments so far this year may have brought about a reduction in cotton export prices of between 0.7 and 1.5 percent. That would translate into an increase in exports of between 50,000 and 100,000 bales, out of the 6.9 million bales we are expecting to export. That impact is not very significant for farmers.

For 1999, the impact might be a reduction in exports of 100,000 to 150,000 bales if the proposed reduction is adopted, as compared to exports without the spending cap. Farmers are not held harmless, but the impact is small.

Question. Although the Step 2 payments are not, per se, part of the so-called "Freedom to Farm" payments, (after all, Step 2 payments are tied to market conditions, not a simple give-away) do you not believe that many cotton farmers will not see this action as a breach of what little "farm safety net" was left in the 1996 Farm Bill?

Answer. The spending cap on upland cotton marketing certificates could have a slight impact on exports of cotton. However, the impact is likely to be small. The savings from the spending cap are likely to be applied to other programs of the Department which can benefit cotton farmers, including crop insurance and conservation cost-share programs. It is not a certainty at all that the rearrangement of spending priorities will result in a net loss to cotton farmers.

TRADE/CUBA MARKETS

Following Pope John Paul's trip to Cuba, there has been discussion about liberalizing trade with that nation. Prior to the trade sanctions with Cuba, U.S. agriculture was a big winner. If trade were reopened, rice trade, especially, with Cuba would present U.S. producers with wonderful opportunities. This would especially be true for producers in the mid-South with ready transportation down the inland waterways and across the Gulf of Mexico.

Question. What is your outlook for opening trade with Cuba?

Answer. We encourage the leadership in Cuba to provide to its citizens the political, economic, and social freedoms they deserve. Once these rights are restored to the Cuban people, we will embrace the opportunity to renew trade.

Question. Because of the importance Cuban trade holds for agriculture, are you taking a personal role in any discussions regarding trade liberalization?

Answer. U.S. agricultural exports are of great importance to the U.S. agricultural economy and our farmers and ranchers. We want to increase our exports where ever possible but, in the case of Cuba, I have not entered into any negotiations regarding trade liberalization.

USER FEE PROPOSALS

The budget proposes $624 million in new user fees. Clearly, this is problematic for many reasons. The authorization committee may not approve them, if we tried to enact them the House Ways and Means Committee might Blue Slip our bill, and without them, we start out $624 million in the hole. User fee proposals are no stranger to this subcommittee, but their rate of acceptance is not high. User fees need to be carefully crafted to ensure that, if appropriate at all, they are borne by the groups best and most properly suited to absorb them.

Question. Do you believe the meat and poultry companies will absorb these costs?

Answer. We do not estimate that the industry will absorb all of the cost of the user fees for meat, poultry, and egg products inspection.

Question. Do you believe the fees will be passed on to the consumers when companies are more likely to try and keep retail prices down below their competition?

Answer. We estimate that most of the fees will passed on to consumers in the form of higher retail prices. The overall impact on retail prices would be less than one cent per pound.

Question. How do you justify the FSIS fees ($573 million) which will most likely be borne by livestock producers at this time of low prices, poor markets, and other problems facing small farmers?

Answer. We do not estimate that the impact of the user fees will be passed down to producers in the form of lower prices paid. We estimate that most of the fees will passed on to consumers in the form of higher retail prices. The overall impact on retail prices would be less than one cent per pound.

Question. Has an analysis been performed regarding the other proposed user fees to determine the impact the fees will have on the groups most likely to bear the cost of the fees? If not, why? If so, what did it reveal?

Answer. When the Administration's user fee proposal is transmitted to Congress, we will provide you with our analysis of the proposal's economic impact.

FOOD ASSISTANCE SURVEYS AND EVALUATIONS

Question. The conference agreement for the fiscal year 1998 appropriations bill contained a House provision that transferred the survey and evaluation function of the Food and Consumer Service to the Economic Research Service. The fiscal year 1999 proposal moves them back.

Please explain the rationale for moving them back?

Answer. The Administration believes that the surveys and evaluation function for the Food Assistance Programs should remain with the Food and Nutrition Service (FNS), the agency that administers these programs. These surveys and evaluations are most effective when conducted in conjunction with food assistance program operations.

Question. What problem, if any, have you encountered with them at ERS?

Answer. I have the highest regard and respect for the Economic Research Service and its people. As I stated in my response to a written question from Senator Cochran, ERS has done an admirable job in administrating and conducting the fiscal year 1998 research and evaluation program for the food assistance programs.

Question. Why is it reasonable for ERS to conduct research for some USDA activities and not others?

Answer. ERS' mission is to conduct research to support USDA's programs, including the Nation's food assistance and nutrition programs. Historically, ERS has conducted an applied research program on food assistance and nutrition issues. The agency has published numerous research findings that have helped policy officials understand the impacts of these programs on participants and the economy. Despite ERS' long history of collaborating with universities on important research issues, it has not had the opportunity to administer a large scale extramural research program.

DELTA REGIONAL COMMISSION PROPOSAL

Question. The USDA budget submission contains a request for an additional $20 million for Empowerment Zones and Enterprise Communities (EZ/EC) assistance. At the same time, the President's budget request for the Appalachian Regional Commission (ARC) includes $26 million for expansion into the Lower Mississippi River Delta as a new arm of the ARC to be known as the Delta Regional Commission (DRC).

Has the proposal to create the DRC been shared with you? If not, will you review it? Upon review of this proposal, will you submit to this subcommittee your views if the proposal would duplicate USDA programs or if it simply would be better administered by USDA?

Answer. I have not had the opportunity to review the proposal, but I will do so.

ADVISORY COMMITTEE CAP

The fiscal year 1998 appropriations act contains a provision that limits all advisory and related committees of USDA to $1 million.

Question. What functions have been provided using this sum?

Answer. I will provide for the record a listing of those advisory committees, panels, commissions and task forces that we plan to fund within the $1 million limitation.

[The information follows:]

USDA ADVISORY COMMITTEES

Food, Nutrition and Consumer Services:

National Advisory Council on Maternal, Infant and Fetal Nutrition

Food Safety:

National Advisory Committee on Meat and Poultry Inspection
National Advisory Committee on Microbiological Criteria for Foods

Research, Education and Economics:

Forestry Research Advisory Council
National Agricultural Research, Extension, Education, and Economics Advisory Board
Strategic Planning Task Force on Research Facilities
USDA/Hispanic Association of Colleges and Universities
USDA/American Indian Higher Education Consortium
National Nutrition Monitoring Advisory Council
National Genetics Resources Advisory Council

Dietary Guidelines Advisory Committee
Census Advisory Committee on Agriculture Statistics

Marketing and Regulatory Programs:

Advisory Committee on Foreign Animal and Poultry Diseases
General Conference Committee of the National Poultry Improvement Plan
National Animal Damage Control Advisory Committee
USDA/1890 Task Force
National Organic Standards Board
Federal Grain Inspection Advisory Committee

Farm and Foreign Agricultural Services:

Agricultural Policy Advisory Committee for Trade
Ag. Tech. Adv. Comm. for Trade in:
- Animals and Animal Products
- Fruits and Vegetables
- Grains, Feed and Oilseeds
- Sweeteners
- Tobacco, Cotton and Peanuts

Technical Advisory Committee for Edward R. Madigan Agricultural Export Excellence Award Board
Emerging Markets Advisory Committee
Advisory Committee on Beginning Farmers and Ranchers

Natural Resources and Environment:

Task Force on Agricultural Air Quality Research
National Commission on Small Farms

Office of the Chief Economist:

Commission on 21st Century Production Agriculture

Question. What problems has it posed for the Department?

Answer. Advisory committees and panels provide the Department with the means to involve the public in our decisionmaking processes by providing reports and recommendations. The cap limits the flexibility we have in USDA to establish and operate committees that assist in the effective and efficient operation of USDA programs. Because of the limitation, most of the committees have been forced to reduce activities, for example, hold fewer meetings or delay reports. In addition, the limitation makes it difficult to deal with new issues like the Secretary's National Commission on Small Farms and the Commission on 21st Century Production Agriculture while still providing adequate support for ongoing activities.

Question. What are some of the additional activities you would have performed without this limitation?

Answer. The cap has caused delay in the establishment of some committees such as the Commission on 21st Century Agriculture Production and the proposed Secretary's Small Business Advisory Committee. As I indicated previously, many committees have significantly reduced meetings and delayed reports in an effort to live within the cap. The flexibility to use additional resources as necessary would enable the committees to provide additional input to the Department's decisionmaking process.

ORGANIC STANDARDS

Question. For several years, I have heard much dissatisfaction with the delays in publishing proposed rules for National Organic Standards. Now, these rules have been published but public acceptance seems questionable due to inclusion of irradiation, human sludge, and other components of production and processing that may or may not be appropriate elements of an organic standard. I understand you have responded by providing an extension for comments?

Answer. Yes. The comment period for the National Organic Standard Program was extended 45 days from March 16, 1998, to April 30, 1998.

Question. Did this reaction surprise you?

Answer. No. Organic standards have been of great interest to a wide audience that feels strongly about the issues addressed in the proposed rule.

Question. When do you think it is feasible to expect publication of a final rule?

Answer. We are working diligently to analyze the comments, which are about 4,000 at this time, and will release a final rule by January, 1999.

HATCH/SMITH-LEVER FLEXIBILITY

Question. The budget request makes reference to a provision that would allow shifting of funds between the Hatch and Smith-Lever accounts. Was this approach shared with the land-grant colleges and extension system prior to announcement of the budget? If so, what was the reaction? In view of all the overall reduction in formula funds, do you think that this proposal will simply worsen the scramble for limited funds by these constituencies?

Answer. In the Administration's concept paper detailing recommendations related to reauthorization of the research title of the Farm Bill, and specifically in testimony presented July 22, 1997, before the Subcommittee on Forestry, Resource Conservation, and Research of the Committee on Agriculture of the U.S. House of Representatives, we addressed this issue. The Administration proposed to amend the Smith-Lever extension formula program and redirect up to 10 percent of total research and extension formula funds to any research or extension purpose, with an approved plan of work. The goal of this amendment is to provide Federal funding to states in a more flexible manner so states can meet high priority needs and to permit states to better leverage their resources. Our proposal would increase this flexibility of states (at their discretion, not direction of the Federal agency) to redirect funds between these formula programs to 25 percent by 2002.

Aspects of this concept have been discussed by individual universities for several years, and by the broader community in the context of studies such as that completed by the National Research Council in 1996 on "Colleges of Agriculture at the Land Grant Universities." Reactions to the Concept have been mixed both within and among institutions.

The Administration believes increased flexibility to the institutions would help in managing proposed reduction in the formula programs.

LOSS OF AG CHEMICALS/PESTICIDE DATA PROGRAM

A few years ago, I spoke in this hearing room about my concerns of a train wreck on the horizon when we lose use of many agricultural chemicals with no worthwhile replacements. Every year, I hear from producer groups asking for special emergency registrations of pesticides to protect their crops from some new or debilitating infestation. Now, the new Food Quality Protection Act places more substances under review.

Question. What is USDA doing to help overcome the potential crisis when production grinds to a halt for lack of useful pesticides or fertilizers?

Answer. To prevent the potential loss of important crop protection pesticides, we are working closely with EPA to ensure that they have the data necessary for developing accurate risk equations needed for the reregistration pesticides under the Food Quality Protection Act (FQPA). In addition, multi-Agency USDA programs, such as IR–4, Integrated Pest Management, Pest Management Alternatives Program, and the National Agricultural Pesticide Impact Assessment Program, provide vital registration information on existing active ingredients, new products including new and safer pest management technologies. By the use of these data, registrants and the EPA are providing safer pest management alternatives to producers and consumers through science-based decisions.

Question. To what extent does the Pesticide Data Program remain important in helping keep products on the market?

Answer. The Pesticide Data Program (PDP) is a critical component of the recently enacted Food Quality Protection Act (FQPA), which directed the Secretary of Agriculture to provide improved data collection of pesticide residues. The FQPA further expanded the use of risk assessments by eliminating the "Delaney" clause that required zero risk to consumers from carcinogens associated with pesticides. The elimination of this provision enables the registration of pesticides where the actual levels of residue would present "no reasonable harm" to consumers from carcinogens. Consequently, EPA will be able to use the PDP data, on actual residue levels, for a greater variety of pesticides important to American agriculture.

For 1999, the budget includes additional funding to maintain statistically valid sampling and to establish a rapid response capability to service EPA data needs. With the implementation of FQPA there is an increased demand for providing the EPA pesticide residue data for minor-use pesticides on rapid basis. EPA will need the data to conduct dietary risk assessment reviews for over 9,000 tolerances over the next 10 years as required by FQPA. Without the data, EPA will be required to make conservative assumptions about pesticide levels that could result in overestimation of risk and loss of registrations for economically important pesticides. The increased funds will permit increased sampling of specific commodities at a faster rate.

GLOBAL WARMING/RICE PRODUCERS

Question. Rice producers in my state are being informed that the Global Warming Treaty may impair their operations due to the reported "contribution" of greenhouse gases released by decaying rice stubble in flooded rice fields. Are you aware of such claims?

Answer. We are aware of certain research documenting that rice fields are a source of the greenhouse gas methane generated by decomposition of plant materials in wet or flooded soils.

Question. If there is any validity to this "contribution" to Global Warming, will USDA enter into the discussion in support of American farmers?

Answer. Yes, in fact USDA has been involved in both the scientific study of agricultural sources of greenhouse gas emissions and the negotiations of the United Nations Framework Convention on Climate Change. Research conducted by the Agricultural Research Service suggests that methane emissions from rice fields is reduced by limiting the period of time when the fields are flooded, without affecting rice yields. USDA employees participate in an interagency team headed by the Department of State which determines the U.S. positions on climate change negotiations, and USDA was represented on the U.S. delegation to the Third Conference of Parties to the Framework Convention in Kyoto, Japan. USDA is currently intensifying its involvement in these issues by strengthening its Global Change Program Office, which will insure that American farmers and ranchers are represented in those discussions. The President's budget for fiscal year 1999 proposes a funding increase of $10 million for climate change activities, and $3 million of that total is targeted towards development of new technology for mitigation of climate change impacts on agriculture, including reduction of greenhouse gas emissions from agricultural lands.

CROP INSURANCE SALES COMMISSIONS

Question. During consideration of the fiscal year 1998 appropriations bill, there was discussion of the proper level to provide as reimbursement to insurance companies to pay for sales commissions. The authorized amount was in excess of $200 million and you argued for a level closer to $150 million. In the end, the conferees agreed on a level in the $180 millions. You note that the past year has provided gains for the insurance industry.

If the sales commission funding is not transferred to mandatory accounts, what level will you think appropriate for fiscal year 1999?

Answer. If no change is made in current law which requires that sales commissions be funded as discretionary spending, $208 million would need to be appropriated for that purpose for 1999. But, I strongly recommend that Congress enact the legislation which the Administration will submit in the very near future to change the law to shift this expense to the mandatory account and make certain other changes in the program.

UNDERWRITING GAINS

Question. Do you think the higher than normal insurance gains should affect the amount we make available?

Answer. I believe that insurance gains, which reflect the level of risk taken by private companies, should be treated separately from administrative and operating expenses which reflect costs incurred for delivering the program.

BOLL WEEVIL

Question. A couple of years ago, we developed a loan program to help farmers move more rapidly into the boll weevil eradication program. This program was necessary because of the delay in appropriating a level of APHIS grant funds that states low on the list were being kept at a marketing disadvantage under states with lower costs due to complete eradication. It was never our intention that the loan program would replace the grant program. Rather, the loan program was designed to accelerate the entire eradication process. How do you justify allowing some states the lower cost of eradication by use of a grants program when neighboring states will have to rely on loans?

Answer. We agree that the FSA loan program is critical to accelerating the entire boll weevil eradication process, because it allows growers to spread the significant start-up costs over several years, resulting in more affordable annual contributions to their programs. We have taken the opportunity to look for cost effective ways to manage program operations. For example, we have recently discontinued cost-sharing in virtually all areas in which the weevil has been eradicated to make available

so much funding as possible for active eradication zones. Grower organizations in all states with active eradication program had been receiving an equitable cost-share percentage. However, as the momentum for expansion has increased, the amount of acreage involved has also increased dramatically resulting in each area receiving a smaller percentage of Federal grant funds than in prior years. Grant funds simply are not available in the amounts needed to accelerate the program. In fact the loan program makes more total funds available for program expansion than have been under the traditional appropriations and grants approach. Because of the tremendous benefits cotton growers can gain from boll weevil eradication, we believe that they will choose to take advantage of the loan program.

LOAN SUBSIDY COSTS

Question. You state that savings will be achieved in loan programs due to declining interest rates. However, due to reforms that lock in program levels over a fixed number of years, it appears that loan subsidy cost is actually increasing. For example, the water and sewer loan program in fiscal year 1998 required a subsidy of only $67 million to achieve a program level of $691 million. For fiscal year 1999, a program level of $764 million will require $126 million in subsidy, nearly twice that of last year.

How do you explain your statement of lower costs for loan programs with the example of higher subsidy costs?

Answer. Perhaps I should clarify my statement. What I said was that due to decreasing interest rates resulting from the economic expansion, the budget authority required to administer these programs is 40 percent less costly than it was in 1993. Your observation regarding the higher subsidy costs for fiscal year 1999 is correct, but that stems from a provision enacted in the Balanced Budget Act of 1997. This provision attempted to fix the problem of widely fluctuating program levels caused by differences in interest rates assumed in the economic assumptions and the actual interest rates in effect at the beginning of the fiscal year. This fix also locked in the budget year interest rate in the out years which means that the out-year interest rates will not be decreasing as they have previously. Since most loan programs have low disbursements in the initial year and higher disbursements in the out-years, the effect is to increase the subsidy cost. Conversely, in an era of increasing interest rates, the subsidy cost will be lower.

ANIMAL WELFARE ACT

Question. What is the Administration's position on legislation (H.R. 594, the Pet Safety Protection Act) proposed by Rep. Canady (R-FL) and Rep. Brown (D-CA)?

Answer. The Administration is continuing to review this bill and has not finalized a position at this time.

Question. What effect would enactment of H.R. 594 have on agricultural, medical, and related research?

Answer. The bill would allow research dogs and cats to come only from licensed breeders, publicly owned and operated pounds and shelters, individual donors who have bred or raised the animals or who have owned them for at least 1 year prior to donation, or other research facilities. The bill would eliminate "random-source" dog and cat dealing—an activity in which only 32 dealers nationwide are involved at this time.

Question. To what extent would enactment of H.R. 594 curtail the occurrence of fraud, theft, and mistreatment of animals?

Answer. We are very pleased that over the last few years, we have succeeded in revoking the licenses of the most non-compliant Class B dealers, and we have dramatically improved compliance by the remaining 32 Class B dealers by inspecting their operations quarterly and tracing selected animals back to their original sources. In fact, in fiscal year 1997, Animal Care officials were able to complete 95.5 percent of their tracebacks of animals sold into research—up from approximately 40 percent in fiscal year 1993. We firmly believe that our efforts have significantly reduced the potential for USDA licensees to steal or otherwise fraudulently obtain animals. Presumably, disallowing random-source dealing altogether would reduce that potential even further.

Of course, we must note that the bill would not affect the wide variety of other situations not covered by the AWA in which fraud, theft, and mistreatment of animals can occur. Examples would include theft of privately owned hunting or security dogs or abuse or neglect of animals by individual pet owners.

Question. Would eliminating USDA regulation of Class B "random source" dealers under the Animal Welfare Act, the objective of H.R. 594, result in savings, and if so, by what amount?

Answer. Not necessarily. It is important to note that a number of Class B dealers have signalled intent to convert to Class A (breeder) operations or have already done so, so if Class B dealers were to be eliminated, some of these savings would be offset by costs to regulate these same individuals as Class A dealers. In addition, H.R. 594 would require pounds and shelters to be licensed and comply with record-keeping and certification requirements, which would further offset any savings achieved by eliminating Class B dealers.

QUESTIONS SUBMITTED BY SENATOR BYRD

WATER 2000

Question. Please provide me with a status report on the U.S. Department of Agriculture's (USDA) progress in achieving the goals of Water 2000 in West Virginia in 1997.

Answer. In fiscal year 1997, 13 water projects were financed by RUS in West Virginia. These 13 water systems served 11,600 people. Out of the 11,600 people served, 5,600 received clean water for the first time. The other 6,000 people had their water systems improved so they could continue to provide clean water.

Question. What progress does the agency expect to make on the goals of Water 2000 in 1998?

Answer. In fiscal year 1998, we estimate that 8,500 more rural people in West Virginia will receive clean water through RUS financed water systems.

Question. What progress does the agency expect to make toward the goals of Water 2000 with respect to the President's fiscal year 1999 budget request?

Answer. In fiscal year 1999, we estimate that an additional 9,319 rural people in West Virginia will receive clean water through RUS financed water systems.

NATIONAL CENTER FOR COOL AND COLD WATER AQUACULTURE

Question. Please provide me with a status report on progress on the National Center for Cool and Cold Water Aquaculture.

Answer. The following describes progress on the National Center for Cool and Cold Water Aquaculture (NCCCWA):

—The mission of the NCCCWA is to enhance aquaculture production of cool and coldwater finfish. The NCCCWA's priority research program areas will include genetics and breeding, fish health, nutrition, and production systems. Work will focus on trout and other salmonids. Other potential species include hybrid striped bass and other cool and cold water species.

—The NCCCWA will combine its scientific expertise with that of the Freshwater Institute and the Leetown Science Center (LSC) of the Biological Resources Division of the U.S. Geological Survey, and with the marketing, genetics, and other scientific expertise of West Virginia University (WVU), in a collaborative and comprehensive program that should contribute greatly to the economic potential of West Virginia and of the Nation.

—ARS and LSC enacted an Interagency Memorandum of Understanding MOU) on September 30, 1996, to facilitate cooperation between NCCCWA and the LSC. LSC and ARS are presently developing accessory agreements for the MOU to provide more detail on cooperation in research and sharing of facilities and resources. LSC has agreed to provide space and facilities for ARS scientists to conduct aquaculture research the NCCCWA construction is underway.

—Extreme drought conditions in 1997 resulted in significantly reduced spring water supplies and stream flow in the vicinity of LSC. The drought condition called into question whether natural water resources would always be sufficient to provide for the future needs of both the Fish Health Laboratory (FHL) and NCCCWA without impacting local residents. Consequently, the present plan is for the NCCCWA design to include the capability to recirculate, with appropriate treatment, up to 50 percent of the water supplied to the building. This capability will also provide for greater control over water quality for research purposes and will obviate the need to develop Bell and Link Springs. Preliminary projections are that the capital costs of the recirculation capability will be essentially equivalent to the cost savings resulting from not developing the Bell and Link Springs. Operating cost projections are presently being formulated. LSC and ARS have also agreed to develop a comprehensive, joint water management plan.

—ARS received $1.9 million in fiscal year 1995 for land purchase and laboratory planning and design. ARS received $6 million in fiscal year 1997 and $6 million

in fiscal year 1998 for construction of the NCCCWA. Total estimated construction costs are $12 million. Annual operating costs are estimated at $4 million.

—The design for the NCCCWA is currently being developed. A site plan has been prepared. Conceptual designs have been prepared for the laboratory/office building and the tank/aquaria building. Aesthetics will be an important component of the design to ensure that the facility blends well with the surrounding environments. Final drafts of the Program of Requirements and the Investigative Report have been completed.

—On October 20, 1997, ARS purchased a 217-acre farm adjacent to the Leetown site to provide for additional watershed protection. The purchase price was $600,000.

—The fiscal year 1998 Congressional appropriation of $250,000 for the NCCCWA's first program funding will be used to recruit a highly-qualified scientist to serve as Research Leader; to begin carrying out a cooperative research program with FHL; and to oversee final design and construction of the facility.

APPALACHIAN SOIL AND WATER CONSERVATION LABORATORY

Question. With the completion of the five-year mission plan for the Appalachian Soil and Water Conservation Laboratory, please provide me with a list of research programs that will be undertaken in the future.

Answer. The proposed research programs to be undertaken in the next five years are:

(1) Management of hilly grassland in Appalachia for sustainable production;

(2) Renovation and improvement of underutilized, abandoned or disturbed hill lands with browsing livestock;

(3) Agroforestry systems for the Appalachian region; and

(4) Improving forage legumes for Appalachian grasslands.

Question. Please provide the funding level required for each program.

Answer. To fully develop these programs and operate the Laboratory at full capacity would require the addition of four to five scientists for an estimated total of $1.2 to $1.5 million.

APPALACHIAN FRUIT RESEARCH LABORATORY

Question. With the completion of the five-year mission plan for the Appalachian Fruit Research Laboratory, please provide me with a list of research programs that will be undertaken in the future.

Answer. The mission of the Appalachian Fruit Research Laboratory is to develop the science, technology and genetic base needed to enhance productivity and fruit quality, minimize adverse effects on the environment and solve critical problems of temperate fruit production, protection, harvesting and marketing in the Eastern U.S.

In response to this mission, the current program is focused on the development of (1) knowledge of the critical molecular processes in fruit development and ripening; (2) genetic materials with improved pest resistance, cold hardiness and fruit quality; (3) integrated cultural and pest management systems that reduce pesticide/herbicide use and increase production efficiency; (4) harvesting, handling and postharvest disease controls that increase shelf life and market value.

Question. Please provide the funding level required for each program.

Answer. To fully develop these programs and operate the Laboratory at full capacity would require an additional four to five scientists for an estimated total of $1.2 to $1.5 million.

POTOMAC HEADWATERS LAND TREATMENT PROJECT

Question. Please provide me with a report on the Potomac Headwaters Land Treatment Project. What is the status of the funding for this project?

Answer. In fiscal year 1997, $2,416,300 funded 116 contracts. In fiscal year 1998, $3,130,000 went to this project which will fund approximately 150 additional contracts.

Question. What is the participation rate of eligible farmers in the program?

Answer. The participation rate has been greater than anticipated when the project was originally planned. There are approximately 340 poultry producers in the watershed. Currently 255 have requested assistance.

STAFFING REDUCTIONS

Question. I understand that the proposed Farm Service Agency (FSA) fiscal year 1999 budget will result in an additional reduction of 1,000 FSA jobs. What effect will these reductions have on the FSA's mission?

Answer. The proposed fiscal year 1999 non-Federal county office staffing level of 9,980, a decrease of 855 staff years from fiscal year 1998, will challenge us to perform the ongoing operations and program activities for the 1996 Act with an adequate level of customer service. However, in proposing these reductions, difficult choices had to be made in balancing the budget for fiscal year 1999.

These staff reductions may hinder program delivery and service to producers in locations already minimally staffed as a result of previous agency downsizing. Assistance to sister agencies, conservation associations and others may also have to be reduced.

In order to effectively manage the resources remaining in the field offices, FSA may be required to achieve some office closures or consolidation beyond those previously planned. However, I've asked that actions to close and consolidate any additional county offices be made only with consultation of local FSA county committees, my office, and Congressional delegations. The Department has entered into a contract with an outside consulting firm to conduct a study of the county-based agencies, and we expect to be able to use the results of the contractor study in guiding our actions to achieve any required office closures through a solid independent workload analysis of the county-based agencies.

Question. What effect will these reductions have on the FSA's mission in West Virginia?

Answer. Historically, the methodology for allocating personnel reductions among States has been based primarily on current and projected workload by State. Until the proposed budget is agreed upon and specific reductions are determined for a State, it will be difficult to furnish specific impacts for a particular State. However, it is likely that an approximate 855 non-Federal county office employee reduction will result in new shared-management arrangements and/or closures of some offices. As I mentioned, the Department has entered into a contract with an outside consulting firm. The study is to be completed by September 1,1998, and may provide insight on how any future staffing reductions might be distributed.

Question. What actions is the FSA taking to accommodate individuals wishing to remain in the FSA's employment, or to otherwise soften the individual disruptions caused by the reduction in force?

Answer. For Federal employees, FSA extends full career transition assistance under the Career Transition Assistance Program. This includes priority placement rights, provision of job information and counseling on resume preparation, administrative time for using career transition resource services and facilities, and official time for interviews.

For non-Federal employees, FSA extends re-employment priority rights to all RIF'ed employees for two years. This affords RIF'ed employees with re-employment priority for any comparable vacancy in the State in which they were employed.

FSA is aggressively pursuing ways to soften the impact of FTE cuts. FSA will continue to use buyouts and early outs wherever possible to minimize the number of involuntary separations. FSA is also retraining employees to learn new skills to assume any vacant positions in the Agency.

QUESTIONS SUBMITTED BY SENATOR LEAHY

EMERGENCY CONSERVATION PROGRAM

Question. The Northeast is still trying to recover from the worst ice storm this century. Although the Farm Service Agency, Natural Resources Conservation Service and the Forest Service have been working with farmers, woodlot owners, maple producers and apple orchards, I am concerned that the Department's ability to help Vemonters rebuild from this atypical disaster is limited. Although there was over $8 million in damage on Vermont farms, Farm Service Agency programs have only requested $1.5 million from the Emergency Conservation Program because the majority of the damage does not fit within the constraints of ECP. Will the Department be flexible in using USDA programs to assist Vermonters and others recover from the storm?

Answer. Our disaster program authorities provide us with significant flexibility in providing assistance to producers with losses due to natural disasters. We are working with producers affected by severe weather conditions in the Northeast and else-

where and will propose any necessary changes in authorities and funding levels as expeditiously as possible.

Question. What programs, other than ECP, can be used to help the region rebuild and diversify their economy over the next 5 or 10 years?

Answer. FSA lending programs, particularly the emergency loan program, can play a critically important role in helping producers recover from losses resulting from natural disasters. Many other programs, including initiatives of the Fund for Rural Development and other rural development loan and grant programs, can help rural areas support and strengthen diversified economies.

UNOBLIGATED DISASTER FUNDS

Question. Does the Department have unobligated funds from previous disasters that may be reprogrammed to address ice storm damage?

Answer. We are unable to determine at this time the extent of additional funding we may need for emergency assistance in the Northeast and elsewhere. We are reviewing current funding obligations to determine whether any funds remain available. But it is clear that unobligated balances in our emergency programs are extremely limited.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

Question. The Department requested an additional $100 million in fiscal year 1999 for the Environmental Quality Incentives Program. How does the Department intend to distribute this additional funding among cost share payments, incentive payments and technical assistance?

Answer. The additional funds will be used to provide increased assistance to meet the President's Clean Water Initiative and to increase assistance to limited resource and Native American farmers and ranchers as recommended by the USDA Civil Rights Action Team. A prescribed distribution to education and financial assistance has not yet been determined, but 10 percent is anticipated at this time for technical assistance.

Question. How will the Department prioritize this funding amongst states and watersheds?

Answer. While a process for prioritizing funding has not been finalized, we will consider the recommendations of NRCS State Conservationists, in consultation with their respective State Technical Committees, NRCS Regional Conservationists, and recommendations received from other governmental and non-governmental entities with interest and expertise in water quality and natural resource concerns.

Question. With this increase can we anticipate an increase in funding for states with long waiting lists of farmers who want to adopt conservation practices or for states that have devoted significant state resources to match the federal program?

Answer. It is likely that States with significant natural resource and environmental problems with a recognized demand for program assistance will receive increased funding. Leveraging of State or other funds has been a consideration when allocating funds and will continue to be so that we maximize environmental benefits per program dollar expended.

RESOURCE CONSERVATION AND DEVELOPMENT

Question. The fiscal year 1998 Agriculture appropriation bill included an $18 million increase for the Resource Conservation and Development Program. How was this funding distributed across the RC&D councils and what criteria were used?

Answer. In fiscal year 1998, Congress appropriated $34,377,000 to the Resource Conservation and Development Program, an increase of $5 million. As outlined in the operating plan submitted to the Congress on December 18, 1997, $2.5 million will fund up to 25 newly authorized RC&D areas, and $1.45 million will provide additional funding for the existing 290 RC&D areas. The remaining $1.05 million will establish a Challenge Grant Fund for one year for authorized areas.

CONSERVATION FARM OPTION

Question. It is my understanding that the Department is finalizing the proposed rule for the Conservation Farm Option (CFO) program. When will it be published?

Answer. The CFO proposed rule should be published by late March, 1998.

Question. Given the protracted development of the rulemaking, there is some concern that full use of the authorized funding levels for the program will not be made. Has the Department projected the demand for the program and how will the program be implemented once the rulemaking process is completed?

Answer. Yes, the Department has projected the demand for the program. Once the proposed rule is published, a call for proposed pilot project areas will be conducted. Selection of the actual pilot areas will follow. As soon as the final rule is published, eligible participants within the selected pilot areas may apply for program benefits.

Question. What are the six regions where the pilot program will be implemented and how will the states be selected for participation?

Answer. The six regions are the six NRCS regions which cover the entire United States. A call for proposed pilot project areas will be conducted nationwide. Generally, pilot project areas within states will be proposed for selection in the CFO. Selection of pilot project areas will be made by the Chief, NRCS.

FARMLAND PROTECTION PROGRAM

Question. The Farmland Protection Program (FPP) reached its authorized ceiling of $35 million in fiscal year 1998. Since 1997, how many requests for FPP funding has NRCS received?

Answer. NRCS has not received any formal requests for FPP since fiscal year 1997, as requests for proposals to participate in the program will not be made until March 1998.

Question. How does this compare with the number of requests you have funded and what is the projected need for the program?

Answer. It is anticipated that new requests will far exceed the number of requests made in fiscal year 1997 as the funding available will be $18 million for fiscal year 1998, as compared to $2 million last year. The projected future funding need for the Farmland Protection Program far exceeds the program's current funding level. This is estimated at approximately $100 million per year.

Question. Has the Department identified other programs that may be able to address this remaining need?

Answer. The FPP is unique in that NRCS works with Tribal, State and local entities to leverage program funding and thus maximize the Federal funds available. Therefore farmland protection programs in the different states will continue to do limited work with individuals in this area of conservation. The department has not identified any other additional federal funds from other programs to address the remaining FPP needs.

CLEAN WATER AND WATERSHED RESTORATION INITIATIVE

Question. The Clean Water and Watersheds Restoration Initiative includes assistance for 1,000 rural watersheds. How will these be selected for assistance?

Answer. Although the guidelines for selecting the 1000 rural watersheds hasn't been completed, the foundation for addressing our nations water quality issues is through a locally-led process. A key component in the selection process will naturally include the condition of water quality in the watershed. It is expected the $20 million NRCS budget proposal will address 350 watersheds.

CONSERVATION OPERATIONS

Under the Conservation Operations budget, NRCS includes $20 million for incentive payments to those States that are successful in increasing the level of non-Federal contributions to the conservation effort. In Vermont, the state agriculture department has funded a program to match federal funds in order to increase the cost-share payment to farmers and attract farm operations that otherwise would not be able to participate in the program. In fiscal year 1999, the Governor has requested $750,000 for this program, almost three-quarters of the federal funding level in Vermont.

Question. Is this the type of success NRCS will be looking for distribution of the additional $20 million?

Answer. The budget proposal of $20 million will be internally allocated to NRCS state offices based on an as yet to be determined threshold of contributions from state and local entities for such activities as GIS and soil survey digitization. These funds are not intended to be used as grants to state and local entities.

Certainly, the Vermont program is an outstanding example of the initiative that states can take to leverage federal funds. The support that the Governor of Vermont and the State Legislature are providing to conservation is exemplary. State efforts such as this result in an increase in conservation on the land and improvement in the environment. Multiplying the Vermont experience across the country will have a significant impact on our environment. Definitely, states that have successful programs in place should be rewarded while at the same time other states should be provided an incentive to initiate suitable leveraging efforts. NRCS will include both of these factors in an equitable system to distribute the $20 million.

Question. The Conservation Operations budget also gives special consideration to those States that expand their use of geographic information systems and purchase additional digital orthophotography. In 1995, the Vermont Center for Geographic Information was presented with an award to "maintain, support and integrate decision support systems for agricultural, rural development, and natural resources initiatives * * *" (USDA letter signed by Wardell Townsend, October 34, 1995) Although the Vermont Center worked with USDA over the next year to actually receive the award, no funding has ever been forwarded to Vermont. Although I find it very troubling that USDA would award a grant and then not follow through on the promise, I am pleased to see that the Department recognizes the importance of these projects in the fiscal year 1999 budget.

Will the Department consider funding the Vermont project under the Conservation Operations budget in fiscal year 1999? If not, how will the Department fulfill its obligation to the Vermont Center for Geographic Information?

Answer. I am aware of the Vermont concerns. We are exploring the opportunity of making the Vermont project a USDA Business process re-engineering project as part of the Service Center Implementation Team activities.

OPTION 1–B

Question. The Department's preferred option for milk marketing order reform is the so-called "Option 1–B." But your proposal notes that this option would put dairy farmers out of business. Therefore you have proposed some so-called transition payments to ease the pain as you phase in Option 1–B. Your proposal states that, with the exception of the upper mid-west, dairy farmers would face reduced income under Option 1–B. Even farmers in the upper mid-west would be better off under Option 1–A in terms of income. The economists for Agri-Mark dairy believe that Option 1–B will cost dairy farmers over $360 million per year in net income. Vermont's Commissioner of Agriculture believes that Option 1–B will mean that half of Vermont's farmers go out of business. Without local, fresh supplies of milk consumer prices could skyrocket with each snow storm in the Midwest. Would you reexamine your preferred position to take into account the recommendations of the National Commission on Small Farms, which I will officially offer as a comment to this marketing order proposal?

Answer. One of the main purposes of issuing a proposed rule is to receive public input on the proposals contained in the rule. All comments submitted to the Department will be reviewed and considered. Based on this review, the Department will then issue a final rule. The National Commission on Small Farms report has been identified as a proposed rule comment and will be considered when developing the final rule.

Question. Would you look at Agri-Mark's analysis and provide me with a detailed explanation of how, if at all, USDA's analysis would differ. I recognize this request, and my next request, cannot be done overnight and I would simply request that this be done soon.

Answer. We have requested input from the public on the proposed rule. Once Agri-Mark's comments are submitted to the Department, they will be given full consideration. Because of ex parte restrictions, I will not be able to give you a detailed explanation of how Agri-Mark's analysis may differ from USDA's analysis. I can assure you though that when received, full consideration will be given to Agri-Mark's analysis.

Question. Would you reexamine your preferred marketing order position (1–B) to take into account the recommendations of the National Commission on Small Farms which I will officially offer as a comment to this marketing order proposal?

Answer. One of the main purposes of issuing a proposed rule is to receive public input on the proposals contained in the rule. All comments submitted to the Department will be reviewed and considered. Based on this review, the Department will then issue a final rule. The National Commission on Small Farms report has been identified as a proposed rule comment and will be considered when developing the final rule.

Question. I would like you to examine how many small farms might go out of business under Option 1–B, as compared to Option 1–A. I am aware some dairy farmers will go out of business regardless, but I would like to know how many more would go out of business under Option 1–B, as compared to 1–A, and what circumstances would affect that issue.

Answer. It is difficult to predict the impact on farm numbers under either Option 1–B or Option 1–A. However, the proposed rule does request input from the public regarding the impact of this proposal on small businesses. We will examine the full impact of any action addressed in the proposed rule.

Question. I recognize that there are limits to being able to predict such outcomes and that other factors, such as interest rate levels, can have a significant impact. Please identify other factors which you think would play a role in this matter.

I believe it is imperative that greater focus be placed on keeping small, local dairy farmers in business.

Answer. Other factors, such as interest rates, have an impact on our ability to predict outcomes from any proposed action. However, the proposed rule does request input from the public regarding the impact of this proposal on small businesses and regarding the price level and phase-in programs. Any additional information we receive will be fully considered in our evaluation of the impacts of the proposed rule.

FUND FOR RURAL AMERICA

Question. I was fortunate enough to have played a part in authorizing the 1996 Farm Bill—a bill that broke new ground in providing assistance to our rural communities. A case in point is the Fund for Rural America, which was established in the bill. The Fund directs $300 million over three years to help solve the problems facing rural areas. Due to a technical error, the $100 million that was intended for use in 1998 will not be available unless a correction to the law is made. Secretary Glickman, what steps are being taken to ensure there is no gap in the Fund for Rural America for 1998?

Answer. The Department shares your concern about the 1-year hiatus in Fund for Rural America funding. We asked for a language correction and the issue is embedded in discussions about the Farm Bill Research Title. However, should the correction no be made, we plan to minimize any break by spending 1999 monies early in the fiscal year. For example, we currently plan to make the final first round Center Grant awards in October, 1998, with additional project grants through the end of the calendar year.

Question. If funding is not provided in 1998, how will that affect projects that receive "Center" grants or other multi-year awards out of the 1997 funding cycle?

Answer. The projects receiving funding out of the 1997 funding cycle would not be affected by the hiatus in 1998. This is because the projects in question were fully funded for the life of the project at the time of award. Therefore, they have funds to continue the activities despite the delay in 1998 funding. However, the break will delay award of center grants from summer to fall. The scheduling adjustments we are making will limit the impact of no 1998 funding to a 4–6 month lag rather than a full year lag.

Question. When will the announcement on 1997 awards be made?

Answer. All 1997 awards were completed March 24, 1998. Congressional offices were notified immediately prior to award in case Members wanted to contact constituents directly. A complete list of the awardees will be released along with press information and individual project summaries in late March or early April.

SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

Question. Your budget indicates that WIC is "fully funded." However, WIC directors believe that not all eligible applicants in all states will be able to be served by WIC. Please explain the status of the WIC funding request in terms of being able to serve all eligible applicants within a reasonable degree of certainty. I recognize USDA has to make projections so that absolute certainty would be difficult to determine.

Answer. Our full funding projection model starts with Bureau of Census estimates of income-eligible infants and children and uses Department of Health and Human Services data useful in estimating those at nutritional risk. We estimate income eligible pregnant women, and then apply nutritional risk factors to each group, and finally make certain projections as to the proportion of those eligible who will actually seek WIC benefits. We are confident that our 1999 funding request is adequate to serve 7.5 million participants a month. As that has been our target for several years, during which time the economy has improved markedly, we are confident that it is a reasonable estimate of full participation.

QUESTIONS SUBMITTED BY SENATOR DORGAN

RURAL ECONOMIC AREA PARTNERSHIP (REAP) ZONE

In 1993 President Clinton made a commitment to establish a high-level interagency working group on Community Development and Economic Empowerment which would specifically address the need to send more Federal economic development resources to rural areas with serious out-migration problems.

Question. Please describe USDA's participation in the interagency working group development as part of this Presidential commitment.

Answer. The Department of Agriculture is one of 22 Departments and Agencies that are a part of the Community Empowerment Board which provides overall coordination for implementation the Empowerment Zone/Enterprise Commodity Initiative.

Question. What specific steps has USDA taken to fulfill the President's commitment to reinvigorate economics in rural areas affected by out-migration?

Answer. USDA and the Small Business Administration help pull together a One-Stop Capital Shop to serve the Rural Economic Area Partnership (REAP) Zones of North Dakota as well as all of North Dakota (one of only five nationwide). In addition, Rural Development assistance to participating North Dakota REAP counties has risen sharply. The 14 county area encompassed within the two REAP zones averaged $1.68 million a year in Rural Development funding dollars (not including single family housing) during 1991–94. For 1996 and 1997 the annual average of Rural Development assistance to the REAP counties is approximately $12.5 million annually.

Question. Please describe the activities USDA will engage in fiscal year 1998 to advance this policy priority.

Answer. USDA's Rural Development mission area is committed to helping improve the economy and quality of life in all of rural America, including areas where out-migration and job loss has torn asunder the fabric of the rural economy. Our financial programs in 1998 will continue to support essential public facilities and services as water and sewer systems, housing, health clinics, emergency service facilities and electric and telephone service. We will promote economic development by supporting loans to businesses through banks and community-managed lending pools. We will offer technical assistance and information to help agricultural and other cooperatives get started and improve the effectiveness of their member services. And we will provide technical assistance to help communities undertake community empowerment programs, such as the REAP demonstration areas in North Dakota.

Question. Due to the obvious application of USDA's rural development mission area programs relating to this initiative, please describe your willingness to take a lead role in helping the interagency working group develop practical, real proposals and actions that will transform the President's commitment into real opportunity in rural areas.

Answer. USDA has always been willing and enthusiastic to take a lead role in developing practical and real proposals to support rural development.

ARS FACILITY CLOSURES

Question. The Appropriations Committee made it clear in Public Law 105–83 that it did not concur with the Department's proposed closure of ARS facilities and, further, that the strategic planning process in the Federal Agriculture Improvement and Reform Act relating to all USDA research facilities be completed before any further closures are contemplated. Now the Department, in the fiscal year 1999 budget, has again proposed closures. What is the rationale for the closure in light of the direction already clearly delineated in the fiscal year 1998 funding bill?

Answer. The fiscal year 1999 Federal budget submitted by the President recommends a number of new initiatives to address changing priorities facing agriculture and the American consumer. Food safety, global climate, nutritional requirements, emerging infectious diseases in a global community, genome maps of critical agricultural products etc. represent critical challenges that must be addressed as we move into the next century. The constraints of Federal spending remain in place. The Administration and the Congress continue to target Federal spending and revenue savings in all budget deliberations.

The research budget proposed for ARS reflects an increase of $32 million over the current year. However, the Department is focusing on many priority agricultural issues that must be addressed now by our research scientists. This requires that ARS terminate ongoing projects and reallocate these resources to the new or expanded initiatives as recommended by the President. In this effort a number of projects carried out at Prosser, Washington; Orono, Maine; Brawley, California and Mandan, North Dakota were identified as less critical. Given these programmatic decisions, management considerations lead to recommendations to terminate and redirect resources to new research initiatives and close the mention research stations. We believe there is adequate information for Congress to act on these relatively straight forward recommendations at this time without formal input from the Strategic Planning Task Force.

CENTRALIZED SERVICING CENTER

Many North Dakotans have registered serious complaints about service at the St. Louis Rural Development Centralized Servicing Center, including that financial records were muddled and files misplaced.

Question. In the case of the Rural Housing centralized service, can you articulate how centralization in this case has been beneficial to the customer?

Answer. The Centralized Servicing Center (CSC) is providing state-of-the-art servicing comparable with any other system available to homeowners across the nation. Our system is unique because of the Congressionally mandated "supervised credit" that must be available to our borrowers to preserve home ownership though economic or other hardships individuals and families may experience. For this reason, we have had to modify the private sector serving software we purchased to ensure these servicing options were handled in a consistent and efficient manner. These servicing features include: 7 day a week, 24 hours voice response for detailed information on loans; nationwide consistency for servicing, including payment assistance, moratorium, reamortization and other services; centralized cash management providing fiduciary control; a monthly statement sent to each borrower; escrow of taxes and insurance; and expanded (7:00 am–6:00 pm) customer service representatives to handle more complex issues for our borrowers.

Beginning in October of 1997, RHS centralized over 700,000 loans from 1,200 offices nationwide to one facility in St. Louis. We currently have approximately 800 field offices. This was a massive undertaking. We have experienced some difficulties with backlogs in our mailroom which has delayed payment assistance and other services. This problem has been rectified and our response time has improved dramatically. Additionally, we have and are continuing to modify our software and other support systems to handle additional concerns and provide the best customer service to our borrowers.

Question. How many staff have been added to the Center, and how does this number compare with the number of personnel that previously handled housing program inquiries in the field offices?

Answer. Prior to the Centralized Servicing Center (CSC), there were approximately 3,300 staff years performing single-family loan origination and servicing in the field. As a result of a move to centralize the loan servicing process, 900 staff years in the field were deployed for other critical Rural Development activities, 600 staff years were transferred to the CSC, 600 staff years were eliminated, 600 staff years still remain in the field to conduct loan origination and 600 staff years remain in the field to conduct post CSC acceleration and liquidation including management and disposal of inventory properties.

SUBCOMMITTEE RECESS

Senator COCHRAN. We do not have any more requests for recognition from other Senators, so this concludes today's hearing. We appreciate very much your cooperation with our subcommittee.

Our next hearing will be on Tuesday, February 24, at 10 a.m. in this room, room SD–138, of the Dirksen Senate Office Building. We will hear then from departmental witnesses with respect to the Department's research, education, and economics programs.

Until then, the subcommittee stands in recess.

[Whereupon, at 12:13 p.m., Tuesday, February 10, the subcommittee was recessed, to reconvene at 10:04 a.m., Tuesday, February 24.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, FEBRUARY 24, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:04 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Gorton, Burns, and Bumpers.

DEPARTMENT OF AGRICULTURE

STATEMENT OF I. MILEY GONZALEZ, UNDER SECRETARY, RESEARCH, EDUCATION, AND ECONOMICS

ACCOMPANIED BY:

EILEEN KENNEDY, ACTING DEPUTY UNDER SECRETARY, RESEARCH, EDUCATION, AND ECONOMICS

DENNIS KAPLAN, BUDGET OFFICE

NATIONAL AGRICULTURAL STATISTICS SERVICE

STATEMENT OF DONALD BAY, ADMINISTRATOR

AGRICULTURAL RESEARCH SERVICE

STATEMENT OF FLOYD P. HORN, ADMINISTRATOR

ECONOMIC RESEARCH SERVICE

STATEMENT OF SUSAN OFFUTT, ADMINISTRATOR

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

STATEMENT OF BOB ROBINSON, ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order.

This morning our subcommittee continues its hearings to review the budget request submitted by the President to fund the Department of Agriculture and related agencies. This morning we are pleased to have an opportunity to review the budget request of the Agricultural Research Service; the Cooperative State Research, Education, and Extension Service; the Economic Research Service; and the National Agricultural Statistics Service.

Miley Gonzalez, who is Under Secretary of Research, Education, and Economics, is with us and is accompanied by Eileen Kennedy, Donald Bay, Floyd Horn, Susan Offutt, and Bob Robinson. Dennis Kaplan is here representing the Budget Office for the Department. We welcome you and we thank you for your cooperation with our subcommittee.

This is probably one of the most important areas for agriculture that the Department administers. If we do not maintain our capacity to improve productivity on our farms; if we do not maintain access to research, which is what extension provides through its programs for farmers and agriculture, landowners, then we are not going to be able to compete in the global marketplace. We are not going to be able to maintain the high quality of our foodstuffs for American consumers at reasonable prices.

So for all of these reasons, the funds that are provided for these programs are essential if we are to continue to enjoy the benefits of our agricultural economy. It provides a lot of jobs, of course. It means a lot in many other ways to us.

That is one reason why I am personally disturbed that the budget request this year is $63 million below last year's funding level. I am disturbed by that, concerned by it, and, frankly, amazed that the President would submit a budget that underfunds these programs to that extent. I hope our hearing this morning will shed some light on why the budget is submitted in that way.

There are some very important programs for which funding is proposed to be cut. The sum of $26 million is cut in Hatch Act and Smith-Lever formula funds. These go directly to our State universities and colleges that are involved in research. A reduction of $41 million in special grants, and a number of other proposed funding decreases and terminations are included in this budget submission.

We are going to look very carefully at it, and I am sure that this subcommittee is going to make some changes in the President's budget request in this area. But you can help us understand where those changes should be considered and why the budget is submitted in this form.

Before going to our panel of witnesses, I recognize the distinguished ranking member of this subcommittee, my good friend from Arkansas, Senator Bumpers.

PREPARED STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Mr. Chairman, thank you very much. In the interest of time, I will waive the reading of my opening statement and insert it in the record.

My statement would very much echo what you have just said. I am mightily concerned about a number of issues in this budget. We will get into those during the question and answer session.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

I am pleased to welcome Secretary Gonzalez before this subcommittee. This is your first visit before this panel we look forward to your comments. I also want to welcome the other agency heads. And, it is always good to see Mr. Kaplan whose long-time assistance to this subcommittee has been invaluable.

In spite of these words of welcome, I must admit that my sentiments with the overall budget submission in the research mission area are a little less generous.

I have stated publicly, on many occasions, that I feel we are not committing enough resources to agricultural research. Compared to the money we spend on research on how to make things explode better and bigger, our dedication in meeting the demands of an ever growing, ever hungry world pale. Over the course of American history, the American farmer has done more to improve the quality of life through an improved quality and abundance of food than any other sector of the economy. But increased production is necessary to keep up with an ever growing population. In addition, our growing population is also responsible for urban sprawl converting more and more farm acreage into housing developments, greater demands on our water and wildlife resources, and higher expectations for food safety. In short, the American farmer is expected to do more with less and only agricultural research can make that happen.

The budget proposal for agencies included under the heading of Research, Education, and Economics reflects a request of $1.826 billion. This is a net decrease of $47 million, or 2.5 percent, below the fiscal year 1998 level. I recognize that the budget proposal implies an overall increase for research and development by about $7 million with the reductions in other areas such as facilities. However, we must consider the budget proposal in total and remember that the mission of USDA's research, education, and economics agencies is tied to the basic premise I have just outlined that we must make American agriculture do more with less. Whether the funding is for agricultural competitive, formula, or facility programs, the programs are designed to work together with an overarching purpose of keeping the American farmer and, by extension, the American consumer at least one step ahead of the increasing demands and challenges ever snapping at our heels. Unfortunately, this budget submission asks us to continue providing the American farmer less, to the tune of about $47 million.

I also feel compelled, again, to point out that our problems with this budget are not limited to what it does not include, but also because of what it does include. The budget request from USDA contains hundreds of millions of dollars in assumed user fees. I realize that those fees are not directly tied to the agencies before us today, but those assumptions will have an impact on our ability to meet the demands of our research efforts. The importance of what we do here is too great for playing budget parlor games. We have a responsibility to protect the U.S. agricultural research base. We are serious about it and we know that if we don't step forward, no one else will. There is simply too much at stake.

I also want to offer a few comments on the apparently continuing battle between the Congress and USDA on setting the research agenda. For as many years as I can remember, the budget request to this subcommittee would always zero out most, if not all, of the CSREES Special Grants. Now, the struggle seems to have been elevated and we find that the programs Congress elected to fund through the Agricultural Research Service, too, have been zeroed out. It appears that in addition to in-house research, USDA is willing only to fund research through competitive grants, which means USDA wants to fund research only to those institutions and researchers that USDA feels is important. It seems a little odd that if USDA funds priority research it is called being competitive and if Congress funds priority research, it is called pork barrel spending.

I realize that USDA makes use of peer review and other scientific community-based groups to set funding priorities and to determine which projects will get attention and which will not. However, it seems that USDA accepts the premise that only they have access to research stakeholders who have any sense of research priorities. With all due respect to my many friends in the research community, let me point out that scientists tend to spend much of their time looking through microscopes. Sometimes, it is important to have a more global view of research priorities which can be lost in the often discipline-specific world of science. I suspect that if you ask an agronomist where the research priorities are, he would likely suggest in the field of agronomy. If you ask the same question of a specialist in animal science, you would get a different answer.

Obviously, there are many specific areas of agricultural research that are very important to me. They may or may not be identical to priorities of Senator Cochran or other members of the subcommittee. However, the process we undertake here is to come together in an agreement that allows us all to form a consensus of research priorities. It would be welcome for USDA to join us in that process rather that suggest only they hold the keys to research.

As I mentioned, there are many specific areas of research in which I hold great interest. I will not go into all of them now. Instead, I look forward to the comments of our guests and the opportunity to ask them questions later during this hearing.

INTRODUCTION OF WITNESS

Senator COCHRAN. Mr. Gonzalez, we have copies of your statement and others' statements. We appreciate having those and they will be printed in the record in full. Please proceed with any remarks you consider helpful to the subcommittee.

FISCAL YEAR 1999 BUDGET REQUEST

Dr. GONZALEZ. Thank you, Mr. Chairman. It is a pleasure to be here with you this morning to talk about the fiscal year 1999 budget request that we have submitted for research, education, economics, our mission area at USDA, and to recognize the team of folks that work with me in this particular mission area. I just would like to begin by underscoring some of the important points that you made.

We are very much engaged in this conversation in terms of the importance that we consider this mission area to have at USDA because of the continuing changing environment out there in agriculture production and all the systems that support that. So we are pleased to be here to work with you, and look forward to continuing the discussion in terms of where we are going with our budget.

I would also say that, as you indicated, we think that this is one of the most important mission areas within USDA and within the Federal agencies, specifically because of the type of approach that we will take to supporting our agricultural production systems.

I have been here for just a short time and I wanted to take a few minutes to talk a little bit about my impressions with regard to the mission area and the USDA budget. We have begun the dialog in discussion with a number of our partners internally to again highlight the importance of what we believe is this particular mission area with regard to research, education, economics, and extension.

As you may know, I have a background in agriculture, both from the production standpoint as well as an educator in agricultural education and extension for a number of years. So this particular mission area, as I considered coming to serve in this capacity, was of particular importance to me, knowing that the things that we do at REE and within USDA really provide the basis and foundation for much of the things that will happen, not only in our current circumstances, but also as we look forward to identifying the kind of scientific knowledge and extension programs that will fortify agriculture in the future.

The combination of fundamental and applied research and statistics, coupled with the higher education and extension programs that we have, I believe yield a powerful partnership that serves agriculture well and will continue to do that. Our research must continue to be cutting edge that will benefit all of our citizens. We plan to communicate these objectives that we have as a part of our strategic plan to everyone, not only those that are already involved in the food and fiber system, but all of our clients.

We have an opportunity to draw on the distinct differences that we have within our four agencies and also on those similarities as we look forward to supporting the work of the other agencies with-

in USDA and certainly as we work across Federal Departments to support the work that is done in other areas.

REE-funded physical and biological research provides the scientific foundation for a vast array of advances that are being made in agriculture and related industries. We are committed to strengthening those linkages between the basic and applied research that also serve the broader Governmentwide research agenda.

REE brings to this larger agenda excellent cutting edge research that complements similar excellence found elsewhere, in Government, at colleges and universities, and in the private sector.

Mr. Chairman, we welcome the opportunity to work with you and with the administration to promote these linkages through funding of research directed at broader priorities and initiatives. Let me emphasize that the budget that we have for our agencies was created through an ongoing conversation with many of our stakeholders, both in and out of Government. We have made an effort, all of us at this table, to go out and visit with a number of our constituents in the research community, the producer and commodity groups, the members of associations that are focused on environmental, food safety, and nutrition concerns, to gain a better understanding of their needs.

We are committed to listening and to the extent possible being responsive to the concerns and recommendations voiced by our stakeholders. I believe that we have met our responsibility to formulate a budget that is responsive to those concerns and interests to the extent possible.

The REE mission area has had to deal with some important issues and concerns regarding the high priority areas that we have addressed in this budget request. The REE budget request for fiscal year 1999 is $1.826 billion, a net decrease of $47 million, or 2.5 percent from the fiscal year 1998 budget. Within this total, the allocation for research and development actually increases by $7 million, or about 1 percent.

The REE agency budgets were developed in the context of the administration's commitment to achieving a balanced budget for fiscal year 1999 and within that context and taking into consideration the almost infinite number of worthy goals and problems REE could address, I believe the budget in total funding and specific initiatives represents a sound and balanced portfolio of public investment.

We have had to make difficult decisions to reduce and redirect resources or terminate valuable projects in order to fund others of higher priority within those established goals.

I think it is important to reiterate that the return on public investment in agriculture research and development is very high. The decline in the percentage of disposable personal income that we spend on food, sustained over many decades, is due in large part to the increases in agricultural productivity resulting from investments in research and development.

Between 1948 and 1994, productivity in U.S. agriculture grew at an annual rate of 1.9 percent, as compared to 1.1 percent for nonfarm businesses and 1.3 percent for manufacturing.

HIGH-PRIORITY INITIATIVES FOR FISCAL YEAR 1999

Mr. Chairman and members, I would like to focus on four of the high-priority initiatives that we have identified in this budget proposal: food genome, food safety, pest management, and civil rights. These initiatives are all closely aligned with the general goals of our strategic plan and contribute to the achievement of several of those goals.

FOOD GENOME INITIATIVE

Among the major challenges the Nation will face in the 21st century are the need for increased high-quality food production, a cleaner environment, and renewable chemical and energy resources. The President's food genome initiative, a Governmentwide initiative in which USDA is playing a major role, will help achieve a safe and abundant food supply, meet the needs of a growing population worldwide, and ensure global competitiveness of the U.S. agricultural industries in a more environmentally sensitive manner.

The food genome strategy will vastly expand our knowledge of genomes of species of importance to the food and agricultural sector. REE is carrying out considerable genetic research, but it does not nearly meet the need. Therefore, as part of the President's initiative REE is requesting $40 million for food genome research, an increase of $19 million over the estimated $21 million for fiscal year 1998.

FOOD SAFETY INITIATIVE

Food safety is another of the initiatives that is of importance to us in this particular budget. The administration has taken major strides to improve our current food safety systems. The recent implementation of HACCP is radically changing our meat and poultry inspection systems, which reside in another of our mission areas. The research proposed in the fiscal year 1999 budget will bring us farther in generating new knowledge to identify cost-effective technologies for prevention and detection of existing and newly emerging pathogens.

The fiscal year 1999 budget includes a total of $26 million in increased funding across ARS, CSREES, and ERS. The majority of the funds will focus on developing improved pathogen prevention and detection methods and other bioscience research in both ARS and CSREES. ERS requests funds to better assess the costs of foodborne illness and to apply economic analysis in the development of more cost-effective control methods.

PEST MANAGEMENT INITIATIVE

The third initiative is pest management. Producers tell us that they need the research community to develop the science and technologies that will allow them to control pests in an environmentally responsible manner and to meet increasingly stringent food safety standards while remaining economically viable.

Last October, in response to these concerns, the Department established the Office of Pest Management Policy within ARS. The fiscal year 1999 pest management initiative encompasses USDA's

multiyear integrated pest management initiative that relates directly to the Department's national goal for the adoption of IPM practices on 75 percent of U.S. cropland by the year 2000. The initiative includes increases to support enhanced research in biocontrol alternatives to pesticides and new control technologies, as well as transfer of the new technologies to producers. This is a very important and critical element in this process.

CIVIL RIGHTS INITIATIVE

The last initiative that I would like to address this morning is civil rights. In December 1996, Secretary Glickman launched a major initiative to address the wide range of civil rights problems and concerns within the Department. The fiscal year 1999 REE budget for the agencies represents a serious response to these concerns that were raised by the Secretary, the USDA Civil Rights Action Team, as well as the National Commission on Small Farms.

The budget also reflects a recognition that the best future for agriculture is one that benefits from a diverse and talented scientific and technological work force. We have additional details about this particular initiative in our budget proposals.

These are the highlights of the four initiatives that span the agencies within REE. Fuller discussion of agency components of these initiatives can be found in the agencies' explanatory notes.

FISCAL YEAR 1999 PROPOSED FUNDING LEVELS

The Agricultural Research Service fiscal year 1999 budget request of $813 million is slightly lower than the $824 million for fiscal year 1998. Embedded in that decrease is a net increase of $32 million in research. Funding for the national research initiative under CSREES' budget request has increased by $33 million, to a total of $130 million, an increase of 34 percent. We realize, of course, that within that budget we also have a decrease of $9 million to a level of $850 million for the total agency budget.

ERS BUDGET

The Economic Research Service budget decreases from $72 million to $56 million in fiscal year 1999. ERS conducts research and analysis on the efficiency, efficacy, and equity aspects of issues related to agriculture, food safety, nutrition, and the environment and rural development.

NASS BUDGET

NASS' budget declines by $11 million due to the cyclical nature of the required census of agriculture funding.

In summary, I want to reiterate that, in the context of a balanced budget, the REE budgets reflect a continued strong commitment to investment in agricultural research, statistics, education, and extension. If U.S. agriculture is to continue to be dynamic and provide leadership in a very competitive global economy and if the American public is to continue to enjoy the high quality, safe, and nutritious products of agriculture that you spoke about a few minutes ago, then our national commitment to increasing the investment in research, education, extension, must continue.

We want to work closely with you and with the administration as we continue to increase our investment in that area, and we look for opportunities to share thoughts and discussion with you following today's hearings. We would, at this point, welcome any discussion and questions that you might have for the REE team.

Thank you, Mr. Chairman.

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much, Dr. Gonzalez.

Is it your wish that any of the other members of your panel make a statement at this point? My thought is we do have copies of statements.

Dr. GONZALEZ. We do have and they have been submitted for the record. I think what we would be ready to do is answer and discuss any of the questions that you might have.

[The statements follow:]

PREPARED STATEMENT OF DR. I. MILEY GONZALEZ

Mr. Chairman, Members of the Committee, I am pleased to appear before you to discuss the fiscal year 1999 budgets for the Research, Education, and Economics (REE) mission area agencies. I am accompanied by Acting Deputy Under Secretary, Dr. Eileen Kennedy, and the Administrators of the four mission area agencies: Dr. Floyd Horn, Administrator of the Agricultural Research Service (ARS); Dr. Bob Robinson, Administrator of the Cooperative State Research, Education, and Extension Service (CSREES); Dr. Susan Offutt, Administrator of the Economic Research Service (ERS); and Mr. Donald Bay, Administrator of the National Agricultural Statistics Service (NASS). Each Administrator has submitted written testimony for the record.

This is the first opportunity I have had to appear before this subcommittee since being confirmed as Under Secretary last July. Before we focus on the budget, I would like members of the Subcommittee to know that your advice is welcomed. We look forward to working with you to enhance and strengthen the already strong programs of the Research, Education, and Economics mission area of USDA. I would like to take just a moment to share with you my impressions of the mission area programs and where I think they lead us as we consider the REE budget for fiscal year 1999. I have a background rooted in Agriculture, as a producer and an educator. Since assuming the responsibilities as Under Secretary I have come to believe that Research, Education and Economics is the most critical Federal mission in agriculture because the continued success of agriculture in the world is dependent on knowledge. The combination of fundamental and applied research and statistics coupled with higher education and extension yields a powerful partnership that serves agriculture well.

The public demands that agriculture provide an affordable, nutritious, and safe food supply, and in doing so, conserve natural resources and assure social and economic progress in rural areas. I am committed to the REE mission area meeting these goals. Our research must continue to be the cutting edge for the benefit of all Americans. We plan to communicate these objectives to all Americans and not just those in the food and fiber sector.

The creation of the REE mission area in 1994 brought together the research, education, statistics, analysis and social sciences and captured the synergies across those functions and disciplines. We can see the fruits of the mission area structure in such diverse program areas as food safety and Integrated Pest Management (IPM).

Drawing on their distinct and complementary capacities, the REE agencies play critical roles in supporting the work of the agencies of other USDA mission areas. REE funded physical and biological research provides the scientific foundation for a vast array of advances being made in agriculture and related industries. For example, in 1997 ARS research resulted in 59 new varieties and 89 new germplasm lines of agricultural and horticultural crops released for use by farmers, ranchers, and home gardeners. REE's statistical and analytical programs enhance understanding of markets and market conditions. Working with USDA's Rural Development mission area, last year ERS prepared a report on rural credit which concluded that, in general, rural financial markets work reasonably well in serving the needs

of rural America. NASS recently assumed responsibility for conducting the Census of Agriculture that will provide valuable information about farm operations and the local economies of which they are a part. REE's education and extension programs work to strengthen the capacity of institutions serving minorities. CSREES awarded more than $1.4 million in grants to 13 Hispanic-Serving Institutions in 1997 to carry out programs needed to educate students capable of enhancing the nation's food and agricultural scientific and professional work force.

REE is committed to strengthening the linkages between the basic and applied agriculture research REE conducts and supports and the broader government-wide and national research agenda. REE brings to this larger agenda excellent cutting-edge research that complements similar excellence found elsewhere in government, at colleges and universities, and in the private sector. We welcome the opportunity to work with Congress and the Administration to promote these linkages through funding of research directed at broader priorities and initiatives.

The President's Food Genome Initiative, for which we are providing leadership, proposes just such a collaborative effort involving multiple Federal agencies and researchers in the academic community and the private sector. Such collaborations I believe, must and will, become the model that the research community adopts to address pressing, complex issues. Such approaches are effective and efficient and create partnerships in which all participants contribute to a common goal.

Working together, the REE agencies are finding that implementation of the Government Performance and Results Act of 1993 is providing a valuable process for enhancing the effectiveness of our programs. Last fall you received our strategic plans. REE and agency plans were generally well received, getting particularly high marks for their outcome-orientation. Last spring when we began work on the budget under discussion, the mission area used the five general goals common to our strategic plans to structure our discussion of proposed adjustments and increases. The process facilitated our looking across the agencies to see how the parts fit together and how they could be more effectively coordinated, while maximizing the unique contributions of each agency.

More recently, developing performance plans helped us systematically consider and describe, in the context of the strategic plans, what we were committed to accomplishing in fiscal year 1999. Within a short time you will receive the departmental performance plan with the four agency performance plans. I believe you will find these plans valuable in reviewing our current program and assessing our proposed budget from the outcome-oriented perspective of the five goals of our strategic plans—an agricultural system that is highly competitive in the global economy; a safe and secure food and fiber system; a healthy, well-nourished population; greater harmony between agriculture and the environment; and enhanced economic opportunity and quality of life for Americans. We welcome your suggestions for making future plans more useful.

I want to emphasize that the agency budgets were created through on-going conversations with our many stakeholders in and out of government. Over the course of the year, all of us at this table and many others from REE have met with people from the research community, producer and commodity group representatives, and members of associations focused on environmental, food safety, and nutrition concerns, to gain an understanding of their needs and recommendations as they relate to national needs and our programs. The National Agricultural Research, Education, Extension, and Economics Advisory Board, with its very diverse membership, also has provided valuable recommendations on the REE strategic plan and a draft performance plan, both of which have implications for the shape and content of these budgets.

We are committed to listening and, to the extent possible, being responsive to the concerns and recommendations voiced by our stakeholders. Clearly, funding constraints do not allow us to be as responsive to individual stakeholders as they or we might like. In general, I believe that we have met our responsibility to formulate a budget that is responsive to the concerns and interests of our diverse stakeholders. As importantly, it is a clear expression of our judgment of where the needs for Federal budget resources are the greatest.

REE'S FISCAL YEAR 1999 BUDGET

I would like to turn now to the fiscal year 1999 budget for the agencies of the Research, Education, and Economics mission area. First, I will discuss overall budget issues and then focus on several important initiatives that address high priority issues and problems.

The REE budget request for fiscal year 1999 is $1.826 billion, a net decrease of $47 million or 2.5 percent from fiscal year 1998. Within this total, the allocation for

research and development actually increases by $7 million or about 1 percent. The REE agency budgets were developed in the context of the Administration's commitment to achieving a balanced budget in fiscal year 1999. Within that context and taking into consideration the almost infinite number of worthy goals and problems REE could address, I believe the budget, in total funding and specific initiatives, represents a sound and balanced portfolio of public investments. In developing the budget, we have had to make difficult decisions to reduce and redirect resources or terminate valuable projects in order to fund others of higher priority within the established goals.

I believe it is important to reiterate that the return on public investment in agricultural research and development is very high. The decline in the percentage of disposable personal income we spend on food, sustained over many decades, is due in large part to increases in agricultural productivity, resulting from investments in research and development. Between 1948 and 1994 productivity in U. S. agriculture grew at an annual rate of 1.9 percent compared to 1.1 percent for non-farm businesses and 1.3 percent for manufacturing. Investments in research have also resulted in new understanding of the linkages between agriculture production and environmental conditions leading to new environmentally friendly production practices and technologies. Similarly, new discoveries about the ecology of human pathogens has led to an improved capacity to prevent and detect food-borne contaminants and to support the development of Hazard Analysis and Critical Control Point (HACCP) regulations. New understanding of both the nutrient content of foods and the nutritional needs of people has been central to our developing healthy dietary guidelines.

REE FISCAL YEAR 1999 INITIATIVES

I would like to focus on four high priority initiatives proposed in the REE agency budgets—the Food Genome, Food Safety, Pest Management and Civil Rights Initiatives. These initiatives are all closely aligned with the general goals of our strategic plans and contribute to the achievement of several goals.

Among the major challenges the nation will face in the 21st century are the need for increased high quality food production, a cleaner environment, and renewable chemical and energy resources. The President's Food Genome Initiative, a government-wide initiative in which USDA plays a major leadership role, will help achieve a safe and abundant food supply, meet the needs of a growing population worldwide and ensure the global competition of the U.S. agricultural industries in a more environmentally sensitive manner.

The Food Genome Strategy will vastly expand our knowledge of genomes of species of importance to the food and agricultural sector. The research will focus on efforts to understand gene structure and function which is expected to have considerable payoff in crop species ranging from rice to corn and animal species ranging from cattle to swine to poultry. Early efforts in the USDA food genomics work will concentrate on identification of economically important traits that increase yield, quality and disease resistance in plants, minimize the need for pesticides, and protect the environment.

The REE mission area has chaired the Interagency Working Group on Plant Genomics involving the Office of Science and Technology Policy, the Department of Health and Human Services, the Department of Energy and the National Science Foundation. In this role, REE brought together commodity group representatives and leading scientists to solicit their views. REE is in the final stage of developing a concept paper on USDA's role in Food Genomics that will provide a blueprint for future research. The paper will build on the genome research program already conducted under ARS and CSREES and will describe how the REE program will complement the food genome program within the National Science Foundation.

REE is carrying out considerable genetic research but it does not nearly meet the need. Therefore, as part of the President's initiative REE is requesting $40 million for food genome research, an increase of $19 million over an estimated $21 million in the fiscal year 1998 budget. The request would increase ARS's research program by $3.0 million to a total of $14 million. CSREES's would increase $16 million, with $6 million added to the current $10 million in the National Research Initiative and an additional $10 million in a new competitive Food Genome Research Program under proposed legislation.

Food safety is the second initiative I would like to address. Even though the U. S. food supply is one of the safest in the world, millions of citizens become ill each year due to foodborne pathogens. In addition, there is growing concern associated with the consumption of foods containing known or potentially harmful levels of natural toxins, such as aflatoxins.

The Administration has taken major strides to improve our current food safety systems. The recent implementation of HACCP is radically changing our meat and poultry inspection system. Research proposed in the fiscal year 1999 budget will bring us further in generating new knowledge to identify cost-effective technologies for prevention and detection of existing and newly emerging pathogens.

As part of the President's Food Safety Initiative, REE is currently co-chairing a National Science and Technology Council working group to develop a comprehensive and coordinated government-wide food safety research agenda. This coordinated research agenda, to be completed in May, should prove valuable in facilitating greater coordination across the research agencies and guiding the formulation of the fiscal year 2000 budget.

The REE component of the Food Safety Initiative in the fiscal year 1999 budget includes a total of $26 million in increased funding across ARS, CSREES, and ERS. The majority of the funds will focus on developing improved pathogen prevention and detection methods and other bioscience research in ARS and CSREES. ERS requests funds to better assess the cost of foodborne illness and to apply economic analysis in the development of more cost effective control methods. CSREES would also receive funding to expand education efforts for those involved in the food production system from farm to table.

The third initiative I would like to discuss is pest management. Effective pest management is an ever present and challenging facet of agriculture production. Increasing public value placed on environmental quality and growing public concern about food safety, only heighten the challenge of effective pest control. Producers tell us they need the research community to develop the science and technologies that will allow them to control pests in an environmentally responsible manner that also meets increasingly stringent food safety standards and is economically viable. That message is as clear this year as in the past. Enactment of the Food Quality Protection Act of 1996 (FQPA) adds to the need for research to develop biological controls and other technologies and production practices that effectively control pests while minimizing environmental stress and food contamination.

Last October, in response to this need, the Department established the Office of Pest Management Policy in ARS. This office will provide a coordinated Departmental approach to minor crops pesticide use, including coordinating USDA's response to EPA's data needs as it implements FQPA. Several of the programs with requested increases in the ARS and CSREES budgets would be coordinated by this office that is focusing principally on FQPA related issues.

Another component of the fiscal year 1999 pest management initiative is USDA's multi-year Integrated Pest Management initiative that relates directly to the Department's national goal for the adoption of IPM practices on 75 percent of U.S. cropland by the year 2000. The initiative includes increases to support enhanced research on biocontrol alternatives to pesticides and new control technologies, as well as to transfer the new technologies to producers. While considerable progress has been made in reaching the IPM goal, the gap between the discoveries made by the scientific community and the transfer of those discoveries and associated technologies to the producer is significant. Both the ARS and the CSREES budgets include funding requests to work with producers to test new technologies and practices and facilitate their adoption. These increases are critical to our harvesting the fruits of our investment in research to enhance environmental quality and food safety through producer adoption of IPM technologies and practices.

The last initiative I would like to address is civil rights. In December 1996 Secretary Glickman launched a major initiative to address a wide range of civil rights problems and concerns in the Department. The fiscal year 1999 REE agency budgets represent a serious response to these concerns raised by the Secretary, the USDA Civil Rights Action Team (CRAT), as well as the National Commission on Small Farms. The budget also reflects a recognition that the best future for agriculture is one that benefits from a diverse and talented scientific and technological work force. With this principle in mind, the CSREES budget includes increased funding for the 1890 and 1994 Land Grant colleges and universities that primarily serve minority populations. If agriculture is to attract those students, it must provide them the best opportunities to gain the knowledge and experience they need at the university or college they attend.

The ERS, NASS and CSREES budgets also include requests for increases that would support new activities that are responsive to the information and technology needs of historically underserved populations. The ERS's budget includes a request for funds to analyze the information needs, particularly market information needs, of small farms, many of which are disproportionately minority owned. Complementing this ERS increase, CSREES will initiate an integrated research, extension, and education competitive grants program for new technology development and transfer

to small farms. Proposed legislation is being submitted for this new integrated program. The NASS budget includes funds to collect data on pesticide use in nursery and greenhouse crops, where farmworker exposure is potentially high. These budget requests, most of which are part of the Department's Civil Rights Initiative, reflect a heightened awareness of our obligation to design and implement programs that are responsive to the needs of all our customers, including those historically underserved.

These are the highlights of four initiatives that span the agencies within REE. Fuller discussion of agency components of these initiatives can be found in the agencies' Explanatory Notes.

REE AGENCY FISCAL YEAR 1999 BUDGETS

I would like to turn briefly to the budgets of the four REE agencies. The Agricultural Research Service (ARS) fiscal year 1999 budget request of $813 million is slightly lower than the $824 million in fiscal year 1998. Embedded in that decrease is a net increase of $32 million in research, facilitated by a decrease of $43 million in buildings and facilities improvement funds. The budget also includes redirection of approximately $35 million in current programs to fund new high priority program initiatives. As the principal intramural biological and physical science research agency in the Department, ARS continues to play a critical role for the Department and the larger agricultural community. Results from ARS's fundamental research provide the foundation of applied and developmental research carried out in many public and private institutions. Drawing on its own and other fundamental research, ARS also conducts research to solve specific problems of national and regional importance and to meet the research needs of other USDA agencies.

The ARS fiscal year 1999 budget includes increases as part of the President's Human Nutrition Research Initiative. With every passing day, we learn more about the critical role of nutrition in promoting health and the number of diet-related diseases that could be mitigated with good nutrition. It is hard to overestimate the potential payoff to individuals in improved well-being and to the nation in enhanced economic productivity if all Americans were to adopt healthy diets. Due in part to this understanding, questions of nutritional outcomes are increasingly being integrated in all the ARS research programs. The increases in fiscal year 1999 funding support both fundamental research on the relationship of nutrition to development and enhanced data on nutrient content of foods and dietary patterns. The ARS budget also includes increases for climate change and *Pfiesteria,* as part of the President's Climate Change Technology and Clean Water and Watershed Initiatives.

The fiscal year 1999 budget proposes $36 million for the ARS building and facilities program, a decrease of $43 million from the fiscal year 1998 level. As the Subcommittee knows, the Strategic Planning Task Force on Research Facilities mandated in the 1996 Farm Bill has been established and has met several times. The Task Force is progressing in its work, which will be completed by May 1999 when it issues a report of its findings. In the meantime, we believe we must provide support for several projects with critical and immediate needs.

The ARS budget includes a total of $17.7 million in funding for three of its Regional Research Centers located at Peoria, Philadelphia, and New Orleans. All three centers are major research facilities built in the 1930's and need major infrastructure replacement and modernization. Another $9.1 million is requested for animal disease centers located at Plum Island, New York, and Ames, Iowa. Current biosafety and biocontainment standards and regulatory issues relating to environmental quality and energy conservation, are among many concerns that indicate both facilities are in very serious need of modernization. All of these planned renovations, as well as those for the Beltsville Research Center, the National Agricultural Library, and Grain Marketing Research Laboratory in Manhattan Kansas, are the product of careful planning over several years. The increase of $4 million for construction of the Melaleuca Research and Quarantine Facility at Ft. Lauderdale, Florida, reflects the Administration's continuing commitment to restoration of the Everglades ecosystem and was designated by the Administration's South Florida Ecosystem Task Force as a top priority.

The Cooperative State Research, Education, and Extension Service's (CSREES) budget decreases by $9 million to $850 million in fiscal year 1999. Funding for the National Research Initiative (NRI), the Department's hallmark competitive research grants program, is increased by $33 million to $130 million, an increase of 34 percent. The Administration continues to believe the competitive research grant programs, such as the NRI, provide the most effective mechanism for eliciting and supporting the most meritorious science focused on high priority research issues and conducted within the vast research community across the country. The increases in

the NRI will emphasize expanded research in food genomics as part of the Administration's Food Genome Initiative, food safety in support of the President's Interagency Food Safety Initiative, and environmental quality. Focusing the NRI increases on these three areas of investigation indicates the importance the Administration places on these research programs. In providing critical funding to the research, education, and extension programs of the Land Grant Universities and other universities and organizations across the country, CSREES continues to play a central role in helping generate new knowledge and technology and in facilitating the transfer of that knowledge and technology to those who ultimately use it.

Consistent with the President's commitment to improving our children's well-being, the fiscal year 1999 budget includes an increase in CSREES's Children, Youth and Families At Risk (CYFAR) program. Designed to empower youth, parents, and community leaders to take responsibility for their own lives and that of their communities, the additional funding will restore CYFAR to its fiscal year 1995 level.

The Economic Research Service's budget decreases from $72 million to $56 million in fiscal year 1999. As the Department's principal intramural economics and social science research agency, ERS conducts research and analysis on the efficiency, efficacy, and equity aspects of issues related to agriculture, food safety and nutrition, the environment, and rural development. The decreased funding level reflects the return of the food program studies to the Food and Nutrition Service. The fiscal year 1999 proposed budget supports new or enhanced research of $1.5 million on the impact of electric utility deregulation on rural areas, market information needs of small farms (as part of the Civil Rights Initiative), and food safety (as a part of the President's Interagency Food Safety Initiative.)

The National Agricultural Statistics Service (NASS) budget declines by $11 million due to the cyclical nature of required census of agriculture funding. With authorization to conduct the census passed into law, NASS is currently conducting the 1997 Census. Fiscal year 1998 is the peak funding year for this cycle of the census of agriculture, accounting for the decrease in the proposed fiscal year 1999 NASS budget. All data are collected in this fiscal year. As of late January, NASS had received approximately 1.2 million completed forms. The NASS budget includes proposals for three surveys, including a new aquaculture census that for the first time will provide national and state level data on aquaculture production.

The new, more market-oriented agriculture policy in the 1996 Farm Bill makes NASS's statistical data program more essential than ever. NASS's comprehensive, reliable, and timely data on U.S. agricultural commodities are critical for farmers, ranchers, and other agribusinesses to make informed production and marketing decisions in a highly competitive global market. Annually, NASS prepares 400 reports on more than 120 crops and 45 livestock items.

SUMMARY

In summary, I want to reiterate that, in the context of a balanced budget, the REE budgets reflect a continued strong commitment to investment in agricultural research, statistics, education, and extension. If U.S. agriculture is to continue to be dynamic and provide leadership in a very competitive global economy, and the American public is to continue to enjoy the high quality, safe and nutritious products of agriculture, then our national commitment to increasing the investment in research, education, and extension must continue. Thank you for this opportunity to share with you my thoughts about the mission area and its agencies' budgets. We welcome your questions.

PREPARED STATEMENT OF DONALD M. BAY

Mr. Chairman and members of the Committee, I appreciate the opportunity to submit a statement for this Committee's consideration of the fiscal year 1999 budget request for the National Agricultural Statistics Service (NASS). This agency was created in 1862 to provide factual information about the Nation's food and agricultural industry. Beginning in fiscal year 1997, NASS also has responsibility for the census of agriculture which was formerly conducted by the Bureau of the Census in the Department of Commerce.

Since the first crop reports were issued 135 years ago, tremendous change has taken place within the agricultural industry. However, each new season brings renewed interest in what will happen. What will farmers plant given the growing list of crops? How will weather affect crop yields? What changes are occurring in the livestock, poultry, and aquaculture industries? The need for relevant, accurate, timely, and impartial statistical information on United States agriculture has grown

during this information age as NASS is constantly faced with demands for more data. The transfer of the census of agriculture certainly enhances the quality and quantity of agricultural statistics available, as well as further strengthens NASS's State-Federal partnership.

This State-Federal cooperative program began 80 years ago and has successfully consolidated both staff and resources, thus eliminating duplication while meeting both State and Federal data needs through a single agency. This unique partnership also makes it possible to establish and maintain national standards to produce consistency in surveys conducted throughout the United States, while at the same time meeting the special needs of each individual State and county. Serving local agricultural data needs through NASS's 45 field offices which cover all 50 States further strengthens NASS's support of the five goals and outcomes stated in the Research, Education, and Economics (REE) mission area strategic plan.

The Nation's food and fiber industry employs one out of every six employees in the United States. The basic food and fiber statistical information provided by NASS supports all facets of the industry from producers through handlers, processors, wholesalers, retailers, and ultimately, food prices for consumers. Voids in relevant, timely, accurate data contribute to wasteful inefficiencies throughout the entire production and marketing system.

NASS estimates provide important information in support of the export of agricultural commodities. NASS estimates also contribute to providing fair markets where buyers and sellers alike have access to the same official statistics. This prevents markets from overly reacting to "inside" information which might unfairly influence market price for the gain of an individual market participant.

With the passage of the Federal Agriculture Improvement and Reform Act of 1996, a question might be asked as to how this legislation affects the NASS program. The first crop report was issued in 1842 in response to the need for producers and processors to know the expected supply of basic food commodities so that markets could properly reflect the true situation throughout the country. Today, with the end of most government price intervention mechanisms, commodity prices are even more heavily influenced by market information which NASS supplies. For that reason, the demand for agricultural statistics is increasing as producers make production decisions based solely on market information. Empirical evidence indicates that an increase in information improves the efficiency of commodity markets. Information on the competitiveness of our Nation's agricultural industry will become increasingly important as producers rely more on the world market for their income.

NASS's agricultural statistics are used throughout the agricultural sector to evaluate supplies and determine competitive prices for world marketing of U.S. commodities, which directly supports Goal 1 of the REE Strategic Plan: Through research and education, empower the agricultural system with knowledge that will improve domestic production, processing, and marketing to successfully compete in the global market.

Through new technology, the products produced in the United States are changing rapidly, which also means that the agricultural statistics program must be dynamic and able to respond to the demand for coverage of newly emerging products. For example, genetic engineering technology will be producing thousands of new varieties such as BT corn and cotton, and Roundup ready soybeans. Data users are already requesting information which would accurately measure the impact of these new varieties.

Not only are NASS statistical reports important to assess the current supply and demand of agricultural commodities, but they are also extremely valuable to farm organizations, commodity groups, and public officials who analyze agricultural policy, foreign trade, construction, and environmental programs, research, rural development, and many other activities. NASS numbers are scrutinized very closely by producers, agribusinesses, industry analysts, economists, investors, as well as government policy makers. As a result of this analysis, major decisions are made that affect the Nation's economy.

All reports issued by NASS's Agricultural Statistics Board are made available to the public at previously announced release times to ensure that everyone is given equal access to the information. NASS has been a leader among Federal agencies in providing electronic access to information. All of NASS's national statistical reports and data products, including graphics, are available as periodic printed reports, as well as on the Internet. They are also available annually in USDA's Agricultural Statistics, and major data series are available in the Statistical Abstract of the United States.

Beginning in fiscal year 1997, NASS received funding to conduct the census of agriculture every 5 years, On February 2, 1997, 68 of the 79 Bureau of the Census employees working on the census of agriculture program officially transferred to

NASS. This makes it possible to truly consolidate the existing NASS survey activities with the census of agriculture. The transfer of the responsibility for the census of agriculture to USDA streamlines Federal agricultural data collection activities and is expected to improve the efficiency, timeliness, and quality of data provided. The enactment of Public Law 105–113, the Census of Agriculture Act of 1997, has now officially transferred the authority for the census to USDA.

Statistical research is conducted to improve methods and techniques used in collecting and processing agricultural data. This research is directed toward providing higher quality census and survey data with less burden to respondents, producing more accurate and timely estimates to data users, and increasing the efficiency of the entire process. For example, NASS has been a leader in the research and development of satellite imagery to improve agricultural statistics. The NASS statistical research program strives to improve methods and techniques for obtaining agricultural statistics with an acceptable level of accuracy. The growing diversity and specialization of the Nation's farm operations have greatly complicated procedures for producing accurate agricultural statistics. Development of new sampling and survey methodology, along with intensive use of telephone and face-to-face contacts and computer technology enable NASS to keep pace with an increasingly complex agricultural industry. Considerable new research will be directed at improving the next census of agriculture to be conducted in 2003.

NASS performs a number of statistical services for other Federal, State, and producer organizations on a cost-reimbursable basis. In addition, NASS has an expanding international program to provide technical assistance to a number of countries on a cost-reimbursable basis.

MAJOR ACTIVITIES OF THE NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

The primary activity of NASS is to conduct surveys which include the collection, summarization, analysis, and publication of reliable agricultural forecasts and estimates. Farmers, ranchers, and agribusinesses voluntarily respond to a series of nationwide surveys about crops, livestock, prices, and other agricultural activities each year. Periodic surveys are conducted during the growing season to measure the impact weather, pests, and other factors have on crop production. Frequent surveys are also needed for food products that are perishable. Many crop surveys are supplemented by actual field observations in which various plant counts and measurements are made. Administrative data from other State and USDA agencies, as well as data on imports and exports, are thoroughly analyzed and utilized as appropriate. NASS prepares estimates for over 120 crops and 45 livestock items which are published annually in almost 400 separate reports.

Agricultural reports issued by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, major fruits and vegetables, floriculture, and selected specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices received by farmers for products; farm real estate values and land rental rates; prices paid by farmers for inputs and services; cold storage supplies; agricultural labor and wage rates; agricultural chemical usage; crop production cultural practices; and other data related to the agricultural economy.

The census of agriculture provides national, State, and county data for the United States on the agricultural economy every 5 years, including: number of farms, land use, production expenses, farm product values, value of land and buildings, farm size and characteristics of farm operators, market value of agricultural production sold, acreage of major crops, inventory of livestock and poultry, and farm irrigation practices. The census of agriculture is the only source for this information on a local level which is extremely important to the agricultural community. Detailed information at the county level helps agricultural organizations, suppliers, handlers, processors, and wholesalers and retailers better plan their operations. Important demographic information supplied by the census of agriculture also provides a very valuable data base for developing public policy for rural areas. The local detailed data provided by the census of agriculture which facilitates locality-based policy and business decisions supports Goal 5 of the REE mission area Strategic Plan: Empower people and communities, through research-based information and education, to address the economic and social problems facing our youth, families, and communities.

The NASS agricultural statistics program is conducted through 45 field offices servicing all 50 States. Nearly two-thirds of the agency's staff and resources are located in the field. All State offices operate under cooperative funding and 25 are collocated with State Departments of Agriculture or land-grant universities. This joint State-Federal program helps meet State and national data needs while minimizing

overall costs, eliminating duplication of effort, and reducing the reporting burden on farm and ranch operators. NASS's State Statistical Offices issue approximately 9,000 different reports each year.

NASS has developed a broad environmental statistics program under the Department's water quality and food safety programs. Until 1991, there was a complete void in the availability of reliable pesticide usage data. This became evident during the Alar situation with apples. In cooperation with other USDA agencies, the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA), NASS has implemented comprehensive chemical usage surveys that collect data on selected crops in selected States. Beginning in fiscal year 1997, NASS began survey programs to acquire more information on Integrated Pest Management (IPM), additional farm pesticide uses, and post-harvest application of pesticides and other chemicals applied to commodities after leaving the farm. These programs will result in significant new chemical use data, which will be important additions to the existing chemical use data base. These surveys also collect detailed economic and farming practice information for the purpose of determining the use of IPM practices as well as to analyze the productivity and the profitability of different levels of chemical use. Our farms and ranches manage half the land mass in the United States, underscoring the value of complete and accurate statistics on chemical use and farming practices to effectively address public concerns about the environmental effects of agricultural production. NASS's pesticide use survey program supports both Goals 2 and 4 of the REE Strategic Plan which relate to ensuring an adequate food and fiber supply and the promotion of food safety, and enhancing the quality of the environment.

NASS conducts a number of special surveys as well as provides consulting services for many USDA agencies and other Federal, State, and private agencies or organizations on a cost-reimbursable basis. Consulting services include assistance with survey methodology, questionnaire and sample design, information resource management, and statistical analysis. NASS has been very active in assisting USDA agencies in programs that monitor nutrition, food safety, environmental quality, and customer satisfaction. In cooperation with State Departments of Agriculture, land-grant universities, and industry groups, NASS conducted 135 special surveys in fiscal year 1997 covering a wide range of issues such as farm injury, nursery and horticulture, farm finance, fruits and nuts, vegetables, and cropping practices.

NASS provides technical assistance and training to improve agricultural survey programs in other countries in cooperation with other Government agencies on a cost-reimbursable basis. NASS's international programs focus on both developing countries, such as those in Asia, Africa, the Middle East, and Central and South America, as well as emerging democracies in Eastern Europe. Accurate information is essential in these countries for the orderly marketing of farm products. NASS works directly with countries undergoing the transition from centrally-planned to market economies by assisting them in applying modern statistical methodology, including sample survey techniques. This past year, NASS provided assistance to Argentina, Bulgaria, China, Colombia, Dominican Republic, Ethiopia, Kazakhstan, Mexico, Morocco, Nicaragua, Poland, Rumania, Russia, South Africa, and Ukraine.

NASS annually seeks input on improvements and priorities from the public through: displays at major commodity meetings, data user meetings with representatives from agribusinesses and commodity groups, special briefings for agricultural leaders during the release of major reports, and through numerous individual contacts. The Agency has made many adjustments to its agricultural statistics program, published reports, and electronic access capabilities as a result of these activities to better meet the statistical needs of customers and stakeholders.

FISCAL YEAR 1999 PLANS

The fiscal year 1999 budget request is for $107,190,000. This is a net decrease of $11,130,222 from the fiscal year 1998 current estimate.

The census of agriculture budget request for $23,741,000 includes a net decrease of $12,586,000. This amount reflects a reduction of $13,328,000 due to the cyclical nature of the census. The $23,741,000 includes the aquaculture census, the Agricultural Economics and Land Ownership Survey, census pay costs, and the census share of increased CSRS retirement costs. Fiscal year 1999 is the fifth and final year of the census of agriculture cycle. Activities in this year include final review of the census data, preparation of results for publication, and conduct of the horticultural specialties and irrigation special follow-on studies.

For fiscal year 1999, NASS has requested a 1-year increase of $500,000 and 2 staff-years to conduct an aquaculture census. This would provide, for the first time, detailed State and national data about aquaculture production. Aquaculture is a

fast emerging domestic industry responding to the expanding demand for seafood. The aquaculture census would collect data on type of production systems, type of products sold, species being raised such as food fish, shell fish, bait fish, oysters, clams, salmon, catfish, trout, fish eggs, fingerlings, and ornamental fish.

An increase of $100,000 and 1 staff-year is requested for 1999 to do the preparatory work needed to conduct the Agricultural Economics and Land Ownership Survey. This special survey was begun following the 1959 Census of Agriculture and has been repeated at about 10-year intervals. It provides the only State-level comprehensive data on agricultural land ownership, financing, and inputs by both farm operators and landlords. The fiscal year 1999 funding would provide for field testing an integrated program that eliminates duplication with the joint NASS/Economic Research Service's annual economic survey.

An increase of $1,400,000 and 10 staff-years is requested to conduct a pesticide use survey of the horticulture and greenhouse industries. NASS has successfully implemented comprehensive pesticide-use surveys that cover the major field crops, fruits, and vegetables grown in the United States. However, such data are lacking for the fast growing nursery and greenhouse industry. This industry, like the fruit and vegetable industry, employs a large number of hired workers. Therefore, it is especially important that this growing industry be included in the comprehensive reports on pesticide use as required under Section 1491 of the 1990 Farm Bill. Collection of these pesticide use statistics also supports a recommendation included in USDA's Civil Rights Action Team Report that addresses the needs of farm workers.

An increase of $1,435,000 for pay costs and $390,300 for retirement costs is requested.

NASS is realizing a decrease of $1,463,000 and 17 staff-years as a result of efficiencies in the agricultural estimates and research programs gained in assuming responsibility for the census of agriculture. This reduction reflects efficiencies which will be realized in the agricultural estimates program as a result of the census of agriculture. Efficiencies will be realized in the NASS annual estimates program in the areas of list frame development and maintenance, data collection, and data dissemination activities.

This concludes my statement, Mr. Chairman, and I will be happy to respond to any questions.

PREPARED STATEMENT OF DR. FLOYD P. HORN

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to present the Agricultural Research Service's budget recommendations for fiscal year 1999. I would like to state at the outset that I am very pleased with the research proposals in this budget and the research initiatives recommended by the Administration. They are directed at some of this Nation's most serious problems involving food safety, human health, agricultural productivity, and the environment.

In fact, because of their importance to the Nation, the Administration has endorsed several of ARS' proposed research thrusts as "Presidential Initiatives," in food safety, human nutrition, and environmental health.

I would now like to turn to our budget recommendations for fiscal year 1999.

FISCAL YEAR 1999 BUDGET ESTIMATES

The ARS fiscal year 1999 budget recommends a research funding level of $776,828,000. This represents an increase of $32,037,000 over the fiscal year 1998 appropriations level. The fiscal year 1999 budget reflects funding increases for several new and expanded research initiatives as well as resources to finance critical operating costs. It also includes terminations of a number of selected research projects totaling $35 million to provide resources to finance the new research which is necessary to address the Nation's changing agricultural needs.

NEW AND EXPANDED RESEARCH INITIATIVES

The budget proposes $51,220,000 for new and expanded research initiatives to meet critical health and safety, nutrition, economic and environmental issues as follows:

Food Safety.—On January 25, 1997, the President announced a National Food Safety Initiative. As part of a multi-agency food safety program ARS is recommending an increase of $13,970,000 for pre- and post-harvest food safety. Food safety is a major concern of American consumers and remains a top priority of ARS. The Department is committed to ensuring the safety of our food supply.

The proposed increases in pre-harvest food safety will be used to develop new disinfection methods for improved sanitation of animal production facilities and waste handling systems. The recommended increases will also be used to develop new technology which will reduce the growth of pathogens on livestock and poultry during transport.

Post-harvest operations of slaughtering and processing can be a source of pathogen contamination of meat and poultry products. Similarly, pathogen contamination can occur during the processing of fruits and vegetables. In the area of post-harvest food safety, ARS is recommending additional research to develop: new handling systems and pathogen decontamination technologies for use in conjunction with packaging, storing, and processing fresh fruits and vegetables; chemical and physical agents to control pathogens (such as Salmonella and E. coli 0157:H7) in fresh produce; alternatives to heat-based preservation technologies that will preserve the fresh qualities of fruits and vegetables.

Human Nutrition.—For the second year increases are proposed for a Human Nutrition Initiative. What and how much people eat affects how they grow, develop, and age. Dietary intake is linked to risks for development of a variety of common, chronic diseases that are disabling and life threatening. For diseases linked strongly to diet, the cost of medical treatment and care exceeds $200 billion per year.

ARS is recommending an increase of $10,500,000 in human nutrition research. As part of the Initiative on Human Nutrition, the proposed increases will be used toward developing the means for promoting optimum health and well-being. Specifically, research will be conducted on the effects of diet on the immune system; the dietary patterns of human performance; and the role of nutrition throughout the life cycle (e.g., the relationship between diet and bone growth and cognitive and neurological development; the nutritional requirements that are needed to delay the onset of diseases associated with aging; and the factors that lead to obesity in children). The proposed increases will also be used to update the National Nutrient Databank, a database of the nutrient content of foods. Congress provided $5 million in 1998 for the Continuing Survey of Food Intakes by Infants and Children (CSFII). The budget proposes to redirect $3.5 million of this 1998 CSFII funding to other fundamental diet, nutrition, and nutrition-related disease research. In addition, $1.5 million would be used to expand the CSFII to increase the sampling size necessary to include population groups requiring special attention as EPA implements the Food Quality Protection Act of 1996.

Environmental Quality and Natural Resources.—The preservation of the Nation's natural resources has become increasingly critical. Because of its importance, ARS is recommending a total increase of $17,250,000 which supports several areas of research emphases.

Of the total recommended increase, $7,000,000 is targeted toward the President's Climate Change Technology Initiative. ARS's role in the initiative is directed at agricultural greenhouse gas emissions and the use of biomass for energy. The proposed increases will be used to identify and mitigate sources of greenhouse gas emissions, and to further develop plant feedstocks for biofuels.

In addition, $3,500,000 is proposed for research which will provide new information on pest biology, the impacts of pest control strategies on crop and animal production systems, and pest control technologies which provide additional safety and effectiveness while providing increased protection to the natural environment. The technologies which will be developed will provide the basic pest control components for implementing effective and sustainable Integrated Pest Management (IPM) programs. Part of this proposed increase will be used to establish the Office of Pest Management Policy which will serve as USDA's focal point for pesticide issues.

ARS is recommending $2,000,000 of additional funding to augment existing resources to accelerate efforts to find alternative solutions to methyl bromide. Grower groups will work with ARS to develop the priorities for a competitively awarded program focused on crops or uses most threatened by the loss of methyl bromide.

ARS is also recommending an increase of $2,000,000 for research on waste management problems associated with large animal production systems. The proposed increases will be used to address manure management, and animal well-being and behavior in confined animal production systems.

An increase of $2,000,000 is proposed for research on Pfiesteria as part of the President's Clean Water and Watershed Restoration Initiative. The recent outbreaks of Pfiesteria in the Chesapeake Bay tributaries have focused public attention on the potential role of agriculture in the degradation of these waters. The proposed funding will be used to develop new management practices to reduce the movement of nutrients and pathogens to surface and ground waters, and new methods for handling, storage, and field application of manure. Technologies will also be developed to detect and identify Pfiesteria, and to determine whether fish or shellfish affected

with Pfiesteria are safe for human consumption, rendering, or other processing for use in livestock and poultry feed.

Finally, ARS is recommending an increase of $750,000 for research in support of the South Florida Ecosystem Restoration. ARS is requesting funds to accelerate research to resolve the ecological, hydrological, and agricultural constraints on sustainable production in South Florida, and to develop biological control agents that control Melaleuca and other exotic or invasive plant species in the Everglades National Park.

Emerging Infectious Diseases.—During the past ten years, emerging and reemerging infectious diseases and exotic pests have become a major health concern. The globalization of trade, increased international travel, changing weather patterns, uncontrolled population growth of cities, highly intensive agriculture, and changes in farm practices are responsible. Once introduced, exotic (non-native) organisms can explode into epidemic proportions due to the absence of natural control agents and lack of resistance by host animals.

ARS is recommending an increase of $6,000,000 for this important research. Of this proposed increase, $3,700,000 will be used to develop diagnostic tests, novel genetic vaccines, and immune strategies to prevent outbreaks and the spread of exotic animal diseases (e.g., Johne's disease, Babesiosis, Vesicular Stomatitis, Bovine Spongiform Encephalopathy, Porcine Reproductive Respiratory Syndrome, Avian Influenza, and Anaplasmosis. Research will also be conducted on the development of technologies to protect livestock and humans against zoonotic diseases (e.g., tuberculosis, brucellosis, toxoplasmosis, trichinosis, and cryptosporidiosis).

The remaining $2,300,000 will be directed at preventing the introduction of emerging plant diseases and pests. Invasive, noxious, and weedy plants are a serious problem in the U.S. that annually cause billions of dollars in damages to the agricultural, recreational, and tourist industries. Research will be conducted to develop new strategies to combat wheat scab, karnal bunt, salt cedar, and sorghum ergot. In addition, the means to rear large numbers of new insect biological control agents will be developed. Remote sensing technology will also be developed to identify new or expanding weed infestations.

Food Genome Research.—ARS is recommending an increase of $3,500,000 in support of the Food Genome Initiative and the preservation of genetic resources which are necessary to ensure that an adequate supply of food and fiber will be available at a reasonable cost in the future. The investigations will focus on agriculturally-important crops and livestock and their associated microbes. Specifically, the proposed increases will be used to map genomes of agriculturally important plants, animals, and microbes to advance breeding programs. Research in this area will contribute to food production efficiencies and ensure the continued availability of genetically diverse collections of plant and animal germplasm.

Essentially, all the crops and livestock raised and used for food, fiber, ornamentals, and industrial feed stocks originated outside the United States, so the system of renewable resource production is highly dependent on germplasm introduced from other countries, some of which is endangered. Once lost, the germplasm cannot be fully reconstructed, so that sources of productive capacity and efficiency, and resistance to pests, pathogens, and environmental stress may be lost forever. A major and growing problem is the loss or "narrowness" of the gene pools of crop and livestock species.

ARS is also requesting the restoration of $913,000 for Evaluation Studies. These investigations provide a basis for policy and funding decisions in support of the mission area's research, education and economics programs.

ARS is also recommending $14,498,000 to finance the anticipated Federal pay raises and Civil Service Retirement System costs. These funds are critical to the ongoing operations of the Agency.

PROJECT TERMINATIONS

The fiscal year 1999 Budget recommends $34,594,000 of reductions in base programs, consisting of fiscal year 1998 proposed project terminations restored in the 1998 Act, as well as Congressionally-added projects. The ongoing projects that have been identified for termination have been deemed less critical to continue in light of higher priority research needs and limited resources. The savings achieved will be redirected to finance the agricultural research initiatives recommended in the President's budget.

BUILDING AND FACILITIES

The modernization and replacement of ARS' major research centers and laboratories remains one of the Agency's highest priorities. Continuing with the renovation

and replacement of the Agency's research facilities is critical if ARS is going to fulfill its mission and carry out its programs.

In fiscal year 1999, ARS recommends under its Building and Facilities account a total of $35,900,000 for the following projects:

Beltsville Agricultural Research Center, Beltsville, Maryland.—Established in 1910, the Center is widely recognized as one of the largest agricultural research facilities in the world. The Center carries out programs in natural resources and environmental sciences, plant and animal productivity, post-harvest research, and human nutrition. ARS is requesting $2,500,000 to continue the modernization of the Center's facilities which began in 1988. Specifically, the funds would be used for the design and construction of a new poultry production facility as well as finance a number of miscellaneous small projects.

National Agricultural Library, Beltsville, Maryland.—Built in 1968, NAL is the largest agricultural library in the world and one of four national libraries. NAL houses a collection of more than 2.2 million volumes in 50 different languages. In 1991, a comprehensive facility condition study of NAL was conducted. Numerous mechanical, electrical, and architectural deficiencies were identified. In fiscal year 1999, ARS is requesting $1,200,000 to begin construction of the first phase of the air handling unit replacement.

National Animal Disease Center, Ames, Iowa.—The Center is the primary USDA facility for conducting research on animal diseases that are of economic importance to U.S. agriculture. Constructed in 1961, the facilities are antiquated and in need of modernization. ARS is requesting $5,600,000 to initiate rehabilitation of the 80 buildings and supporting infrastructure of the Center. In fiscal year 1999, the funds would be used for design and construction plans for repair projects, including the repair of the contaminated waste collection piping system and treatment plant for infectious agents.

ARS Regional Research Centers, Peoria, Illinois; Philadelphia, Pennsylvania; and New Orleans, Louisiana.—The regional research centers were constructed in the late 1930's. All major building systems—heating, ventilation, air conditioning, electrical, roofs, and infrastructures (i.e., paving, steam and water lines, and waste treatment disposal systems)—have either reached or passed their useful life expectancy. ARS is requesting $8,400,000 for its Center in Peoria. The funds will be used to continue the modernization program. Similarly, ARS is requesting $3,300,000 and $6,000,000 for modernization programs at the Philadelphia and New Orleans Regional Research Centers, respectively.

Grain Marketing and Production Research Center, Manhattan, Kansas.—The Center conducts research on a broad range of technical problems in domestic and international marketing, handling, and storage of grains. In 1990, a facility condition study identified numerous deficiencies in all of the Center's buildings. ARS is requesting in fiscal year 1999, $1,400,000 to continue with the renovation program.

Plum Island Animal Disease Center, Greenport, New York.—Plum Island conducts state-of-the-art research on foreign animal diseases which are an ongoing threat to the U.S. It is the only facility in the Nation authorized by Congress to carry out such research. In 1989, ARS developed a long range plan for the repair and maintenance of the Center's 23 buildings and supporting infrastructure. In fiscal year 1999, ARS is requesting $3,500,000 to continue with the phased plan to renovate and modernize the Center.

Melaleuca Research and Quarantine Facility, Ft. Lauderdale, Florida.—The exotic weed tree Melaleuca, introduced in the 1930's, now covers tens of thousands of acres of South Florida's fragile wetlands. Melaleuca can be controlled with the aid of biological control agents from Australia. ARS is proposing $4,000,000 for the construction of a Melaleuca research and quarantine facility in support of this research. Construction of this facility has been designated by the Administration's South Florida Ecosystem Restoration Task Force as one of its highest priorities to ensure the restoration of the Everglades National Park.

CLOSING REMARKS

ARS' challenge is to bring the most advanced research and technologies to bear on some of this Nation's most recent and difficult problems, in food safety and health, human nutrition, agricultural productivity and the environment. In a larger sense, its challenge is to continue solving problems for agriculture, its producers and consumers, and meet the food and fiber requirements of a growing population in a way that is safer, more efficient, and more nutritious.

ARS has completed a 2½ year long process of developing a new Strategic Plan that embodies the spirit and letter of the Government Performance and Results Act of 1993. The new plan focuses on the outcomes of the Agency's research activities,

organized around the five broad goals identified in the Strategic Plan of the Research, Education, and Economics mission area. The new strategic plan went into effect on October 1, 1997, and the Agency developed its first Annual Performance Plan, as required by GPRA. The Annual Performance Plan describes what ARS will accomplish in fiscal year 1998 and fiscal year 1999 in measurable terms that will demonstrate progress towards reaching the Agency's goals.

Mr. Chairman, this concludes my prepared remarks. I will be happy to answer any questions you may have.

PREPARED STATEMENT OF SUSAN E. OFFUTT

Mr. Chairman and members of the Committee, I am pleased to have the opportunity to present the proposed fiscal year 1999 budget for the Economic Research Service.

MISSION

The Economic Research Service provides economic and other social science analysis on efficiency, efficacy, and equity issues related to agriculture, food, the environment, and rural development to improve public and private decision making.

BUDGET

ERS's appropriation for 1998 of $71.6 million consists of the 1997 appropriation level ($53.1 million) and an increase of $18.5 million to evaluate food stamp, child nutrition, and WIC programs. ERS continues implementation of its streamlining strategy and plans to maintain staff in 1998 at its current level of 554 full-time equivalents. ERS continues to make full use of early-out and buy-out authorities. Since October 1993, the ERS staff has been reduced by 241 full-time equivalents, including reductions in 1998 through 19 buyouts. In the future, ERS must manage its staff levels to maintain its non-salary program of agricultural data purchases and cooperative university research necessary to support its analytical program.

The agency's request for 1999 is $55.8 million, a net decrease of $15.8 million over 1998. The decrease consists of five parts: a $1.3 million increase for pay raises and contributions to the CSRS retirement fund; a $0.9 million increase for estimating the benefits of food safety; a $0.3 million increase to meet the analytical information needs of small farmers, niche marketers, other casualties of an industrializing agricultural sector; a $0.2 million increase to assess the potential impacts of electric utility deregulation; and an $18.5 million decrease for evaluations of food stamp, child nutrition, and WIC programs. When he signed the Agriculture Appropriations bill, the President stated that, "I am concerned about the provision of this bill that alters the administration and funding for research on nutrition programs serving the poor and disadvantaged. The research needs of these important programs should continue to be addressed in the context of the programs' administration." This budget follows through on these concerns and restores funding for WIC, Food Stamps, and Child Nutrition research to the Food and Nutrition Service.

Food Safety.—ERS proposes an interagency research effort to strengthen our understanding of the costs of foodborne illness and the benefits and costs of programs and policies to improve the safety of the Nation's food supply. This initiative is designed in accordance with the President's Food Safety Initiative, and is based on activities underway as part of this initiative.

National Estimates of Foodborne Illness and their Economic Costs from Sentinel Site Survey Data.—The initiative includes funding for eight regional data collection efforts. We will work with staff of the Centers for Disease Control and Prevention to develop new estimates of the national incidence of foodborne disease, the distribution of illness among subpopulations, and morbidity and mortality rates for specific illnesses. We will use these new data to refine our estimates of the costs of illness from specific foodborne diseases, to narrow the confidence intervals for specific cost-of-illness measures, and to evaluate the distribution of these costs among subpopulations.

Risk/Benefit Assessment of Pathogen Control Options.—The initiative also includes funding for expanded risk assessment. To perform benefit/cost analysis of control options for improving food safety, economists need data from other scientific disciplines. The best way to further this multidisciplinary exchange is to set up a formal collaboration among groups of scientists. Economists from ERS will work with scientists from other USDA agencies, FDA, CDC and academia to bring a systems view to their analyses of options for pathogen control from farm to table. The goal is to provide economic analysis of pathogen control options to determine which

controls are most cost-beneficial. Application of risk modeling to food safety is a new field. Risk assessment models (such as fault-tree analysis and probabilistic-scenario analysis) could be used to identify where pathogens gain entry into the food chain and where control efforts would be most cost-effective. By incorporating the results of risk assessment in our economic analysis of pathogen control options, we will further enhance our understanding of the economic consequences of specific food safety policies (such as HACCP, safe handling labels, and consumer education).

Completion of activities outlined in this initiative will yield improved economic assessment of policies and programs designed to improve the safety of the Nation's food supply. This will result in improved economic performance of the food sector, as the costs of achieving food safety goals and the attendant economic burden on farmers, processors, distributors, and retailers are minimized. This will also result in increased cost savings to consumers and the general economy as the research results are used to maximize the public health benefits of public and private efforts to improve food safety.

Information Needs of Small Farmers.—ERS proposes to organize and lead an interagency research activity to comprehensively assess the USDA's role in providing analytically based information on agricultural markets to small, limited-resource, and socially disadvantaged farmers, in the context of an interagency market information program. Specifically, the study will determine: (a) whether and how the agricultural market information needs of domestic producers and marketers vary by scale of operation, organizational structure, or demographics; (b) whether, given this new knowledge, it appears that USDA market information programs provide information that meets some subgroups' needs better or worse than others, and if any revealed differentiation in service is warranted; (c) the extent to which private sector analytical and information services do or can serve various subgroups' needs for market information; and (d) whether and, if so, in what manner ERS and other USDA agricultural market information programs require reform or modification to accommodate the new public sector role in a modern agricultural economy. Subsequently, plans would be designed and implemented to reform and/or modify these programs in the manner suggested by the assessment.

In 1996 and 1997, ERS conducted a general assessment of the market for agricultural market information. While this study examined the use and value of information across several broad categories of public and private sector clientele, resources have not been available to conduct sampling to assess how utility and value might vary within groups as a function of size, economic class, or other features. Additional resources are a necessary prerequisite for any assessment aimed at segmenting the information client population to assure public service to unique and potentially underserved subgroups (e.g., small or disadvantaged farms, direct marketing firms, independent firms in otherwise highly coordinated industries, etc.).

The proposed effort will be planned by ERS, with input from an advisory group representing CSREES, WAOB, OCE, AMS, FSA, and FAS. ERS will perform the market research needed to assess the performance of its own and USDA's agricultural market information programs, with focus on the nature of the information generated and its utility to clients of different sorts, sizes, economic classes, and demographic characteristics. Following market data collection, analysis, and interpretation, the full set of agencies producing agricultural market information will need to be involved directly in the implementation of resultant recommendations.

By providing a sound understanding of how commodity market information needs vary among different sizes and types of agricultural producers and marketers, the study will assure that USDA's commodity market information programs are nondiscriminatory with respect to producers' and marketers' scales of operation, income brackets, races or ethnicities, and geographic locations (for locations characterized by small or disadvantaged enterprises). It will prevent small, niche, limited-resource and socially disadvantaged clients from "falling through the cracks" as commodity market information programs respond to the changing structure of American agriculture. It will thus allow these producers and marketers to be competitive by assuring them easy access to scale-appropriate, market-empowering information, regardless of their disassociation with large, integrated, or vertically coordinated markets where information is otherwise more readily available or affordable. This, in turn, assures a more robustly competitive sector overall. Without the study, attempts to accomplish these results would have to rely on anecdotes and supposition. With it, USDA will be armed with the knowledge required to ensure information-related competitiveness for small and disadvantaged, along with large and advantaged, market participants, as the American agricultural sector continues its divergent path towards a small number of large, highly commercial operations, and a large number of small and diverse operations.

Electric Utility Deregulation.—ERS proposes an interagency research activity with USDA's Rural Utilities Service (RUS) and the Department of Energy to expand REE's capacity to assess the potential impacts of electric utility deregulation on USDA's rural utility loan programs, the competitive position of rural businesses and communities, the viability of alternative power generation systems, and the well-being of rural customers.

ERS has considerable expertise and data available on rural industries, households, and communities, and has experience developing economic models and policy analysis on a wide range of issues. However, ERS currently lacks expertise and information on the electric utility industry sufficient to model deregulation's effects on rural utility customers in various regions of the country. With an expanded program, ERS and its cooperators will be able to assess the potential impacts of deregulation on USDA's rural utility loan programs, the competitiveness of rural businesses and communities, and rural households.

The products of this research will enable RUS to better evaluate the likely effects of electric utility deregulation on the financial health of rural electric cooperatives, and, as a result, the prospective quality of the RUS loan and loan guarantee portfolio. The products of this research also will provide USDA with important information about the prospective effects of electric utility deregulation on farmer electric costs, electric costs for consumers in rural America, and on rural economic development. This information will be available to support the work of RUS and USDA as they participate in developing Administration policy on electric deregulation.

CUSTOMERS, PARTNERS, AND STAKEHOLDERS

The ultimate beneficiaries of ERS's program are the American people whose well-being is improved by informed public and private decisionmaking leading to more effective resource allocation. ERS shapes its program and products principally to serve key decision makers who routinely make or influence public policy and program decisions. This clientele includes White House and USDA policy officials and program administrators/managers, the U.S. Congress, other Federal agencies and State and local government officials, and domestic and international environmental, consumer, and other public groups, including farm and industry groups interested in public policy issues.

ERS carries out its economic analysis and research in four divisions and an Office of Energy. ERS depends heavily on working relationships with other organizations and individuals to accomplish its mission. Key partners include: the National Agricultural Statistics Service (NASS) for primary data collection; universities for research collaboration; the media as disseminators of ERS analyses; and other government agencies and departments for data information and services.

ERS CONTRIBUTIONS TO MISSION AREA GOALS

ERS shares five general goals with its fellow agencies in the Research, Education, and Economics mission area: a highly competitive agricultural production system, a safe and secure food supply, a healthy and well nourished population, harmony between agriculture and the environment, and enhanced economic opportunity and quality of life for all Americans. These goals are fully consistent with the U.S. Department of Agriculture mission.

A Highly Competitive Agricultural Production System in the Global Economy.—ERS helps the U.S. food and agriculture sector effectively adapt to changing market structure and post-GATT and post-NAFTA trade conditions by providing analyses on the linkage between domestic and global food and commodity markets and the implications of alternative domestic policies and programs on competitiveness. ERS economists analyze factors that drive change in the structure and performance of domestic and global food and agriculture markets; provide economic assessments of competitiveness and efficiency in the food industry; analyze how global environmental change, international environmental treaties and agreements, and agriculture-related trade restrictions affect U.S. agricultural production, exports and imports; and provide economic analyses that help identify competitive and environmentally sound new crops and uses. ERS will continue to consider how the potential for increased commodity price and farm income variability affects market performance and interacts with Federal policies and programs. These analyses will include short- and long-term projections of U.S. and world agricultural production, consumption, and trade. In addition, ERS will continue preparation for the 1999 World Trade Organization mini-round (expected to focus on agriculture) by analyzing the economic effects of Uruguay Round policy disciplines; assessing the economic effects of state trading and tariff-rate quota allocations; and assessing regional trade initiatives. In this latter category, ERS experts will take a more in-depth look at China's

evolving role in world agricultural markets. ERS will conduct research on the changing structure (for example, vertical integration, concentration, and contracting) of the food marketing chain and will also analyze the effectiveness and use of alternative marketing strategies and risk management tools in mitigating farm income risk, including tools available from both private and public sector providers.

ERS analyses can help guide and evaluate resource allocation and management of public sector agricultural research, a key to maintaining increases in productivity that underlie a strong competitive position for U.S. farmers. ERS economists track and endeavor to understand the determinants of public and private spending on agricultural R&D; evaluate the returns from those expenditures; and consider the most effective roles for public and private sector research entities.

A Safe and Secure Food Production System.—ERS focuses on improving the efficiency and effectiveness of public policies and programs designed to protect consumers from unsafe food by analyzing benefits of safer food and the costs of food safety policies; efficient and cost-effective approaches to promote food safety; and how agricultural production and processing practices affect food safety, resource quality, and farm workers' safety. This research helps government officials design more efficient and cost-effective approaches to promote food safety. Specifically, the ERS research program provides detailed and up-to-date appraisals of the benefits of safer food, such as reducing medical costs and costs of productivity losses from foodborne illnesses caused by microbial pathogens. In addition, ERS has undertaken new research on the costs to industry and consumers of alternative food safety policies, including assessment of the distribution of costs across the food industry and across demographic groups.

Understanding how food prices are determined is increasingly important in responding to domestic and international market events and opportunities that promote the security of the U.S. food supply. As the farm share of the food dollar declines, accurate retail price forecasts depend more heavily on understanding the marketing system beyond the farmgate. ERS systematically examines the factors that help set retail prices, including an assessment of the roles of the transportation, processing, manufacturing, wholesaling and retailing sectors, the impact of imports and exports, and linkages to the total economy.

A Healthy and Well-Nourished Population.—ERS helps identify efficient and effective public policies that promote consumers' access to a wide variety of high-quality foods at affordable prices. ERS economists analyze factors affecting dietary changes; assess impacts of nutrition education and the implications for the individual, society and agriculture; and provide economic evaluations of food nutrition and assistance programs. The Agency studies the implications for producers and consumers of movement towards adoption of the dietary guidelines; the trends and determinants of American's eating habits; evolution of food product trade; and the determinants of food prices. Analysis of nutrition education efforts considers what kinds of information motivate changes in consumer behavior, the food cost of healthy diets, the influence of food assistance programs on nutrition, and the implications of healthy diets for the structure of the food system. And, because trade in high valued agricultural products, including processed food, now exceeds the value of bulk commodity flows, ERS will spend more time to break down the components of these trade flows, understand relationships to international investment and strategic behavior of U.S. food firms; and investigate the implications for U.S. consumers of a globalized food marketplace.

Harmony in Agriculture and the Environment.—In this area, ERS analysis helps support development of Federal farm, natural resource, and rural policies and programs that promote long-term sustainability goals, improved agricultural competitiveness, and economic growth. This effort requires analyses on the profitability and environmental effects of alternative production management systems and on the cost effectiveness and equity, of public sector conservation policies and programs. ERS analysts focus on evaluating the benefits and costs of agricultural and environmental policies and programs in order to assess the relationship between improvements in environmental quality and increases in agricultural competitiveness. In this vein, ERS provides economic analyses on the linkages between biodiversity and sustainability issues and agricultural performance, competitiveness, and structure. In the energy and environment area, the ERS Office of Energy provides departmental leadership, oversight, coordination, and evaluation for energy and energy-related policies and programs affecting agriculture and rural America.

Enhanced Economic Opportunity and Quality of Life for Americans.—The ERS contribution to improving opportunity and quality of life in the U.S. is based on analysis that identifies how investment, employment opportunities and job training, and demographics affect rural America's capacity to prosper in the global marketplace. ERS economists analyze rural financial markets and how the availability of

credit, particularly Federal credit, spending, taxes, and regulations influence rural economic development. ERS analyzes the changing size and characteristics of the rural and farm populations and the implications of these changes in human capital, including skill development, on the performance of rural economies. In addition, ERS studies the economic structure and performance of non-farm economic activities in rural areas, including the fairly widespread rebound in population growth in non-metropolitan counties. The relevant analyses will involve monitoring rural earnings and labor market trends with emphasis on regional and other disaggregations in order to provide insight into the determinants of variation in trends among non-metro counties. Such work should yield a better understanding of the factors that promote rural vitality and the opportunities for effective public sector intervention.

Because the effects of changes in welfare programs may vary between rural and urban residents due to differences in labor markets and other aspects of a regional economy's structure, ERS social scientists will track implementation of recent program changes to understand any differential impacts. In particular, ERS analysis can help anticipate changes in participation across assistance programs, including those for which USDA has primary responsibility, in rural housing and in food. Another opportunity for understanding whether rural America faces unique circumstances will come with analysis of a recently-completed survey of the rural manufacturing sector.

ERS continues to monitor the financial situation of the farm sector, establishing farm business organization and performance benchmarks. This task includes study of the financial position of farmers who employ technological advances and innovative risk management strategies in their businesses, compared with the financial position of farmers who use more traditional approaches. Previous work on the use of production and marketing contracts by farmers will be extended to identify contractors by class to better define the role of non-farm businesses in the industrialization of farms. Analyses of financial performance will also measure the comparability of returns between farm and non-farm small businesses and assess the financial viability of commercial and non-commercial size farm operations.

CLOSING REMARKS

I appreciate the support that his Committee has given ERS in the past and look forward to continue working with you and your staff to ensure that ERS makes the most effective and appropriate use of the public resources. Thank you.

PREPARED STATEMENT OF DR. B.H. ROBINSON

Mr. Chairman and Members of the Committee, I appreciate the opportunity to present the proposed fiscal year 1999 budget for the Cooperative State Research, Education, and Extension Service (CSREES), one of four agencies in the Research, Education, and Economics (REE) mission area of USDA.

CSREES provides leadership for and cultivates partnerships in research and education among USDA, the land-grant university system, and other research and education institutions.

CSREES advances and integrates agricultural research and education through our partnership with the land-grant universities. In this partnership, 75 universities work in close cooperation with CSREES, employing more than 9,500 scientists, 9,600 extension educators, and engaging nearly 3 million volunteers supporting activities in the 50 states (3,150 counties), the District of Columbia, and six territories (Puerto Rico, the Virgin Islands, Guam, American Samoa, the Northern Marianas, and Micronesia). The scientific and education resource base of the 1890 Historically Black and the 1862 land-grant universities is expanded through the participation of scientists and educators from the 29 Native American land-grant institutions, and from non-land-grant institutions and the private sector.

The programs supported by CSREES and carried out through our university partners play a central role in meeting what I believe to be two fundamental challenges facing agriculture today. The first challenge is to achieve long-term sustainability in agricultural production while simultaneously maintaining competitiveness and profitability, minimizing negative environmental effects, and developing and improving strong communities. The second challenge is to respond to broad public concerns for a safe, nutritious, and accessible food supply.

To meet these challenges, our programs reflect the five Strategic Goals to which the REE mission area is committed: (1) an agricultural production system that is highly competitive in the global economy; (2) a safe and secure food and fiber system; (3) a healthy, well-nourished population; (4) greater harmony between agriculture and the environment; and (5) enhanced economic opportunity and quality of

life for Americans. These goals are the framework for the CSREES Strategic Plan, the fiscal year 1999 GPRA performance plan and, of course, the fiscal year 1999 President's budget request for CSREES.

I would like to present several examples of outstanding research, education, and extension accomplishments resulting from support provided through our programs as they relate to the five REE/CSREES Strategic Goals. I believe that these "success stories" clearly show that the activities conducted by the land-grant university system and other partner institutions significantly contribute to the ability of U.S. agriculture to maintain its worldclass competitive edge. The Committee may be interested to know that CSREES and its university partners are collaborating on the development of a World Wide Web site that contains impact statements to showcase how programs supported by the USDA/land-grant university partnership benefit U.S. agricultural research and education; this site is available for public access at http://www.reeusda.gov/success/impact.htm. Although many activities conducted by our partners contribute to multiple goals, the following examples are aligned under the Strategic Goals to which they make the most significant contribution:

Goal 1: An Agricultural Production System that is Highly Competitive in the Global Economy

In cattle, 30–40 percent of pregnancies are lost during the first 40 days of gestation. Research supported by the National Research Initiative and conducted at the University of Missouri and Texas A&M University has identified a protein, interferon-tau, which is produced by the developing embryo prior to implantation and acts as a biochemical signal to the mother's uterus to establish pregnancy in cattle and sheep. This protein, when given to nonpregnant cattle or sheep, extended the length of their reproductive cycle. Current studies are focusing on the potential use of the protein as a fertility drug to minimize early embryonic losses associated with insufficient production of the protein.

Goal 2: A Safe and Secure Food and Fiber System

Funding provided under the Smith-Lever 3(d) Food Quality and Safety program was used to develop and sponsor two National HACCP (Hazard Analysis and Critical Control Point) Education Conferences on "Forming Partnerships from Farm to Table." The conferences were designed to build and enhance partnerships among government, academia, industry, and consumers, and brought together state core teams who received training and education enabling them to develop and implement state planning strategies for HACCP training. Conference planning and coordination was a cooperative effort between Texas A&M University, Virginia Polytechnic Institute and State University, and Kansas State University.

Goal 3: Healthy, Well-Nourished Population

The nutritional status of participants in a program supported by Smith-Lever 3(d) Expanded Food and Nutrition Education Program (EFNEP) has improved due to intensive nutrition education instruction from the University of Massachusetts Extension Nutrition Educators. A behavior survey of more than 2,500 EFNEP participants indicated that behavior changes included: a 57 percent increase in recommended fruit consumption, a 34 percent increase in vegetable consumption, and 47 percent increase in the consumption of foods to meet the Recommended Daily Allowance for vitamin C. Improved nutrition practices resulting from this Massachusetts program included preparing foods without salt, reading nutrition labels for fat and sodium content, and ensuring that children eat breakfast.

Goal 4: Greater Harmony Between Agriculture and the Environment

An early project awarded under the USDA Food and Agricultural Sciences National Needs Graduate Fellowships program to North Carolina State University resulted in five exceptional graduate students' completing Doctoral degrees. The accomplishments of this project have been realized as these students are now employed in positions significantly impacting the food and agricultural sciences. These students are President of a soil and water engineering consulting company in Kentucky; Associate Professor at Texas A&M University, an Extension Specialist in Agricultural Engineering; President of a consulting company in Washington that deals with the impact of forestry programs on water quality and soil erosion; Chief Engineer for a State district in Florida; and Soil/Water Engineer for a consulting firm in California.

Goal 5: Enhanced Economic Opportunity and Quality of Life Among Americans

The Blackfeet Reservation comprises 1.2 million acres of rangeland in northwestern Montana. The location of the reservation limits the feasibility of alternative agricultural enterprises. The reservation has the range resources to greatly expand the

number of individually-owned cattle heads, and human resources to expand the number of ranchers. In the first 5 years of the program, with funding from the Smith-Lever 3(d) Extension Indian Reservation Program, Montana Cooperative Extension Service agents have assisted 38 young producers in acquiring over $220,000 in youth agriculture loans, in the purchase of 385 head of cattle, and in the formation of business plans, as well as livestock production. These livestock should increase aggregate tribal income by at least $20,000 per year while herds are being expanded. Assuming eventual net incomes of $30,000 per year, these ranchers represent an increase in the aggregate tribal income of over $1 million per year. Such income will contribute to improved quality of life for the ranchers and for their immediate and extended families. Income stability and improved quality of life will provide an example for family members and others. A cadre of successful private operations will foster increases in such enterprises. Successful marketing strategies will develop cooperative efforts.

Continuing its implementation of GPRA, CSREES is working with our State partners to develop annual performance plans with stated goals and targets; implement programs and projects designed to achieve or work toward achievement of goals; collect and assemble data at the State, regional, and National level; and integrate this information to assess accomplishments and extend the planning process.

CSREES is entering its fourth year after the merger of two former agencies, the Cooperative State Research Service and the Extension Service, and we continue to be successful in enhancing critical linkages between research and extension. Our land-grant university and other partners conduct fundamental and applied research to gain the knowledge needed to address problems in the development and sustainability of agriculture and forestry and in the overall quality of life of our citizens. Programs conducted by the Cooperative Extension System use this research-based guidance as the basis for practical decisionmaking by producers, individuals, families, and communities.

The Administration is proposing that a new authority be established for an Integrated Research, Extension, and Education Competitive Grants Program. In fiscal year 1999, we are requesting $4 million for a Small Farms Initiative under the Integrated Research, Extension, and Education Competitive Grants Program. The Small Farms Initiative will benefit socially disadvantaged groups through the integration of research and education by supporting: (1) targeted research, outreach, and technology transfer/adoption to meet the needs of this diverse clientele; (2) needs assessments; (3) improved access to information for and delivery of programs to small farms; and (4) development of a small farms information system.

The Administration has also proposed new legislation for a Food Genome Initiative, to be funded in fiscal year 1999 at a level of $10 million. The Initiative will be coordinated with NRI grants and ARS research activities. This Initiative represents a targeted investment in the National Food Genome Strategy, which has two major components. In the first component, the Plant Genome Initiative, USDA would be the lead Federal agency, working with the National Science Foundation and the Department of Energy, to focus on crop species of major, agriculturally important plants. In the second component of the National Food Genome Strategy, the Animal Genome Initiative, scientists would be able to take advantage of ongoing work at the National Institutes of Health on the Human Genome Initiative to improve our understanding of animal genes, their genetic capabilities, and their genetic structures. These efforts will permit development of new genetic technologies for improvement in yield, composition, and quality of the domestic agricultural output.

FISCAL YEAR 1999 BUDGET REQUEST

The budget submitted to Congress by the President requests $849,840,000 for the Cooperative State Research, Education, and Extension Service. This request is a decrease of $9.1 million or approximately 1 percent, from the current appropriation, and comprises specific program increases and decreases. Highlights of the proposed increases in the fiscal year 1999 CSREES Budget are:

FOOD SAFETY

An increase of $3 million is proposed in fiscal year 1999 for the second year of the Food Safety Special Research Grants Program which supports the President's National Food Safety Initiative. We thank the Congress for providing $2 million to initiate the program in fiscal year 1998. In 1999, research supported under this program will target select populations, such as children, the elderly, immunocompromised, or those suffering from chronic disease, who may be more vulnerable to foodborne illness and will address both biological and behavioral science

issues, including food handling and safety practices, purchasing and storage patterns among populations, and factors increasing risk of food-borne illness. These efforts will underpin the education activities supported by the Food Safety Education Program under the Smith-Lever 3(d) funding mechanism for which we are proposing an increase of $5 million. Funding provided for the Food Safety Education Program will enable CSREES, in cooperation with ARS and other Federal agencies, to increase producer, processor, and consumer awareness, understanding, and information regarding food safety.

PEST CONTROL

The CSREES fiscal year 1999 budget proposes an increase of $15.5 million for our research and extension-related pest control programs in contribution to USDA's Integrated Pest Management (IPM) Initiative, a multiagency effort to develop strategies to bring 75 percent of the nation's cropland under integrated pest management practices by the year 2000. Increases are proposed for the following programs: Pest Management Alternatives; Expert IPM Decision Support System; research and extension Integrated Pest Management; IR–4 Minor Crop Pest Management; Pesticide Applicator Training; and extension Pesticide Impact Assessment. The ability of the Nation's agricultural production system to keep pace with domestic and global demand for food and fiber depends on access to safe, profitable, and reliable pest management systems. Farmers and pest managers have fewer chemical control options available to them than they did at the beginning of the decade, and this trend is likely to continue at an accelerated rate. In addition, the Food Quality Protection Act will have significant impact on pest management systems in the United States over the next decade. "Minor use" crops (high value crops grown on relatively few acres) will be particularly hard hit. It is essential that farmers and pest managers be provided with new pest management tools and better information to remain competitive in today's global marketplace and assure consumers access to a wide range of safe, affordable food. To meet this challenge effectively and efficiently, the CSREES pest-related programs will be coordinated with the activities of the USDA Office of Pest Management Policy along with other IPM-related activities undertaken by the Department.

SUSTAINABLE AGRICULTURE

An increase of $2 million is proposed for the research and education component of the Sustainable Agriculture Research and Education (SARE) Program. This increase will allow expansion of the knowledge base related to more sustainable practices. Many of the projects supported by SARE emphasize helping farmers and ranchers save money through grazing system improvements that also protect our natural resources. Fiscal year 1998 marks the ten-year anniversary of Federal funding for the SARE research, education, and extension program. In the past decade, SARE has funded approximately 1,200 projects, most of which were led by university researchers working in concert with farmers, ranchers, and extension educators. In honor of the ten-year anniversary of SARE, a conference entitled, "Building on a Decade of Sustainable Agriculture Research and Education," will be held March 5—7 in Austin, Texas. The conference will bring together researchers, farmers and ranchers, agricultural extension agents and other educators, sustainable agriculture advocates, and other partners for informative sessions on sustainable agriculture and tours of farm and community, projects that are helping to bring about a more sustainable food system in central Texas. I believe that this conference is a fitting tribute to the impact the SARE program has had on U.S. agriculture.

NATIONAL RESEARCH INITIATIVE

The budget proposes to fund the NRI at $130 million, an increase of $32.8 million. The NRI is the USDA's largest competitive grants program that provides a critical investment for the future of American agriculture. We appreciate the Congress providing additional funding for the NRI in 1998. Agricultural research is needed to assure a sustained and bountiful harvest of agricultural products. It is also needed to meet the ever-changing preferences and demands of consumers, domestic and global, and to keep up with increases in both the population and economic status of people.

The NRI invests in those areas of research with the greatest potential for expanding the knowledge base needed to address issues that will face the agricultural and forestry enterprise. The NRI supports a broad spectrum of mission-linked agricultural research that results in practical outcomes.

The increase in the NRI will therefore focus on these key areas: food genome research, food safety, and environmental quality. Increased food genome research is

needed to improve plant and animal species to increase yields, reduce inputs such as fertilizers, pesticides and antibiotics, decrease production costs, and improve quality and safety. Also of particular concern to the American public is the safety of the food supply. The NRI responds to this need by expanding the science base for the Hazard Analysis and Critical Control Point (HACCP) approach to meat and poultry inspection to reduce food-borne illness due to microbial pathogens. The health of the environment also is a major concern to Americans. Research supported by the NRI leads to improved production practices and contributes to improved water quality, better soil quality and fertility, and sustained ecosystem health.

RESEARCH, EDUCATION, AND ECONOMICS INFORMATION SYSTEM

An increase of $1.2 million is proposed for REEIS to work on the system design and launch development of the REEIS prototype. This also will entail the enhancement of several current databases to make them more useful to REEIS users. An information needs assessment will be conducted in order to align REEIS products and services with information requirements of the agencies and their partners.

The Research, Education, and Economics Information System—REEIS—will be a valuable mechanism for helping the REE agencies meet the accountability standards mandated by GPRA and for enabling us to provide better delivery of comprehensive research, education, extension, and economics information to USDA, REE agencies, and our partners. The first REEIS National Steering Committee meeting was held in June 1997, and I am very pleased with the progress that resulted from that meeting. As a result of the Committee recommendations, an information audit of existing REE databases is being conducted. The first phase of the audit produced an on-line catalog of the major databases and provided specifications, through interviews with database managers, to conduct an assessment of additional databases or information which should be included. The second phase of the audit will build the data dictionary and provide specifications for a controlled vocabulary to facilitate coordinated user access to REEIS databases. Initial implementation activities are expected to be essentially completed by the end of the year 2000.

The second National Steering Committee meeting is scheduled for the week of February 23. Members of the National Steering Committee, the REE mission agencies and State partner institutions have been provided copies of the specifications for the needs assessment and controlled vocabulary. The Committee will review and approve progress to date and formulate the action plan and strategies for future tasks such as specifications for the REEIS system design and collection of accountability data.

USDA CIVIL RIGHTS INITIATIVE

A proposed increase of $9.3 million is included to address recommendations made in the USDA Civil Rights Action Team (CRAT) report of February 1997 to strengthen USDA's research and educational assistance to the socially disadvantaged and to address the needs of farmworkers. Increases are proposed for: (1) the Extension Indian Reservation Program to expand the presence of extension agents on Indian Reservations; (2) the 1890 Facilities Program to improve the quality of research, extension, and teaching facilities on the campuses of 1890 Institutions so that they are more comparable to facilities generally found on the campuses of 1862 land-grant universities; and (3) the Extension Services at 1994 Institutions to bring needed educational programs normally addressed under the broad mandate of the Cooperative Extension System to people served by Native American institutions. The Administration also is proposing that: (1) funding levels for the Hispanic Serving Institutions higher education program and the 1890 institutions research and extension formula programs be maintained at the fiscal year 1998 levels; and (2) as discussed earlier, a Small Farms Initiative be implemented under new legislation to be established through the reauthorization of the research title of the Farm Bill for an Integrated Research, Education, and Extension Competitive Grants Program. The Small Farms Initiative will support multi-functional research and education activities to address the resource constraints of small farms.

CHILDREN, YOUTH, AND FAMILIES AT RISK

The budget proposes that funding for the Children, Youth, and Families at Risk (CYFAR) program under Smith-Lever 3(d) be increased by $446,000 to restore it to the 1995 level. This program is one of several National Initiatives of the Cooperative Extension System which represent the System's commitment to respond to important problems of broad national concern. CYFAR funds are distributed to each State and awarded competitively. Every State has identified youth at risk as a priority, and most of the efforts focus on community collaborations, initiating school age child

care programs, and strengthening science and technology programs. Projects supported by CYFAR are empowering youth, parents, and community leaders to take responsibility for their own lives to reduce environmental risk factors.

WATER QUALITY

An increase of $296,000 is proposed to restore funding under the Water Quality research program to the level provided in fiscal years 1995–1997. In 1996 new projects were initiated as Agricultural Systems for Environmental Quality to focus on watershed-scale agriculture production systems that reduce pollution of soil and water while maintaining productivity and profitability. This increase will address these and other water quality issues, such as hypoxia oxygen depleted waters—and Pfiesteria, a problem recently reported in some tributaries of the Chesapeake Bay, and specific water-borne diseases such as Cryptosporidium, which continue to be of a high priority at local, regional, and National levels.

BINATIONAL AGRICULTURAL RESEARCH AND DEVELOPMENT (BARD)

The United States-Israel Binational Agricultural Research and Development Fund was established in 1977, but low interest rates and an increase in the cost of research have impeded the ability of BARD to adequately meet the needs of each country's producers and consumers. The Administration is proposing a $1.5 million increase for BARD to continue support of research of mutual interest between the U.S. and Israeli agricultural research communities. These funds will supplement the interest derived from existing BARD endowment funds and will be matched by funding from the Israeli government.

GLOBAL CHANGE/UV–B MONITORING

An increase of $567,000 is proposed for the Global Change/UV-B Monitoring Program to restore funding to the fiscal year 1997 level. This program supports the USDA UV-B (ultraviolet-B) Monitoring Program, a component of the U.S. Interagency UV-B Monitoring Network Plan of the United States Global Change Research Program. This increase will be used to bring the network closer to complete operational status for obtaining ground level UV-B radiation applicable to locations of importance to agriculture, forestry, and natural resources.

Sustained Funding Support:

The Animal Health and Disease Research formula program is proposed for funding at the 1998 appropriation level, as are most of those Special Research Grants that concentrate on problems of national and broad regional interest beyond the scope and resources of the formula-based programs, including Critical Issues, Minor Use Animal Drugs, National Biological Impact Assessment, Rural Development Centers, and Pesticide Impact Assessment.

In continuation of the Department's commitment to helping limited resource farmers and other socially disadvantaged populations, funding is maintained at the 1998 levels for extension formula distribution to the 1890 Institutions, the Evans-Allen research formula program, the 1890 Capacity Building Grants Program, the Hispanic-Serving Institutions Education Grants Program, the Tribal Colleges Education Equity Grants Program, and the Tribal Colleges Endowment Fund.

Our fiscal year 1999 Higher Education Programs portfolio is also maintained at the 1998 funding level of $26.1 million. The portfolio includes the aforementioned Capacity Building Grants, Hispanic-Serving Institutions Education Grants, and Tribal Colleges Education Equity Grants Programs and the Tribal Colleges Endowment Fund, along with the Institution Challenge Grants Program, the Graduate Fellowship Grants Program, and the Multicultural Scholars Program.

Funding is also maintained at the 1998 levels for Smith-Lever 3(d) programs for Water Quality, Rural Development, and Sustainable Agriculture, as is funding for the Renewable Resources Extension Act Program.

Decreases and Eliminations:

In support of the Administration's goals to reduce the Federal deficit and focus its resources on high priority national issues, the fiscal year 1999 CSREES Budget proposes decreased funding for several programs.

The Administration strongly supports a mixed portfolio of formula-based and competitive funding but we find that a different approach is needed, in this era of limited resources, for addressing high priority National issues while simultaneously balancing the budget. We have proposed decreases for several of the formula programs in the 1999 budget to generate resources needed to address issues of broad public concern that cut across State lines or other boundaries. Formula decreases

include $15.062 million for the Hatch Act research funds; $615,000 for the McIntire-Stennis cooperative forestry research funds; and $10.740 million for the Smith-Lever 3(b) and (c) extension funds. States have maximum flexibility to fund specific programs through formula funds, thus the proposed decreases should have the least impact in those areas States identify as high priority. The flexibility of the States in the use of the Hatch Act and Smith-Lever 3(b) and (c) formula funds will be enhanced if the Administration's recommendation that the States be given authority to use a percentage of these funds for either research or extension activities is implemented in the reauthorization of the research title of the Farm Bill.

Decreased funding or the elimination of funding is proposed for several other programs. These programs could be supported by the States through the reallocation of formula funds, or by State, local government, and/or private sources if they are deemed to be high priority at the State or local level. Decreases totaling $2.5 million are proposed for the Aquaculture Centers Program and the Expanded Food and Nutrition Education Program (EFNEP). The Supplemental and Alternative Crops; Critical Agricultural Materials; Rural Health and Safety; Farm Safety; and Agricultural Telecommunications programs are proposed for elimination, saving $7.6 million.

CSREES has also proposed that State-specific or other earmarked Special Research Grants totaling $43.867 million; earmarked research Federal Administration projects totaling $8.866 million; and earmarked extension Special Projects under Direct Federal Administration totaling $6.113 million be eliminated because they are not high priority and National in scope. Alternate funding from formula programs, State and local government, and private sources could be used to continue these efforts if they are considered high priorities at the State or local levels.

In conclusion, the President's fiscal year 1999 Budget Request for CSREES reflects the commitment of the Administration to further strengthen the problem-solving capacity of Federally-supported agricultural research, extension, and higher education programs. I appreciate the support of the Committee and look forward to working with you and your staff during the upcoming budget process.

BIOGRAPHICAL SKETCHES

I. MILEY GONZALEZ

I. Miley Gonzalez was nominated by President Clinton as the Under Secretary of Agriculture for Research, Education, and Economics on July 9, 1997. He was confirmed for that position by the U.S. Senate on July 31, and sworn in on August 5.

Gonzalez provides oversight of the research, education and economics programs at USDA. He manages the Agricultural Research Service, the Cooperative State Research, Education, and Extension Service, the Economic Research Service, and the National Agricultural Statistics Service.

Before his appointment as Under Secretary, Gonzalez served on the National Agricultural Research, Extension, Education, and Economics Advisory Board—a 30-member group authorized by the 1996 Federal Agricultural Improvement and Reform (FAIR) Act to advise the Secretary and land-grant colleges and universities on agricultural research, extension, education, and economics policy and priorities. As the Under Secretary, Gonzalez is an ex-officio member of the group which will provide consultation on other FAIR Act legislation, including the Fund for Rural America.

Before joining USDA, Gonzalez served as associate dean and director for academic programs in the College of Agriculture and Home Economics at New Mexico State University (NMSU). From 1994–96, he was assistant dean and deputy director of the Cooperative Extension Service. Prior to that he served as professor and head of the Department of Agricultural and Extension Education at NMSU for three years.

Gonzalez worked on the Hispanic Association of Colleges and Universities/USDA leadership team, representing NMSU.

Before joining the faculty at NMSU, Gonzalez was an assistant director of International Agriculture Programs in the College of Agriculture at Iowa State University from 1988–91. In the early 1980's, Gonzalez served as a state 4–H specialist at Pennsylvania State University and participated in extension program activities.

His administrative experience began in 1976 at the University of Arizona as assistant director in the Office of Resident Instruction in the College of Agriculture. He has private sector experience in marketing, management, and production agriculture in both the U.S. and Mexico and worked on a cattle ranch in Venezuela. Gonzalez started his professional career as a high school vocational agriculture

teacher in 1970 and taught at Parker High School on the Colorado River Indian Reservation in Parker, AZ.

He has taught numerous undergraduate and graduate courses including guest lectures in Spanish. His teaching has focused on problem-solving techniques, program planning and evaluation, curriculum development, and beginning teacher and extension agent training.

Gonzalez has served on numerous evaluation and task force teams at the local, national, and international levels. His research and scholarly activities have focused on the areas of international development, extension education, adult and non-formal education, technology transfer, and leadership development and training.

He has received numerous awards and honors from various professional groups, teachers, institutions and many other organizations such as 4–H and the FFA. He earned the American Farmer Degree in FFA and has received the Distinguished Service Award from the American Association of Agricultural Education for both domestic and international work in the western region.

He was born in Ysleta, TX, on July 30, 1946, grew up on a small farm and livestock operation in San Simon, AZ, and managed farming and marketing operations in northern Mexico. Gonzalez attended the University of Arizona where he received both a B.S. and M.S. in agricultural education from the University of Arizona and a Ph.D. in agricultural and extension education from Pennsylvania State University.

EILEEN KENNEDY

WASHINGTON, Nov. 7, 1997—Agriculture Secretary Dan Glickman today announced the appointment of Dr. Eileen Kennedy as Acting Deputy Under Secretary for Research, Education, and Economics, effective November 10.

"Eileen Kennedy has provided sound policy advice, analysis, and research on USDA's food assistance and nutrition programs," said Glickman. "Her ability to work with diverse groups to develop research driven dietary guidance will serve USDA well in her new role. Her keen insight and extensive background in research and education will prove invaluable as USDA sets research and education priorities that are responsive to the needs of the American people."

Kennedy will work with the Under Secretary for Research, Education, and Economics, I. Miley Gonzalez, to provide oversight of the research, education, and economics mission. She will help to manage the Agricultural Research Service, the Cooperative State Research, Education, and Extension Service, the Economic Research Service, and the National Agricultural Statistics Service.

Prior to her appointment, Kennedy served as the Executive Director of the USDA Center for Nutrition Policy and Promotion. She managed the Center and provided technical direction for policy research and applied nutrition for USDA's nutrition programs.

Before joining USDA in 1994, Kennedy was a visiting professor at Tufts University, School of Nutrition. From 1981 to 1994, Kennedy worked for the International Food Policy Research Institute here as a senior research fellow. She also worked as a visiting professorial lecturer at Johns Hopkins School of Advanced International Studies from 1987 to 1990.

Dr. Kennedy is currently a member of the United Nations Advisory Group on Nutrition as well as a member of the Institute of Medicine's Board on International Health.

She received her B.A. degree from Hunter College in New York, NY, and her two M.S. degrees, one in Foods and Nutrition from Pennsylvania State University and one in Nutrition from Harvard. Kennedy received her Doctor of Science degree from Harvard University.

IMPLEMENTATION OF ARS' FISCAL YEAR 1998 PROGRAM INCREASES

Senator COCHRAN. That is perfectly satisfactory with us.

Let me ask the first question and then I am going to yield to my colleagues for any questions that they have. Looking at the budget request specifically for ARS—Dr. Horn has submitted a statement discussing that aspect of the budget request—but it confuses us to this extent: that the funding levels for ARS activities are proposed to be increased from the fiscal year 1998 level, mostly for the purpose of adding staff, professional research scientists, at ARS facilities throughout the Nation, but you are proposing to execute in-

creased staffing levels and at the same time requesting that all of those increases provided for the current fiscal year, what the budget calls "congressional add-ons," be eliminated? Some of these reflect, for example, suggestions that this committee received as to staffing that was needed in order to fully undertake the work that was being done at some of these facilities.

I am specifically aware of the warm water aquaculture research that is being done in Mississippi and in Arkansas, and we added a couple of research scientist staff positions there. How are you recruiting and filling those positions at the same time you are proposing to take the money out of the program and, therefore, having to cut those same staff positions?

What is the reality of the situation with regard to that?

Dr. GONZALEZ. Mr. Chairman, if I may, and I will ask Dr. Horn to share also with some of the detail. Within the broader context of the budgeting process, we looked at those areas of funding of very important and high-priority areas and went through a discussion to take a look at the shifting of resources. As a result, as you look at that budget, you will find some places where there is a definite increase and other places where we have had a shifting of resources.

But specifically to your question, I think that as we look at the site specific parts of this agricultural research agenda that we certainly have some areas where we have continued to move funding to enhance the work that is being done there and taken a look at how those things fit within this sort of limited, if you will, research budget that we are having to work with.

I will turn to Dr. Horn and ask him to provide any of the detail for this particular question.

Dr. HORN. I have been very concerned about the decline in the number of ARS scientists for some time, and in fact as an agency we are trying to turn that decline around. There were 3,400 scientists when I came to ARS 27 years ago and now we are under 1,900.

We went through exactly this same process a year ago when we had some projects and some locations proposed for closure, and we held back in our recruiting process and the ultimate result, of course, was restoration of many of the projects and of all of the four locations that were proposed for closure. But in that process our number of FTE slots for scientists actually did decrease by about 100.

So we learned a lesson there and we are proceeding to a point this year in a different way. We have about 140 vacant scientist positions in the agency. Seventy of those are holdovers from prior funds or the result of attrition. Seventy of those are from the new money that came to us in fiscal year 1998. We are pursuing the recruiting process full bore on all positions, and we are doing so in the realization that it is going to be midsummer before many of these will be to the point where we can interview or commit, and by that time we expect to have some additional information on what really will become of this budget.

As you have mentioned, you may impose changes in this committee and the House may do the same. So our intention is to continue to recruit, look for the best and the brightest, but the day will come

actually when we have to either say to them, you have to understand that the funds may not be there for that position next year, but we will find you a job in ARS, or we have to stop recruiting.

So our intention is to keep recruiting.

STATUS OF FISCAL YEAR 1998 IMPLEMENTATION PLANS

Senator COCHRAN. One thing we will do for the record, if you can help us with this, is submit a listing of all of those research facilities and the additional funding that was provided in the appropriations bill for this current fiscal year and ask for a status report on the execution of the funding increases provided for fiscal year 1998 for ARS for those purposes.

We have a list that includes, it looks like, about 30 different facilities across the Nation that are in this same shape, not just the ones in Mississippi and Arkansas. But you know, the reason I point these out is that last year the testimony was very clear that aquaculture is one of the fastest growing activities in agriculture today in our country, and we need to find out about diseases and other challenges that are presented to the aquaculture industry in not only the South, but other parts of the country as well.

We had a West Virginia aquaculture center, for example, that was funded. That is another area where we are wondering how you are filling those positions that were funded last year, when now you are asking that those funds be terminated and canceled in this year's budget.

It is an important area. I think you recognize that, Dr. Horn and Dr. Gonzalez, in your comments before the committee. I know in Dr. Horn's case, from testimony he presented last year. And I think this year's testimony also confirms that this is an important area for inquiry.

Can you confirm that?

AQUACULTURE RESEARCH

Dr. HORN. Yes; it is absolutely true. I believe we are still importing about 70 percent of our shrimp, for example, and a lot of our freshwater fish activities not only promote rural economic development, but it is a new industry and a burgeoning industry and a very rapidly growing industry. So it is extremely important to us.

Senator COCHRAN. Thank you.

Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman.

Dr. Horn, this is something you are not required to know the answer to. Do you know what rice yields are in this country compared to, say, 3 years ago?

Dr. HORN. I am glad I am not required to know that. [Laughter.]

Senator BUMPERS. Does anybody on the panel know?

Dr. HORN. Given 3 years ago, I suspect they are more or less level and perhaps even a bit lower compared to 10 or 12 years ago, due to our research accomplishments.

Senator BUMPERS. I think you are absolutely right. I wanted to hear somebody who monitors those figures. I am not going to make the same speech here this morning I have made 100 times about the importance of research on agriculture in this country and how we are going to feed ourselves in the future.

But I get the impression, with some minor exceptions, a lot of our yields of food products are pretty static. I think in 1965 we had a static production of corn for the first time in 60 years. Those things ought to be alarming, not only to the research community, but to those of us who are funding research.

Now, this brings me to my next question, and that is following up on what the chairman has just asked you about agriculture. Mississippi and Arkansas both have state-of-the-art agriculture research labs and in last year, 1997, we directed in the 1998 budget that—we just put a direction in there that in 1999 you would increase, for example, the funding for the rice germplasm center, which is really vital to increasing rice yields. We put a provision in there that it would be increased, I believe $700,000 in 1999, and $400,000—I am not sure what we put in for the Mississippi aquaculture lab, but we put an increase of $500,000 for the aquaculture lab in Stuttgart in my home State.

They are not in here. My next question is, was this submitted to OMB for inclusion in the President's budget, these increases that Congress directed last year? I want to be sure we are on the same wavelength. Do you know what I am talking about?

Dr. HORN. By the agency?

Senator BUMPERS. Yes.

Dr. HORN. Yes; we requested those.

Senator BUMPERS. You did request those increases?

Dr. HORN. Yes; we did.

Senator BUMPERS. And you got a negative response, I take it? I mean, they just did not put it in the President's budget request. Of course, you knew in advance what their reaction was to this, I assume.

RICE RESEARCH

My point, Mr. Chairman and members of the panel, is that here we have these state-of-the-art research facilities that cannot function at the proper level, simply because we lack scientists. And we needed that $700,000 in the rice germplasm center. The rice germplasm center is the only facility I know in this country that really has the ability to increase rice yields.

When I was first elected Governor of my State, I think yields were averaging less than 100 bushels per acre. Today the average is probably like 150, but 200 to 220 bushels an acre is not uncommon. That is all due to research.

I do not know how far you can go, but all I am saying is—and I have said 1,000 times—of all the research money we spend in this country, the Pentagon obviously gets the most of it, the National Institutes of Health is second and that is entirely proper. I am not going to deliver my sermonette on the Pentagon. But when I think about it, we are putting I think $1.8 billion—is that a fair statement—in agricultural research in this country, it's outstanding to be alarming.

Dr. Gonzalez, do you want to comment on that?

Dr. GONZALEZ. Yes; thank you. Mr. Chairman and Senator, I think that has been part of our discussion internally as well, the fact that when you compare the share of research moneys for agri-

culture, including the extension and education component that is critical to that continuum, that we are not in the same ballpark.

It is certainly a discussion that we have begun to talk about with our agencies and across the mission areas within USDA, and I think to engage other parts of the research community so they understand the relationship and the linkage that we have between agricultural research and some of the things that they do.

You pointed out NIH; on the NSF side as well. And again, it is not a matter of getting engaged in a match, if you will, of those dollars, but that we communicate to all folks that we do have that opportunity to highlight the success of agricultural research and how it fits within the broader research agenda.

When we talk about the food genome area, for example, you were talking about rice. I think there is a component in that initiative that will also allow us to address some of those questions that you were specifically addressing a moment ago.

FACILITIES TASK FORCE

Senator BUMPERS. Dr. Horn, let me ask you another question. The Department has been working on a report by the Strategic Planning Task Force on Research Facilities, and they were to determine—they were to prioritize, and I hate that word, but they were to prioritize Federal research directives. Now, this report is not finished. One of the principal things it was supposed to do was to determine which facilities should be closed, is that correct? Is that a fair statement?

Dr. HORN. Not exactly, Senator Bumpers.

Senator BUMPERS. What was the principal purpose of that task force?

Dr. HORN. It was to evaluate all of the Federal and State facilities and, in fact, some private laboratories to take a look at what we have and what we are going to need to have. So it was to deal with more than just closures. It was to deal with highlighting as well what is needed into the future.

Senator BUMPERS. But that study has not been completed, has it?

Dr. HORN. No; as a matter of fact, they met yesterday.

PROPOSED CLOSURE OF ARS FACILITIES

Senator BUMPERS. Why is the Department recommending closure of certain facilities before that study is completed?

Dr. GONZALEZ. If I may, and I do not know that I know the exact answer. But certainly the committee is meeting now. This is their fourth meeting, and they are looking at, as Dr. Horn described, the research capacity both from the standpoint of facilities and the programmatic side. We will have an interim report by about the middle of June in terms of what we have done at this point to take a look at both the Federal facilities, as well as those that are out there in the university system.

The idea is that we will not finish that report, we will not have all of those data, until 1999. But within those constraints in the budget discussion there were some things that were already on the board that we were looking at in terms of how to manage the sites and programs that had been identified for closure prior to this

budget session. Those considerations were part of this ongoing discussion. There may or may not be some other facilities that they are looking at that might also fit into a list like that.

But I think part of my discussion with the committee and with others has been that we are not only looking at the possibility of closure, but also that we are looking at the capacity that we have. We have an investment in a variety of places, depending on the agricultural research that is going on, that is site specific. So we really have to come back with some serious answers to these questions that are being raised.

Senator BUMPERS. This committee obviously is going to review your recommendations and look at it very closely, because my own personal opinion is it is premature for ARS to be making these decisions right now. I know that the budget constraints are terrible. Senator Cochran and I have had private conversations about what a monumental task this subcommittee has in trying to get this budget—this is the toughest year I have ever seen on budgeting.

ALTERNATIVE PEST CONTROLS

Mr. Chairman, I have one final question and I will submit my other questions for the record. And I would like to direct this question to you, Dr. Robinson. And that is, what kind of progress are you making on alternative pest controls and what kind of progress, if any, is the private sector or the public sector making in making pesticides and herbicides more benign?

We have an environmental disaster on our hands, and we are trying to produce more crops at the same time we are trying to use less pesticide and herbicide. It is a monumental chore, but I would just like an update on that.

Dr. ROBINSON. I wish I could give you quantitative information across the board. Perhaps I can do it in three ways. We have, as you know, as part of the overall budget request—and it is the same kind of request we have had in previous years—a request to increase fairly significantly our pesticide management, research, and education program. Those also go in sort of a hand-and-glove manner with many of our sustainable agriculture programs.

One of the points, a quantitative point, that has been addressed in a lot of positions before was to reach 75 percent of agriculture applying IPM practices, which often would involve the alternative pesticide applications that you speak of, by the year 2000. Current information suggests that we are probably somewhere in the neighborhood of 65 to 70 percent. So 75 percent by the year 2000 is not out of the question.

The problem with that, that kind of answer, though, is it does not go deep enough. There are a lot of definitional issues with regard to what is and is not the application of an IPM practice or an alternative pesticide or production practice. So we like to think of that both in terms of the depth of that change in agriculture as well as just a percentage count of who is adopting some kind of practice.

We think that the programs that we have in terms of the alternative pesticide research programs that are producing—and it is a slow process—alternatives and in working with EPA in providing them information in terms of what alternatives are available or if

there are no alternatives, is a useful kind of collaborative effort as they begin to make their decisions. And the educational program that we have in extension to move that research to the farm and the farmer as quick as possible is going to move in the direction of improving both the depth as well as the quantitative count of IPM practices on farms by the year 2000.

That is not going to resolve all the issues, as you well know. So it is a program that is going to continue to have to struggle with the issues between interfacing production agriculture and competitiveness with the environment.

Senator BUMPERS. Let me just say that, you know, in the Department—and not just Agriculture, but everybody—every time Senator Cochran or Senator Burns or I get a little project for our State it is considered pork.

Senator BURNS. In agriculture that ain't bad.

Senator BUMPERS. If ARS comes up with it, it is high-class research. But I think about a small project I got for the University of Arkansas back in the eighties to do alternative pest control research, and they were doing high-class research when I went there 3 years later. And we funded it every year for a while.

They have been on their own for some time, I do not know how many years. They have been on their own now for 2 years. We are funding it. There may be a little private money from some of the chemical companies or somebody going into it. But they are doing top-class research and they are on their own.

Now, I cannot think of a better success story than that. I make that point just to show that the people sitting on this side of the table oftentimes have pretty good ideas, too. I always voted against Senator Proxmire's amendment that everything had to be let on a competitive basis. That meant everything went to Harvard and MIT and you name it and the University of Arkansas got nothing.

If Senator Cochran and I were not here protecting our States, we would not get anything, I can tell you. But we do good research, and that is the reason we have that rice germplasm center down there, which is really critical to the future of the rice industry.

Well, that is enough.

Senator COCHRAN. Senator, those were excellent questions and we appreciate very much your asking them.

Senator Burns.

Senator BURNS. Thank you, Mr. Chairman, and thanks to the folks for coming up here this morning.

When I look over this budget and the request for funds down there, I was a little dismayed in some areas. And I am glad to hear that at least the Department on the individual places that we think is very important they were requested from OMB. I would assume Miles City and Sydney and those things were in there.

PRODUCTION AGRICULTURE

With all the demands that are being placed on our producers today from environmental, taxes, high cost of operation, it would seem to me that the thrust of this part of USDA should be pointed toward production agriculture. I cannot believe that we have only got 1,900 scientists working in the USDA and ARS doing research today.

Dr. Horn—or I will ask Dr. Gonzalez: How many of those 1,900 are actively involved in production agriculture?

Dr. GONZALEZ. Mr. Chairman and Senator, maybe I will ask Dr. Horn to respond to that because of the specificity of that number. But before he does that, if I may, kind of going back to the question that the Senator asked a minute ago, I think those are the exact kinds of questions that we've begun to ask.

I talked yesterday to the CARET delegates that are here.

Senator BURNS. To the who?

Dr. GONZALEZ. The Council for Agricultural Research, Extension, and Teaching [CARET], that are part of that university community. A great many producers and commodity group representatives are in that group.

One of the things I said to them is that we are, again, readdressing, if you will, the agenda in terms of the importance of that producer community and to look at——

Senator BURNS. It is the only community. As far as this room is concerned, it is the only part. Everything else lives off of it. Everything else lives off of it. You take it out of business and none of us is working.

We can use pretty words, but it just does not make a lot of sense.

Dr. Horn.

Dr. HORN. I do not think we have anyone that is not working on a problem at ARS. We really do try to tell all of our scientists to understand why they are doing what they are doing, and it is a relatively applied program.

But the answer to your question specifically, about 70 percent of the scientists are involved in production agriculture. Others are involved in more fundamental programs that should lead to application and should help producers. But it is about 70 percent.

Senator BURNS. If you line that up against any other segment of the American economy, you have 1,000 scientists out there trying to deal with something that every one of us in this town does three times a day, and that is eat, most of us. I eat more than that, obviously, but nonetheless.

I just think that our initial thrust—I am just wondering, when OMB sent it back down was there anybody that raised their eyebrow and said, what in the world are we doing and what are our priorities? And is there anybody going back down there that says, this is unacceptable, this is unacceptable to go at this, this thing? It is like the aquaculture that they are concerned about in Arkansas, and I am concerned about that, too. I am concerned about rice yields. Our wheat has been going down a long time.

But yet we do not see anything, anything to address that. I would say, we cannot do research on western ranges or Mississippi aquaculture or Arkansas rice in Maryland. We cannot do it, we just cannot do it. And these two Senators to my right here have just absolutely fought tooth and toenail to put the research on the ground where it is supposed to be.

And then you come back and you cut extension. You can have all the knowledge in the world, but we have no way to transfer that technology, none. So it all goes hand in hand.

Forget about rural development. It may be a feel-good methodology to take care of something in the neighborhood, but if you have

no production that is where your great development is, folks. That is what pays the bills. And if you do not think we do not have a problem, you just go around and explain to producers in this country why Wheaties is $3.75 a pound in the grocery store and we cannot get $3 for a 60-pound bushel of wheat. And then you wonder why we got hurt and why we get awful sensitive about our producers that are on the land.

And by the way, if you took your researchers out there and tried to run a farm, ranch, or an aquaculture, I will tell you what: They would go broke in 15 minutes, and then we are all out of jobs.

A little ASCS guy is sitting in the ASCS office one time, he was crying. The guy says: What's the matter? And he said: My farmer died. Well, they are dying.

It just seems like that our thrust, that somebody in this Department, the Department of Agriculture, has got to go down to OMB and say: This is outrageous and completely unacceptable to a community that is supposed to be advocating something for production agriculture, because the demands—everybody wants to pass laws on agriculture, you got to do this, that, and the other.

You cannot spray, you cannot even take care of your weeds. You know how hard it is to find weed money? And noxious weeds runs, spotted nap runs all the way from the highest mountain in Arkansas to the flats of Arkansas. And by gosh, we cannot get a little old measly pile of money to develop something for noxious weeds.

But you go to one of these Grey Poupon parties around here and white wine, you know, them little finger parties, and you start talking about weeds and you are standing there talking to yourself pretty quick.

So we need some advocates down there, folks. We need somebody that is willing to fight, and I do not see that happening right now and I am concerned about it.

So I do not have any questions. We are going to look at this. I am going to work with the chairman. He is concerned about it. I am concerned about it, and I am going to work very, very hard in putting those dollars where they will do the most good, and that is research and production agriculture and the extension work it takes to get that technology on the farm. That is where I come from.

I do not have any of them fancy letters behind my name. It says "NDBA" behind mine: No degree, but boss anyway.

I am going to work very, very hard at that. Thank you for coming today.

TRADE FLOWS

Senator COCHRAN. Thank you, Senator.

Before I ask another question about the research budget, I was noticing in the Economic Research Service statement there is a comment about how the Economic Research Service intends to spend more time to break down the components of trade flows, understanding the relationships to international investment and the strategic behavior of U.S. firms, and investigate the implications for U.S. consumers of a globalized food marketplace.

After reading that, it occurs to me that one of the most challenging aspects of agriculture today is trying to understand the implica-

tions of international economic conditions. For example in Asia, the Far East, the Pacific Rim, we are seeing a lot of turbulence in markets there and currency values are plummeting in places like Indonesia and elsewhere. Korea is undergoing massive change and dramatic change in its economic structure there and the banking system.

We sell a tremendous amount, not only of raw agricultural commodities, but value-added products, in those parts of the world, and it is a growth area for us. We have seen China suspend imports of cotton.

Is the Economic Research Service actively engaged in trying to analyze what is going on there and interpret that for the benefit of American agriculture? If so, tell us what your findings are?

Dr. GONZALEZ. Go ahead, Susan, Dr. Offutt.

Dr. OFFUTT. Yes; we are. As you noted, the nature of change in economies around the world is as important to U.S. agriculture as anything that happens domestically because of our dependence on exports. Specifically, we recognize the importance of the Asian region to further growth in U.S. exports. With respect to China, ERS has in place a bilateral technical assistance agreement that will allow us to better understand Chinese agricultural markets as they themselves better understand them—in collaboration with the National Agricultural Statistics Service as well. We have also begun work on trying to understand the implications of accession to the World Trade Organization of China, which under some conditions would actually improve the functioning of the world marketplace. China might be less likely to be disruptive, for example, stopping imports without warning. So we certainly are concerned about the capacity of China because it is clearly the largest country on Earth, and as it enters the world trading system it will change the way our exports are dealt with in markets.

More specifically and more recently on the Asian crisis, most of the testimony that the Secretary and Under Secretary Gus Schumacher have given before the Congress is based on the analysis that ERS has done reflecting our understanding of changes in demand in the Asian markets, both with respect to reductions in income that come about when those economies falter as well as changes in currency values that affect our competitiveness in a market vis-a-vis, for example, the Australians, which is a particularly important relationship in Asia.

We feel it is certainly an important component of our program to look beyond what happens next week or the week after, because the forces that shape the prosperity of United States agriculture are being determined in China and Indonesia and Malaysia today.

Senator COCHRAN. Thank you very much.

REDUCTIONS IN CSREES RESEARCH PROGRAMS

I notice in the Cooperative State Research, Education, and Extension Service accounts, what we see in this budget is a proposal to terminate most special research grants that are funded for the current fiscal year and, for the first time that I can remember, to reduce formula funds—the Hatch Act Smith-Lever, McIntire-Stennis cooperative forestry research, and others.

What I would like to know is, have you assessed the implications of what the practical results of all of this would be in terms of benefits for production agriculture, for forestry, or for the research that is now supported by these special research grants? What are the practical consequences?

What if we just approved that and shocked the heck out of you, the President, and the people who are responsible for submitting this ridiculous proposal to the Congress? What if we just shocked you and said, OK. Would you bear the responsibility for it? Would you go out and explain to people what this means in practical terms?

What does it mean? Tell us if you can?

Dr. GONZALEZ. Mr. Chairman, we have begun that discussion. In the recent 2 or 3 weeks we have been discussing this with the university community. We have tried to put this in terms of the fact that we are looking at making sure, as we continue this discussion with regard to formula funding and competitive grants processes, that we balance the portfolio without harming that base structure that we established over a long period of time—the investment that we made in the university community to be able to be competitive.

I think that is part of this discussion. And I appreciate your question, because it is important that we talk about what those implications will be and what the impact will be out there at the local level, which, getting back to the Senator's question a minute ago, is just fundamental to the total process.

POSTAWARD MANAGEMENT

Senator COCHRAN. One thing that disturbs me, for example, is I do not think you have any analysis on which to base decisions to stop funding special research grants. I do not think you conduct, for example, a study, a post-grant study to evaluate the results of that research; do you? I do not think there is a process in place in CSREES to do that. Is that right, Dr. Robinson?

Dr. GONZALEZ. Dr. Robinson.

Dr. ROBINSON. Thank you, Mr. Chairman. We do have a process, but it is a bit ad hoc and it is not as developed as it needs to be. And that is true of special research grants and some of the other grants.

We have spoken within the mission area about the need to strengthen what we would call postaward management, the ability to evaluate projects once awarded, whether it involves special research grants or improving our postaward management process with the NRI grants or other activities, to ensure that those projects are addressing and, in fact, are producing the results that Congress and the administration had in mind.

Senator COCHRAN. You know, I would not have any argument if there was a proposal in here to set aside some amount of the funding in this budget to do just that, because we all know there are special grants in here that have been funded year in and year out for 20 years—I am just picking out a number—and we probably do not know what the practical results have been from that research. The grant gets funded every year because it is requested by somebody who is vouching for the program.

But as far as the Department is concerned, they do not really have any of the facts. They do not really have any of the detailed facts to make a judgment about whether this is valuable research, addressing a need and producing results and should be continued or not.

So why do we not try to maybe, in this appropriations bill, spell out that this is going to be an initiative that we think ought to be undertaken so we can make a determination, but not just right now, this year, in this bill, say all of these special grants are presumptively ineffective or not producing the results for which they were earlier intended or expected and should not be funded?

That to me would be a much more logical and thoughtful way to proceed, rather than to take the administration's request and just do away with all of these projects. I do not think that is wise or thoughtful. I think it is irresponsible to do that.

What is your reaction to that, Dr. Robinson?

Dr. ROBINSON. Well, I certainly cannot object to the statement you laid on the table. Postaward management is an area the agency needs to develop to the same standard as our preaward processes.

My sense is the special research grants that are included in the administration's budget versus those that are eliminated, are supported because there is fairly firm evidence that they are addressing national problems or issues and they are doing it in a way that we are seeing progress.

A few have emerged by virtue of the strength of the projects and definitely address either national or broad regional issues. Even then, we do not have the kind of postaward management assessment that you laid out that would be most beneficial as we look, not just to next year, but what is happening to this series of projects.

MC INTIRE-STENNIS PROGRAM

Senator COCHRAN. I appreciate that very much. As we proceed to markup after our hearings, I hope that we can establish a dialog as to how best we address that in this bill, so that we do not make the mistake of eliminating special grants that we think are providing real benefits to American agriculture and American citizens and are justified.

Let me ask you this. I do not know who wants to answer it, but what specific research is carried out, just for the benefit of the record, under the McIntire-Stennis research program?

Dr. GONZALEZ. Dr. Robinson.

Dr. ROBINSON. The program carried out under McIntire-Stennis is through colleges of forestry or forestry and natural resources in each of the States. It is a formula-based fund allocation to support in a cooperative way the partnership between the State and the Federal Government on forestry research at certified State institutions. This research complements the research done by the Forest Service through its many regional labs.

It addresses the needs of forestry, be they farm lot forestry production or broader scale forestry production, within the States or regions of this country.

Senator COCHRAN. Let me ask you one other question for the record, so we will have this information. I do not suggest that you have this right now to submit, but please provide the committee a description of each project funded through the McIntire-Stennis program, what forestry research is being supported by ARS and the CSREES, and the level of funding for each project, and who is conducting the research? That would be good for us to understand.

Dr. ROBINSON. We will get that information to you, sir.

[The information follows:]

MCINTIRE-STENNIS COOPERATIVE FORESTRY RESEARCH PROGRAM

In fiscal years 1997 and 1998, $27,735,000 was appropriated each year to support the McIntire-Stennis Cooperative Forestry Program. Funds assist the States in carrying out a program of forestry research at State forestry schools, and in developing a trained pool of forest scientists capable of conducting needed forestry research. Forestry research funded through the McIntire-Stennis Program focuses on the following nine categories: (1) Reforestation and management of land for the production of crops of timer and other related products of the forest; (2) management of forest and related watershed lands to improve conditions of water flow and to protect resources against flood and erosion; (3) management of forest and related rangeland for production of forage and domestic livestock and game and improvement of food and habitat for wildlife; (4) management of forest lands for outdoor recreation; (5) protection of forest lands for outdoor recreation; (6) protection of forest resources against fire, insects, diseases, or other destructive agents; (7) utilization of wood and other forest products; (8) development of sound policies for the management of forest lands and the harvesting and marketing of forest products; and (9) such other studies as may be necessary to obtain the fullest and most effective use of forest resources.

A report detailing the projects supported by McIntire-Stennis funds has been provided to the Committee.

AQUACULTURE CENSUS

Senator COCHRAN. In the National Agricultural Statistics Service proposal, there is a request for an increase of $500,000 and two staff-years to conduct an aquaculture census that would provide for the first time detailed State and national data about aquaculture production. It would be helpful to us if you could explain—I do not know who is going to answer. Mr. Bay?

Dr. GONZALEZ. Mr. Chairman, I will ask Mr. Bay to respond.

Senator COCHRAN. Mr. Bay, explain the importance of this census and who would use the data? What is this for? Is this a one-time cost or is this going to be an annual census of sorts?

Mr. BAY. Senator, this would be a one-time cost or it would be a cost every 5 or 10 years depending on what the industry felt like they needed. It would follow the census of agriculture, where we pick up very limited information on the aquaculture industry, and it would make it possible for us to provide a lot more detail and cover a lot more species that are not covered by the census of agriculture or the current agricultural statistics program that we have for catfish and trout.

AGRICULTURAL RESEARCH

Senator COCHRAN. The President in his State of the Union talked about emphasis on agriculture, making investments in—I am talking about research generally—proposing increases in National Institutes of Health research, a lot of emphasis on that in the speech, talking about the National Science Foundation and its programs.

We see in the budget request a lot of increases for National Science Foundation programs.

I do not have any objections to any of those. Those are very important areas of concern. But there is almost short shrift and no emphasis on the importance of agriculture research, which is one of our basic needs in our society and one of the most important economic activities in our society, providing surplus in trade. The record is unquestionably impressive in terms of the benefits that flow from agriculture research.

So it is my hope that we will not lose sight of the importance of it, that it does not get lost in the shuffle, which is what my impression is. Here we see a budget request cutting substantially the funding for research programs done by the Department of Agriculture, and I do not think this committee is going to just sit back and say, OK, if that is the way you want it, Mr. President, we will go along with that. I think we are going to say: No, not so fast; we need to look at this very carefully.

That is my attitude. I think there are ways that we can continue to reap benefits from agriculture research and we ought to put the emphasis there and not let it get lost in the shuffle.

SUBMITTED QUESTIONS

Additional questions will be submitted in writing, and we hope you will be able to respond to them in a timely fashion.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

RESEARCH, EDUCATION, AND ECONOMICS

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD SAFETY INITIATIVE

Question. An increase of $26 million is requested for fiscal year 1999 across ARS, CSREES, and ERS for the Food Safety Initiative. How much has each of the research, education, and economics mission agencies invested in food safety research and related activities in each of fiscal years 1997 and 1998?

Answer.

REE FOOD SAFETY INITIATIVE

[Dollars in thousands]

	Fiscal year—			Increase
	1997	1998	1999	
Agricultural Research Service	$49,647	$54,849	$68,819	$13,970
Economic Research Service	485	485	1,391	906
Cooperative State Research, Education, and Extension Service [1]	6,234	8,765	19,765	11,000
Total REE	56,366	64,099	89,975	25,876

[1] Funds include the National Research Initiative, the Food Safety Special Research Grant Program, and Extension Smith-Lever 3(d) Food Safety. In addition approximately $6 million is provided annually through formula programs and other special research grants for related food safety research.

Question. How is this research being coordinated among the agencies?

Answer. An interagency working group (IWG) under the National Science and Technology Council was formed in December 1997 to develop a food safety research

agenda. The group is co-chaired by the Deputy Under Secretary for Research, Education and Economics within USDA and the Science Advisor to the Secretary of HHS. Agencies within the Federal Government involved with food safety research participate in this IWG; this includes, ARS, CSREES, ERS, FSIS, FNS, and Office of the Chief Economist in USDA; FDA, CDC, NIH in HHS; and EPA. The IWG has developed a framework for assessing food safety research which looks at all the links from farm to table. Currently an inventory of food safety research across all the agencies is being conducted. This inventory will lead to an identification of any gaps in the research agenda and will also serve to ensure that there is no duplication of effort in research that is currently being conducted on food safety. The IWG expects to complete the research agenda this summer.

Question. How has duplication of effort been avoided?

Answer. This is the second year of the Food Safety Initiative. The REE agencies have worked closely with the other agencies, including FSIS, FDA, and CDC, in the development and implementation of the initiative. The current activity to develop an integrated food safety research agenda is one aspect of this overall effort to coordinate agency activities. This coordination effort has led to a government-wide program in which the food safety agencies each make distinct and complementary contributions to the overall initiative objectives.

Question. What have been the results of these investments to date?

Answer. USDA has a long history of serving the research needs of FSIS, APHIS, FDA, and other agencies responsible for food safety, as well as more broadly producers, food processors and the public. The recent release of new techniques that use benign microbes to control or eliminate Salmonella in poultry promises to help limit the risk of this serious food poisoning in humans, is just one recent example of how USDA investment in research is contributing to the safety of the U.S. food supply. Some other examples from fiscal year 1996 and 1997 include:

—a monoclonal antibody was developed by ARS to identify unacceptably high levels of glycoalkaloids in potatoes (and tomatoes and eggplants if needed) which can be toxic to humans. This technology can and will be commercialize in a test kit form;

—development by ARS of a specific avian immune cytokines which protects chickens against salmonella serotypes;

—research on E. coli 0157:H7 in production settings has shown that incidence of shedding of this organism is lower in feedlot beef animals than in adult cattle in cow-calf heads. Sources of contamination included often contaminated surface water supplies. Providing clean uncontaminated water to the animals would reduce the incidence of E. coli shedding. Related research on Intimin, an outer membrane protein of E. coli 0157:H7, demonstrated the important role that membrane plays in infecting newborn calves. This knowledge may lead to ways to prevent E. coli colonization;

—a Salmonella Risk Assessment Model for Poultry has been released and is currently being evaluated by processors. The software program assesses changes in microbiological safety through processing, storage, distribution, and final meal preparation;

—through cooperative HACCP research with FSIS, APHIS, and the National Pork Producer's Council, technologies have been developed that will allow for the production of pigs that are free of Trichinella spiralis. Periodic monitoring with an ARS developed blood test will certify that the pigs are Trichinae free;

—ongoing CSREES supported research with steam pasteurization of carcasses has proved that this process can consistently meet the pathogen reduction requirements for E. coli control, which is to be used as an index for process control. Results on Salmonella control also demonstrate that steam pasteurization can achieve the pathogen control standards required by USDA;

—several Pathogen Modeling Programs developed by ARS are widely used by microbiologists in industry, regulatory agencies, and educational institutions to estimate the growth or survival of pathogens during specified processes without expensive laboratory testing;

—researchers supported by CSREES found that trisodium phosphate is an effective antimicrobial rinse of catfish fillets. They also found that atmosphere steam treatment of whole catfish reduced surface microbial numbers and resulted in the possibility of extending refrigerated shelf life without adversely affecting acceptance;

—discovery that certain strains of Aspergillus flavus (that do not produce aflatoxins) out compete aflatoxin producing strains thus limiting contamination. Tests using biological control techniques reduced aflatoxin levels in corn and peanut products by 90 percent; and

—a number of rapid immunoassay tests have been developed by ARS to measure drug and chemical residues in red meat and poultry.

These examples are just a few of the discoveries resulting from USDA's research investments that are contributing directly to making U.S. agricultural products safe.

FOOD GENOME INITIATIVE

Question. The fiscal year 1999 budget requests a total of $40 million in USDA funding for fiscal year 1999 for a food genome research initiative. Dr. Gonzalez, you indicated that the President's Food Genome Initiative is a collaborative effort involving multiple Federal agencies and researchers in the academic and private sector, and that you are in the final stage of developing a concept paper on the USDA's role in Food Genomics. Which other federal agencies are involved in this effort? Can you briefly distinguish the role of USDA and each of the other federal agencies involved in this effort? What is the total level of fiscal year 1999 funding proposed for this initiative, by federal agency?

Answer. The Interagency Working Group on Plant Genomics (IWG) included representatives from USDA, HHS, NSF, Department of Energy, OSTP, and OMB. The chair of the IWG was the Chief Scientist, CSREES/USDA. The IWG issued its report in January, 1998. A copy of the report is provided for the record.

[CLERK'S NOTE.—The IWG report does not appear in the hearing record but has been submitted to the committee.]

REE now has a draft Blueprint for Action for the USDA Food Genome Research which lays out the essential core activities for food genome research. The USDA Food Genome Initiative will focus on mapping, sequencing, identifying, and understanding the function and control of genes responsible for economically important traits in agricultural plants, animals and associated microbes. In addition to coordinated efforts in genomic research within USDA's National Research Initiative in the Cooperative State Research, Education, and Extension Service, Agricultural Research Service, and the Economic Research Service, the Initiative will be coordinated fully with other Federal agencies that are pursuing genome activities, principally through the Interagency Working Group of the National Science and Technology Council. Thus, the Initiative will build upon and be coordinated with ongoing genomic research in model organisms such as the Human Genome Program at the National Institutes of Health and the Department of Energy (DOE); the Arabidopsis Genome Research Program at the USDA, the National Science Foundation (NSF) and Department of Energy; the NSF Plant Genome Initiative; the DOE Microbial Genome Program; and the Advanced Technology Program of the U. S. National Institute of Standards and Technology. Coordinated efforts will reduce potential duplication and provide for efficiency in moving towards long-term goals.

FOOD GENOME INITIATIVE FUNDING

[Dollars in millions]

Agency	Fiscal year—		
	1998 estimated	1999 President's budget	1999 proposed increase
Department of Agriculture	25	40	15
Agriculture Research Service	11	14	3
Cooperative State Research, Education, and Extension	14	26	12
National Science Foundation	60	60	.....
Department of Energy	0.15	0.15	.....
Total	85	100	15

Question. Would you please describe the importance of the Food Genome Initiative, including fiscal year 1999 and future years objectives and costs.

Answer. The foundation of future gains in agricultural research will be driven in large part by research conducted under our food genome initiative. The knowledge gained from this research in genomics will permit the United States to develop new technologies for improvements in the yields of major crops, pest and disease resistance, enhanced quality of agricultural products, and new agricultural products. The overall thrust of the USDA research is better understanding of the structure of the entire DNA composition of the genome of economically important crops and livestock

and identification of how this structure relates to functional properties of these animals and crops.

The draft concept paper describes the following objectives under the Food Genome Objective:

—Understand the structural features of the entire DNA make-up of a genome;
—isolate and discover the biological function of expressed genes;
—identify the role of identified genes in the outward appearance and performance of economically important plants and animals;
—construct bioinformation systems that integrate data across species; and
—create new products important to U.S. agriculture using genome technologies.

The concept paper proposes funding for the Food Genome Program at $40 million in fiscal year 1999, increasing to $70 million in fiscal year 2000, and $100 million in fiscal year 2001 and subsequent years.

Question. Is food genome research the initial phase of a longer-term federal genome research program? What is the blueprint for future research in the area of genomics and what level of federal investment will be required?

Answer. The blueprint for research on food genomics is envisioned as a long term effort. The draft concept paper identifies priorities and budget requirements for the first three years. The longer term strategy will be modified based on accomplishments.

The draft concept paper, now out for review and comment, provides a blueprint for a coordinated REE food genome program involving ARS, CSREES, and ERS. Specifically the paper describes the current intra- and extramural programs and their achievements, the overall objectives of the initiative, and planned activities directed at achieving those objectives. The proposed level of federal investment is $40 million in fiscal year 1999, $70 million in fiscal year 2000, and $100 million in fiscal year 2001 and subsequent years.

Question. The Department's fiscal year 1999 request includes a $30 million increase in the discretionary appropriations for this initiative and proposes legislation which involves an additional $10 million. What legislative authority is required?

Answer. The Administration proposes a new authority for a competitive research grants program specifically focused on supporting research conducted under the Food Genome Initiative.

Question. Please describe the genome research program already conducted under ARS and CSREES. Please specify the level of funds now being committed to this research, where this research is being conducted, and what is being accomplished.

Answer. USDA conducts plant and animal genomics research through well-developed intramural and extramural programs. These programs are designed to complement each other in partnership with State agricultural experiment stations, colleges, universities, other research institutions or organizations, Federal agencies and laboratories, private organizations, corporations, or individuals.

The USDA's intramural plant and animal genomic research program has been conducted by the Agricultural Research Service (ARS) through their network of laboratories and strategic cooperative agreements with selected universities and private sector researchers. Substantial resources have been devoted to molecular genetic map development. Numerous genetic markers on the maps of cattle, swine, sheep, and poultry have been developed in ARS laboratories. The same is true for the genetic maps of a number of important crop species. The ARS has research projects aimed at the use of molecular genetic markers for the characterization of germplasm and for the selection of crop varieties with enhanced pest resistance and product quality. Other ARS programs are aimed at the isolation and manipulation of genes controlling disease resistance and stress tolerance in plant and animal species. An important result of USDA's genomic funding has been the development of extensive crop and animal genome databases now available on the World Wide Web hosted by the USDA National Agricultural Library.

In fiscal year 1998, ARS' food genome research is funded at $11.5 million as follows:

Plant Genome Research

Location	*Funding*
Albany, California	$217,100
Ames, Iowa	218,100
Beltsville, Maryland	161,800
Columbia, Missouri	$217,200
Headquarters	2,544,300
Ithaca, New York	328,500
Total	3,687,000

Animal Genome Research

Location	*Funding*
Athens, Georgia	$170,800
Ames, Iowa	559,000
Beltsville, Maryland	2,777,400
East Lansing, Michigan	926,100
Clay Center, Nebraska	3,377,800
Total	7,811,100

The USDA's extramural program is managed by the Cooperative State Research, Education and Extension Service (CSREES) in partnership with the Land Grant university system and other organizations. Whenever possible, CSREES provides national leadership by coordinating and facilitating genome research activities across federal agencies and regional projects. Under the auspices of CSREES National Research Initiative (NRI), NRI grants are awarded to genomic projects on agriculturally important crops, forest trees, and animals.

The NRI Plant Genome program places priority emphasis on cloning agriculturally important genes; developing new technologies for genome mapping, gene manipulation, gene isolation or gene transfer in plants; creation of new germplasm lines or varieties to solve problems of U.S. agriculture; and software development for databases and bioinformatics. CSREES, in a joint effort with NSF and DOE, is engaged in an international cooperative effort in mapping and sequencing the genome of the model plant, Arabidopsis thaliana. This program, which began in 1996, was the first effort to provide a complete DNA sequence of a plant, similar to the effort being done by NIH to completely sequence the human genome and by DOE to sequence microbial genomes. CSREES has also taken the lead, along with other Federal Agencies, to begin coordinating U.S. activities with the international rice genome sequencing programs. Sequencing Arabidopsis and rice as model systems in plants provides broad coverage of the plant kingdom. Compared to other higher plants, the genome of Arabidopsis and rice are small, making whole genome sequencing of these two plants a readily achievable goal. Arabidopsis and rice can become reference or model genomes for two major classifications of plants, dicots and monocots, respectively. It is anticipated that the genomes of Arabidopsis and rice could be completed in the years 2000 and 2004, respectively, provided that sufficient funding is available through a USDA Food Genome Initiative. This research will be vital to facilitate international collaboration to ensure that data, materials, and technologies are readily available to U.S. scientists and the larger agricultural community including growers and producers.

Priority emphasis of the NRI Animal Genetics and Genome Mapping has been placed upon genomic mapping and organization; gene identification and interactions; technology development, and economic or quantitative trait loci and marker assisted selection. CSREES provides leadership and coordination for a national, coordinated research program to map the genome of agriculturally important animal species through Regional Projects of the National Animal Genome Research Program. The program involves CSREES, ARS, State Agricultural Experiment Stations, and other universities. CSREES also provides leadership for several other Regional Projects, all with a national focus, that make major contributions to animal genomic research such as, Advanced Technologies for the Genetic Improvement of Poultry; Genetic Improvement of Cattle Using Molecular Markers; Positional and Functional Identification Economically Important Genes in the Pig; Integration of Quantitative Molecular Technologies for Genetic Improvement of Pigs; Genetic Basis for Resistance to Avian Disease; and Genetic Maps of Aquaculture Species.

In fiscal year 1998, CSREES funding devoted to food genome research under the NRI is estimated to be $11.5 million for plant genome research and $2.9 million for animal genome research for a total of $14.4 million.

There are many accomplishments in plant and animal genomics to date. They include: development of genomic maps in corn, soybean, cotton, wheat, barley, rice, sorghum, loblolly pine, conifers, poplar, cattle, swine, wheat, poultry, horses, catfish and many other plant and animal organisms for genetic improvement; Quantitative Trait Loci have been mapped that target genes of paramount importance to producers and growers to include tolerance to environmental stress, pest and disease resistance, milk production and fat deposition, and quality. The USDA is the world leader in developing technologies used in gene transformation systems, agricultural bioinformatics, and germplasm resources for improved genetic enhancement of both plants and animals.

OFFICE OF PEST MANAGEMENT POLICY

Question. How is this Office being funded for fiscal year 1998? What are the current funding and staffing levels for this Office?

Answer. Funding for the Office of Pest Management Policy (OPMP) for fiscal year 1998 will come primarily from existing National Agriculture Pesticide Impact Assessment Program (NAPIAP) funding, including transfers of existing positions and staff. The funding level for NAPIAP in fiscal year 1998 is about $1 million. Of the $1 million, about $400,000 in NAPIAP funds will be used for salaries and other expenses of the OPMP for the five remaining months of the fiscal year. The staff of the office currently includes a director, a staff entomologist transferred from Environmental Protection Agency (EPA), and a staff plant pathologist transferred from Beltsville NAPIAP. Current plans call for a total of 10 staff positions, representing all agricultural sciences. The positions will be filled through recruiting and transfers.

Question. Why did you determine there was need for a separate office to focus principally on Food Quality Protection Act-related issues? Please describe the role of this new office and list individual programs, by agency, that will be coordinated by this office.

Answer. Although the Food Quality Protection Act of 1996 (FQPA) requires that the Department establish a "minor use" program, the role of the new office extends beyond minor use issues and is charged with integrating and coordinating existing USDA pesticide and pest management programs. The office is also responsible for improving communications with and strengthening the existing network of grower organizations and crop specialists at land grant institutions. FQPA has the potential to dramatically alter pest management systems for many crops. It is important that the Department provide EPA with high quality data on current pest management tools and practices to make better informed regulatory decisions. Furthermore, the Department must be responsive to the needs of the agricultural community in developing alternative pest management practices to meet critical needs that may develop as a result of EPA's regulatory process. In addition to its new responsibilities, OPMP will assume the headquarters functions of the NAPIAP program. The state Land Grant component of NAPIAP will remain in place and continue to serve as the primary pest management data gathering and analyses arm of the office.

Existing programs include:

Food Consumption Surveys—ARS
NAPIAP—ARS; CSREES; ERS; and Forest Service
Pest Management Alternatives Program (PMAP)—CSREES
Areawide Integrated Pest Management—ARS
Biological Control—ARS; CSREES; APHIS
Pesticide Use Surveys and Analysis—NASS and ERS
Pesticide Data Program—AMS
Integrated Pest Management Research—ARS, ERS, and CSREES
IR–4 Minor Crop Pest Management Program—CSREES and ARS
Pesticide Applicator Training—CSREES

USDA RESPONSIBILITIES UNDER THE FOOD QUALITY PROTECTION ACT (FQPA)

Question. You indicate that the Food Quality Protection Act of 1996 adds to the need for effective pest management research. Please cite for the record the requirements of this Act which will require additional investments by the USDA research, education, and economics mission agencies and the additional funds proposed for fiscal year 1999 and each future fiscal year to fulfill these requirements.

Answer. The Secretary of Agriculture has been given many new and enhanced responsibilities as a result of the passage of the Food Quality Protection Act (FQPA). The Secretary's FQPA-related functions can be grouped into the following categories:

(1) Explicit USDA functions under the provisions of FQPA.
(2) Explicit USDA functions provided for in FQPA amendments to FIFRA.
(3) Explicit USDA functions provided for in FQPA amendments to FFDCA.
(4) Other current law USDA responsibilities that will be enhanced by FQPA.

EXPLICIT USDA FUNCTIONS UNDER FQPA

Data Collection—Infants and Children

(1) Consumption Patterns—The Secretary is directed to coordinate the development and implementation of survey procedures with respect to food consumption patterns of infants and children. Secretary must consult with EPA and HHS. (Section 301 (a) of FQPA)

(2) Residue Data—The Secretary is directed to improve data collection of pesticide residues, to provide guidelines for the use of comparable analytical and standardized reporting methods, and to increase the sampling of foods most likely consumed by infants and children. (Section 301(c) of FQPA)

Data Collection—Pesticide Use

(1) Collection—The Secretary is directed to collect data on the use of pesticides on major crops and other dietarily significant crops through surveys of farmers or other sources. The Secretary must make the data available to EPA. (Section 302 of FQPA)

(2) Coordination—The Secretary is directed to coordinate with EPA in the design of the surveys. (Section 302(c) of FQPA)

(3) Study & Report—Within 1 year of enactment, the Secretary must carry out a study, in consultation with EPA, and report to Congress on the current status and potential for improvement of Federal agency collection of pesticide use information. The study must include an analysis of options available to increase the effectiveness of the collection, the costs and burdens placed on agricultural producers and other pesticide users, and the effectiveness in tracking risk reduction by those options. (Section 305 of FQPA)

Integrated Pest Management

The Secretary is directed to implement research, demonstration, and education programs to support adoption of IPM and to make information on IPM widely available to pesticide users. Federal agencies must use IPM techniques and promote IPM through procurement and regulatory policies, and other activities. (Section 303 of FQPA)

II. EXPLICIT FUNCTIONS UNDER FQPA AMENDMENTS TO FIFRA

Minor Use Crop Protection Incentives

(1) Definition—FQPA creates several incentives for the registration of minor pesticide uses. The Secretary is responsible for determining whether a pesticide use will qualify as a minor use based upon the total acreage on which the pesticide is used. Alternatively, the Secretary will consult with EPA in determining whether a pesticide use will qualify as a minor use due to the lack of sufficient economic incentive to support its registration. (Section 2(ll)(1) & (2) of FIFRA as added by section 210(a) of FQPA)

(2) Exclusive Use Period—The Secretary is required to consult with EPA in determining whether particular minor uses will qualify a pesticide for extension of the registration data exclusive use period. (Section 3(C)(1)(F)(ii) of FIFRA as amended by section 210(b) of FQPA)

USDA Minor Use Program

(1) USDA responsibilities related to minor uses:

The Secretary is directed to assure the coordination of the responsibilities of USDA related to minor uses of pesticides including:

(a) IR–4 Project (established to develop registration data for minor uses).

(b) National Pesticide Resistance Monitoring Program (Established by section 1651 of the FACT Act.)

(c) Support for IPM research.

(d) Consultation with growers to develop minor use data.

(e) Assistance for minor use registrations, tolerances, and reregistrations with EPA. (Section 32(a) of FIFRA as added by section 210(i) of FQPA)

(2) Minor Use Data Grants and Revolving Fund—The Secretary is directed to establish and operate a grant program to provide matching funds for the development of data to support minor use pesticides. Any data that is developed as a result will be jointly owned by USDA. (Section 32(b) of FIFRA as added by section 210(i) of FQPA)

Identification of Public Health Pests

The Secretary is directed to coordinate with the Administrator of EPA to identify pests of significant public health importance. (Section 28(d) of FIFRA as added by section 236 of FQPA)

III. EXPLICIT FUNCTIONS UNDER FQPA AMENDMENTS TO FFDCA

Dietary Surveys

The Secretary is directed to conduct surveys to document dietary exposure to pesticides among infants and children in order to provide information for use by the

Administrator in the establishment of pesticide residue tolerances. (Section 408(b)(2)(C) of FFDCA as amended by section 405 of FQPA)

Actual Use Data

The Secretary may collect and provide aggregate pesticide use data for consideration by the Administrator when assessing chronic dietary risk in establishing a pesticide residue tolerances. (Section 408(b)(2)(F) of FFDCA as amended by section 405 of FQPA)

Consumer Right to Know

The Secretary is required to consult with EPA and HHS in the annual publication of information for public display by retail grocers relating to the risks and benefits of pesticide residues and recommendations to consumers for reducing dietary exposure. (Section 408(o) of FFDCA as amended by section 405 of FQPA)

IV. CURRENT LAW USDA RESPONSIBILITIES THAT WILL BE ENHANCED BY FQPA

Various provisions of current law, although not directly amended by FQPA, will continue to require the involvement of the Secretary of Agriculture. In several cases, the role of the Secretary may even be enhanced as a result:

Establishment of Tolerances (Maximum Residue Levels)

FQPA requires the consideration of various risk factors and data as part of the decision making process involved in issuing a tolerance under the new law. Much of the information and data on which these decisions will be based is to be collected by the Secretary. The data collected and provided by the Secretary will be extremely important to registrants and pesticide users seeking the establishment of tolerances for various pesticides. (Section 408 of FFDCA as amended by section 405 of FQPA)

Emergency Exemptions

Section 18 of FIFRA authorizes EPA to exempt the use of certain pesticides from registration requirements in order to handle local emergency situations. The FQPA adds a new requirement that each such exempt pesticide use must have a tolerance in place under the FFDCA when the exemption is granted. As stated, the Secretary will provide an increasingly important function with respect to the approval of all tolerances, which will be most critical in the case of tolerances associated with Section 18 emergency exemptions to meet local needs that must be issued within a short period of time in order to be useful. (Section 18 of FIFRA; Section 408 of FFDCA as amended by section 405 of FQPA)

Research Coordination

Section 20 of FIFRA requires EPA to coordinate with the Secretary in conducting IPM research, which is to receive increased emphasis under FQPA.

Regulations—Comments by USDA Sections 21 and 25 of FIFRA require EPA:

(1) to notify and seek comments from the Secretary in advance of any rulemaking under FIFRA,

(2) to share with the Secretary any proposed or final regulations in advance of their publication, and

(3) to take into consideration and respond to any comments made by Secretary with respect to the regulations.

These current requirements will apply to any regulations issued by EPA to implement the amendments made by FQPA to FIFRA.

Identification of Pests

Section 28 of FIFRA directs the Secretary to cooperate and coordinate with EPA in the identification of:

(1) Pests that must be brought under control.

(2) Available methods of pest control.

(3) Minor pest control problems, including minor or localized problems in major crops.

(4) Factors limiting the availability of specific pest control methods.

The Secretary is also required to prepare an annual report to EPA containing the above information, indicating crucial pest control needs based on any shortage of control methods identified above, and describing research and extension efforts designed to address those needs. This function will be increasingly important as pest control products are lost due to the tougher standards established under FQPA.

Conditional Amendments

Section 3(c)(7) of FIFRA requires concurrence by the Secretary with any determination by EPA of the availability of effective alternative pesticides for the pur-

poses of making a risk-benefit determination for a conditional registration of a pesticide use on a minor food or feed crop.

Recordkeeping

Section 1491 of the 1990 Farm Bill directed the Secretary to require certified applicators of restricted use pesticides to keep records of pesticide use, make the information available when necessary, compile a data base, and publish annual comprehensive reports in conjunction with EPA. The new data collection requirements in FQPA (see above) seem to build on this current law requirement by requiring the Secretary to collect data from farmers and other sources on the use of all pesticides. One difference, however, is that the new requirements do not contain the same safeguards and penalties to avoid misuse of the data collected.

The fiscal year 1999 budget includes the following increases related to FQPA needs:

Program	*Increase*
IPM Research Grant Program	$5,300,000
Pest Management Alternatives	2,600,000
Extension IPM Application	4,200,000
Food Consumption Surveys	1,500,000
Pesticide Use Surveys	1,400,000
Pesticide Residue Data	4,200,000
IR–4 Minor Use Program	1,700,000
NAPIAP Programs	1,600,000
Applicator Training Programs	1,500,000

Budget needs beyond fiscal year 1999 will depend on EPA's schedule and regulatory policy decisions and will be addressed in future budget requests.

INTEGRATED PEST MANAGEMENT (IPM)

Question. The fiscal year 1999 budget again requests increased funding for the Integrated Pest Management (IPM), which is the Administration's initiative to bring 75 percent of the nation's farmland under IPM practices by the year 2000. Can you give us a status report on what has been accomplished in that regard to date, what percent of the nation's crop acreage was under IPM practices when this initiative began and where we are now, and what the additional funds you are requesting for 1999 for this project will achieve?

Answer. A consensus has emerged that IPM systems should be measured along a continuum, ranging from none to high levels of IPM adoption. The Department's 1994 report, Adoption of Integrated Pest Management in the United States, measured adoption along a continuum, and this approach was refined by Consumers Union in its 1996 report, Pest Management at the Crossroads. These analyses estimated that 70 percent of crop acreage is managed using IPM systems, however, 38 percent of these systems are at the low end of the IPM continuum. Our goal is to develop and help growers implement IPM strategies that permit them to move from the low end of the continuum to the high end of the continuum, moving incrementally toward biologically based IPM systems.

The overall percentage of U.S. crop acres under IPM in 1997 remained at the 70 percent level, and will likely remain constant in 1998. However, we remain convinced that the increased investments proposed in the President's budget request for fiscal year 1998, and again proposed in fiscal year 1999, will permit us to reach the 75 percent adoption goal by 1999 or 2000. More importantly, we believe that these investments will accelerate the adoption of IPM systems at the medium and high end of the continuum. We believe that increasing adoption of pest management systems at the high end of the IPM continuum will benefit all Americans by increasing profitability, protecting water quality and farm worker safety, and enhancing the wholesome quality of our Nation's food supply. We believe that an accelerated effort is warranted to develop and help growers implement pest management strategies that will help them reduce reliance on high risk pesticides and enhance the sustainability of their operations.

Question. Please provide a list of the fiscal year 1999 IPM funding increases for the research, education, extension and economics agencies in order of priority.

Answer. The increases proposed for IPM and related activities reflect USDA's goal of helping U.S. agriculture implement IPM practices on 75 percent of the nation's crop acreage by the year 2000, and to help producers respond to the challenges they will face as the result of Food Quality Protection Act (FQPA) implementation. Each research and extension program that supports IPM activities is coordinated to support major IPM goals. To further the development of a coordinated and integrated effort, USDA has created a new Office of Pest Management and Policy (OPMP) to

serve as the focal point within the Department for pest management and pesticide regulatory issues.

Proposed IPM and IPM-related activities in the fiscal year 1999 budget focusing on this integrated and coordinated approach are summarized below. All of these would be considered high priority within the Department's 1999 budget.

IPM Initiative.—Activities proposed under this multi-faceted initiative are built around producer-identified needs for applied research and education projects using pest control technologies that are ready for large area trials and adoption. These regional or area-wide projects will be supported by proposed increases of approximately $10 million for CSREES and ARS.

The initiative also includes a proposed increase of $2.7 million for research on alternatives to pesticides that may be lost to producers as EPA proceeds to implement FQPA and on a decision support system that will help identify crop-pest combinations where alternative controls are most critical.

Pesticide Use Data Collection and Analysis.—Net increases of $2.1 million are proposed for pesticide use and food consumption data. USDA is the sole or primary source for this data. Information on actual use and consumption patterns is needed to conduct more accurate risk assessments. These programs include the Continuing Survey of Food Intake by Individuals (CSFII) carried out by ARS, the Pesticide Data Program under AMS, and pesticide use survey and analysis conducted by NASS and ERS, respectively.

Pesticide Registration, Clearance, Assessment and Training.—Net increases of $4.8 million are proposed for programs to support the registration process with information and analyses on the costs and benefits of current and alternative pest management strategies at the local, regional, and national scales; programs to gather data on pesticide residues for new and safer minor-use products; to fund the new Office of Pest Management Policy; and for applicator training to build confidence in the system that relies on well informed pesticide applicators. Accurate data and analysis are essential to help policy-makers understand the implications of pest-control decisions.

AGRICULTURAL RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

BUILDINGS AND FACILITIES

The President's fiscal year 1999 budget again proposes to close down the ARS Prosser, WA; Mandan, ND; Orono, ME; and Brawley, CA facilities. These are the same facilities proposed to be closed in the President's fiscal year 1998 budget and the Congress continued to fund.

The Administration has indicated that research facilities are under review by the Strategic Planning Task Force on Research Facilities mandated by the 1996 farm bill and that the Task Force is scheduled to report in April of 1999.

Question. Why prejudge the recommendations of that Task Force by proposing to close four ARS facilities in fiscal year 1999?

Answer. The fiscal year 1999 Federal budget submitted by the President recommends a number of new initiatives to address changing priorities facing agriculture and the American consumer. The research budget proposed for ARS reflects an increase of $32 million over the current year. However, the Department is focusing on many priority agricultural issues that must be addressed now by our research scientists. This requires that ARS terminate ongoing projects and reallocate these resources to the new or expanded initiatives as recommended by the President. As a result, a cost-effective decision was made to terminate and redirect resources to new research initiatives and recommend closure of these research stations. These actions are essential to the President's recommendations and cannot be delayed for future decisions to be made by the Task Force.

Question. How many people and scientists would be impacted by the closure of Prosser, WA; Mandan, ND; Orono, ME; and Brawley, CA facilities? What is the annual operating cost of each of these facilities?

Answer. All permanent employees impacted by the proposed closures will be offered a position within the Agency. The number of impacted employees and the annual operating costs for these facilities will be provided for the record.

[The information follows:]

Facility	Scientists	Other employees	Operating cost
Prosser, WA	9	24	$2,435,000
Mandan, ND	9	25	2,582,600
Orono, ME	3	7	808,500
Brawley, CA		4	287,200

The fiscal year 1999 budget again requests $4 million in initial construction funding through ARS for a new Melaleuca Research and Quarantine Facility in Florida. Design and engineering work on this facility was funded and completed by the Corps of Engineers.

Question. Why request funds for a new facility when the Strategic Planning Task Force is now reviewing the need for additional facilities?

Answer. This facility is being built in support of biological control of the harmful introduced pest weeds, especially the Australian paperbark tree Melaleuca, which is devastating the Florida Everglades and causing major economic and environmental damage.

The need for the facility is immediate, based on the large number of biological control agents for Melaleuca and other high-priority introduced weeds that ARS and our State cooperators are now processing through an old, small and technologically inadequate quarantine facility in North Florida. Should the construction of this facility be delayed, the goal of safely managing introduced weeds would be set back, and Melaleuca and the other introduced pests would continue to spread unchecked, resulting in increased economic and environmental damage to Florida.

The new quarantine facility that ARS has proposed in south Florida is to be built in cooperation with the U.S. Army Corps of Engineers and the state of Florida. Although the primary and immediate use of the facility is to safety test and process exotic natural enemies of the paperbark tree Melaleuca, it will also be used for a number of other purposes. In fact, the portion of the facility that the Army Corps is interested in will address a number of aquatic and semi-aquatic weed issues that are important for several of the states in the southeastern U.S. (Alabama, Mississippi, Louisiana and Texas) and also the western states of California and Oregon. In addition, the state of Florida (specifically, the University of Florida Experiment Station at Ft. Pierce) is interested in the use of this facility to evaluate and process exotic beneficial agents and to study some pests under highly contained laboratory conditions. Thus, this facility is expected not only to help solve critical pest problems associated with Florida wetlands, but it is also expected to serve agricultural needs throughout the southeastern U.S. Examples of pest species that may be the focus of control studies at the new facility would include the brown citrus aphid, the silverleaf whitefly, thrips palmi, and the pink hibiscus mealybug. More specifically, the facility is expected to test and clear beneficial natural enemies of these pests for release into field sites throughout the U.S. Since many of these pests affect both field and greenhouse crops, the new technology developed at this new facility could be utilized in almost every state in the country.

The ARS biological control of weeds program is a partner in the Everglades Initiative, the National Strategy for Invasive Plant Management, and the White House initiative on management of Non-native Invasive Species. The facility is a key part of the nation's long-term biological control program for introduced pests.

Question. Why does the Administration propose that this project be transferred from the Corps of Engineers to the Agricultural Research Service?

Answer. Although the original design funds were appropriated through the Corps of Engineers, it had always been the intent that ARS would staff and operate the facility.

Question. Would ARS face any problems or difficulties constructing a facility based on the design and engineering work of the Corps of Engineers?

Answer. For project continuity purposes, ARS would likely pursue an arrangement with the Corps of Engineers for assistance during the construction phase to facilitate the completion of the project. Since ARS would be responsible for operating the facility, it is important that ARS be involved in management and oversight of construction so that the lab will meet the agency's research needs.

Question. What is the total cost of the project?

Answer. The latest cost estimate from the Corps of Engineers was $3,143,000 in 1996 dollars. Applying escalation, construction contingency, and administration costs, the total cost for construction is estimated at $4 million.

Question. Funding of $2.5 million is requested for fiscal year 1999 to continue the modernization of the Beltsville Agricultural Research Center. These funds are to be

used for the design and construction of a new poultry production facility as well as a number of other miscellaneous projects. Please provide a list of each project for which funds are requested.

Answer. In fiscal year 1999, BARC will use $2.5 million to design and construct a replacement Poultry Facility for $2.2 million, demolish facilities for $100,000, and utilize $200,000 for unplanned small projects and unforeseen cost increases on other modernization projects.

Question. With respect to modernization of the Beltsville Agricultural Research Center, please provide the Committee with an update of the costs and projects completed and planned for the modernization of the Beltsville Agricultural Research Center. Please give projects and funding required by fiscal year.

Answer. Through fiscal year 1998, a total of $106,616,792 has been expended on the modernization of BARC. The attached is a listing of projects that have been completed, initiated, or are proposed through fiscal year 1999. The funding source for these projects is the Building and Facility Modernization funding.

Beltsville Agricultural Research Center (BARC) Modernization

Fiscal year 1988:	
Renovate Building 007	$2,000,000
Design Building 003	660,859
Renovate Abattoir, Building 204	57,446
Renovate Building 303	506,877
Modify HVAC, Building 306	372,270
Water Lines	1,402,195
Miscellaneous Projects, BARC (under $100,000)	374,234
Repair Building 307	88,064
Repair Building 467	10,835
Repair Building 264	5,480
Small Animal Facility Contingency	271,740
Total	5,750,000
Fiscal year 1989:	
U.S. National Arboretum (USNA) Roof Repairs	300,852
U.S. National Arboretum Greenhouse Electrical Repairs	273,200
Steam Lines, Phase IV	1,100,000
Oil to Gas Conversion	328,237
Renovate Building 203 (Boar Facility)	529,026
U.S. National Arboretum, Relocate Service Road	87,643
Hazardous Waste Marshaling Facilities	79,662
Waste Water Treatment Study	194,864
Renovate Building 204	354,335
Beltsville Area Security	91,806
Pesticide Handling Facilities	441,793
Swing Space	274,100
Miscellaneous Projects	44,482
USNA Brickyard Restoration	2,000,000
Total	6,100,000
Fiscal year 1990:	
Steam Lines, Building 169–179	568,752
Steam Lines, Buildings 001–011A	1,407,084
Range 2 Modernization	690,574
Waste Water Treatment Facility	1,100,056
Electrical Distribution System	574,157
BARC Roads Maintenance	361,027
Animal Parasitology Unit Planning	30,282
HVAC System, Building 050	44,598
Repair Embankment Failure	211,135
Powder Mill Road	1,547,588
Swing Space	103,685
Brooder House	230,000
Renovate Building 043, 046, 047	148,591
Annual Painting	200,098
Annual Roofing	247,582
U.S. National Arboretum Storage Building	90,402

U.S. National Arboretum Plastic Greenhouses (3)	235,687
Demolition of Obsolete Facilities	27,985
Replace Chiller, Building 006	103,965
Renovate Building 209	71,693
Renovate Headhouse 16	35,124
Repairs Building 177B	12,465
Repairs Building 211	7,965
Renovate Building 1120	18,391
Elevator, Building 449/Gas Cyl	50,954
Renovate Building 449	4,865
Key Card Security Gate	37,002
Small Miscellaneous Projects	625,031
Repairs, Building	15,000
Contingency Steam Lines	297,170
Contingency	197,604
Replace Roof, Building 012	139,000
Contingency	424,488
Total	9,860,000

Fiscal year 1991:

Addition, Building 426	65,000
Conference Room, Building 005	435,000
Electrical	1,500,000
Building 001	735,000
Plant Sciences Building	1,100,000
Dairy Research Facility	2,186,330
Central Hay Storage	803,670
Repair Building 201	50,000
BARC—East Waste Water Treatment	6,534,000
Building 200 Modernization	60,000
Renovate Building 007	1,290,000
Demolition	198,904
Swing Space	991,888
Contingency	50,000
Total	15,999,792

Fiscal year 1992:

Renovate Range 2 Greenhouse Complex	3,100,000
Repair/Replace Waste Water Treatment Facility	300,000
Construct Plant Sciences Building	12,600,000
Total	16,000,000

Fiscal year 1993:

Range 2 Greenhouse Complex	7,400,000
BARC—West Waste Water Treatment Plant	4,000,000
BARC—East Water System	600,000
Controlled Environmental Chamber Facility	586,000
Office/Laboratory Economic Analysis	200,000
Animal Space Economic Analysis	230,000
Contingencies	531,000
Total	13,547,000

Fiscal year 1994:

Modernize Building 001	9,700,000
Modernize East Potable Water System	7,400,000
Design New Animal Building	530,000
Upgrade West Electrical System	1,500,000
Design to Modernize Building 004	450,000

Contingencies	120,000
Total	19,700,000
Fiscal year 1995: Modernize Building	3,960,000
Fiscal year 1996:	
Construct Controlled Environment Facility	4,700,000
Design/Construct Infrastructure in 300 Area	2,000,000
Contingencies	60,000
New Animal Building Design	615,000
Cooling Tower for Building 004	375,000
Renovate Building 001	250,000
Total	8,000,000
Fiscal year 1997:	
Design New BHNRC Building	1,700,000
Infrastructure BARC—East	1,400,000
Fiber Optic Backbone Cabling	700,000
Contingencies	700,000
Total	4,500,000
Fiscal year 1998:	
Construct New Feed Center	1,970,000
Fiber Optic Backbone Cable	850,000
Contingencies	380,000
Total	3,200,000
Proposed fiscal year 1999:	
Design/Construct New Poultry Barn	2,200,000
Demolish Facilities	100,000
Contingencies/Miscellaneous Small Projects	200,000
Total	2,500,000

The balance of funds needed beyond fiscal year 1999 is in excess of $96 million. Due to the uncertainty regarding funding levels in 1999 and beyond, and potential changes to priority projects, the Agency has not developed a firm phasing plan beyond fiscal year 1999.

Question. The budget requests $1.2 million to begin the first phase of the air handling unit replacement at the National Agricultural Library. What additional funding will be required in each future fiscal year to complete this replacement project?

Answer. Replacement of the air handling units is planned in two phases. The second phase is planned for fiscal year 2000 and is estimated at $1.2 million as well.

Question. What additional buildings and facilities work is required at the National Agricultural Library? Please give projects and funding required for each, by fiscal year.

Answer. NAL completed a facility study in 1991 that identified numerous code, mechanical, electrical, and architectural deficiencies estimated at $18 million in 1998 dollars. In addition, NAL also commissioned a space utilization study in 1990 and 1991 to investigate how best to meet competing space needs. As a result of this study, it became clear that NAL needed more space for collections. The Total cost for the facilities work will increase based on how much is appropriated each year and the corresponding rate of inflation.

In general, the deficiencies and costs can be categorized into three major areas of work: architectural, mechanical/plumbing, and electrical. The types of deficiencies and associated estimated costs are as follows:

Architectural deficiencies include items such as deteriorating brick, exterior glazing leaks, egress requirements; fire code deficiencies; accessibility issues; and other items of this type. The estimated cost to correct these deficiencies is $4.7 million.

Mechanical/plumbing deficiencies include items such as lack of a sprinkler system; insufficient cooling capacity; lack of temperature and humidity control; poor air circulation; lack of vacuum breakers; worn out water control valves; and other miscellaneous items. The estimated cost to correct these deficiencies is $10.2 million.

Electrical deficiencies include items such as improper lighting levels; insufficient emergency power system; branch circuit wiring devices in disrepair; insufficient lightning protection system; and other miscellaneous items. The estimated cost to correct these deficiencies is $3.1 million.

Due to uncertainty regarding future funding levels, the Agency has not developed a firm phasing plan beyond Phase 1. Phase 1 was to address the replacement of boilers, renovations to the first, third, fourth, and fifth floors, and installation of sprinklers. Of the $6 million requested in fiscal year 1998 only $2.5 million was appropriated. These funds will be used to renovate the first floor which will include correcting a variety of architectural, mechanical/plumbing, and electrical deficiencies. The renovation will also include a variety of improvements for library users. In fiscal year 2000, the Agency will request the balance of funds to complete Phase 1. This cost is estimated at $3.7 million.

Question. The budget requests $5.6 million to initiate rehabilitation of the 80 buildings and supporting infrastructure of the National Animal Disease Center. What additional funding will be required in each future fiscal year to rehabilitate the Center?

Answer. In fiscal year 1992, a Facility Condition Study indicated that an estimated $140 million (escalated based on fiscal year 1998 implementation) would be required to upgrade the NADC facilities. In fiscal year 1998, the Agency will take action to update the existing Facility Condition Study to prioritize remaining needs at NADC. In fiscal year 1999, ARS will use $5.6 million for the following modernization projects.

—$1.7 million for design and construction plans for maintenance and repair projects common to all research activities (electrical, water and sanitary systems, central heating and cooling plants and distribution systems, and waste treatment facilities).

—$3.9 million will be for design and construction costs associated with maintenance and repair of the contaminated waste collection piping system and treatment plant for infectious agents.

Because of the different types of diseases today, research at NADC has changed from Biosafety Level (BSL) 2 to BSL 3. Therefore, it is necessary to provide adequate BSL–3 facilities at NADC. ISU has received $3.0 million for the initial phase of the new BSL–3 AG Large Animal Isolation Facility to complement the Necropsy/Incinerator Facility. ISU has started preliminary planning for this new facility. ARS will have to provide ISU with an easement authorizing ISU to have access to NADC for various tasks related to the design and construction of this project. This initial phase (approximately 5,000 gsf) will not satisfy ARS needs, however, it will address APHIS immediate needs. Ultimately, an additional 15,000 gsf will be necessary to satisfy ARS needs beginning with, $2 million for planning and design of an addition to the BSL 3 Large Animal Isolation Facility. Also, $3 million will be needed for planning, design and construction to perform minimum safety upgrades to plumbing and mechanical systems to an existing BSL–3 wing of an Animal Isolation Facility.

Due to uncertainty regarding future funding levels and the update to the Facility Condition Study currently underway, the Agency has not developed a firm phasing plan beyond the above. In fiscal year 1998, the Agency will develop a Master Plan for NADC that will provide the Agency with a phasing plan and better cost information.

Question. The fiscal year 1999 budget requests $8.4 million to continue its modernization project at its Center in Peoria, Illinois. Which projects will be funded with the $8.4 million requested and what additional funds will be required in each future fiscal year to complete this modernization effort?

Answer. The $8.4 million in fiscal year 1999, will be used to fund Phase 3 of the North Wing Renovation project. This includes design and construction. This will complete the modernization effort of the North Wing. Additional funds will be needed in future fiscal years to cover planning, design, construction, and construction management of the Chemical, Biological, and Administrative Wings as follows:

Fiscal year	
2000: Chemical Wing Design	$2,500,000
2001:	
Chemical Wing Construction	20,400,000
Biological Wing Design	2,000,000
2002:	
Biological Wing Construction	16,400,000
Administrative Wing Design	2,000,000
2003: Administrative Wing Construction	18,900,000

Question. Funding of $1.4 million is requested to continue the renovation program at the Grain Marketing and Production Research Center, Manhattan, Kansas. What work will be funded with the $1.4 million requested and what funds will be required in each future fiscal year to complete this renovation program?

Answer. The $1.4 million requested will complete the funding necessary for:

1. The estimated construction cost of the Phase 1 and 2 combination—Phase 1 (Mechanical Room, Cooling Tower, Penthouse additions); Phase 2 (renovate the Central Systems and Equipment), and

2. The construction phase services/construction contingency for this construction phase.

The funds required in each future fiscal year to complete this renovation program are:

Fiscal year 2000—$6.4 million for construction, construction management services and contingency for Phase 3. The scope of work for Phase 3 consists of: Renovate the laboratory (Sections C, D, B, A, E, F); Center Core (Sections C and D); North Wing (Sections A and B); and West Wing (Sections E and F).

Fiscal year 2001—$1.25 million for construction, construction management services and contingency of Phase 4. The scope of work for Phase 4 consists of a new roof and lighting protection systems.

Question. Funding of $3.5 million is requested for fiscal year 1999 to continue the phased plan to renovate and modernize the Plum Island Animal Disease Center, Greenport, New York. Will this complete a phase of this plan? Please provide the costs and projects completed and planned, by fiscal year, for the modernization of the Plum Island Animal Disease Center.

Answer. The $3.5 million in fiscal year 1999 will be used to construct Phase 1 of the Power Plant; design renovations to laboratory space and animal rooms; and provide location and Architect-Engineer support services for modernization projects and other small miscellaneous projects. Modernization projects completed, or in design and construction at PIADC are as follows:

Fiscal year 1993

Consolidation (c)	$18,400,000

Fiscal year 1993

Underground Storage Tank Removal/Replacement (c)	443,000
Old Wastewater Treatment Plant Repairs (c)	185,000
Boiler Rental (c)	304,000
Incinerator Repair (c)	74,000
Environmental Assessment (S)	33,000
Chiller Plant (c)	1,400,000
Sludge Removal (c)	500,000
Miscellaneous Projects	784,000
Total	[1] 3,723,000

[1] Includes APHIS contribution of $1,183,000.

Fiscal year 1994

New Wastewater Treatment Plant (c)	1,250,000
Miscellaneous Projects	741,250
Total	[1] 1,991,250

[1] Includes APHIS contribution of $516,250.

Fiscal year 1995

Above-Ground Fuel Tanks (Phase I)(C)	1,168,000
Miscellaneous Projects	747,000
Total	[1] 1,915,000

[1] Includes APHIS contribution of $747,000.

Fiscal year 1996

Upgrade Fire Alarm System B–101 (D/C)	1,150,000
Above-Ground Fuel Tanks (Phase 2) (c)	730,000
Wastewater Treatment Plant Closure/Wetlands Creation (c)	1,200,000
Boiler Plant Design	500,000
PCB Transformer Replacement (D/C)	51,000

Miscellaneous Projects	933,000
Emergency Repairs Building 102 (c)	250,000
DOE—Energy Savings Technical Support	273,000
Plum Island Harbor Repairs (D/C)	1,647,000
Install Chiller (D/C)	1,267,000
Electric/Telephone Distribution System (D)	199,000
Total	[1] 8,200,000

[1] Includes APHIS contribution of $3.2 million.

Fiscal year 1997

Above-Ground Fuel Tanks (Phase 3) (c)	1,228,000
Underwater Electric Telecommunications Cable (c)	2,754,000
Sewage Decontamination Plant (D)	500,000
Miscellaneous Projects	668,000
Upgrade Pathological Incinerators (D)	450,000
Underwater Electric/Telecommunication Cable (c)	2,370,000
Wastewater Treatment Plant Improvements (D)	230,000
Total	[1] 8,200,000

[1] Includes APHIS contribution of $3.2 million.

Fiscal year 1998

Renovate East Service Wing (D)	350,000
Wastewater Treatment Plant Improvements (c)	1,000,000
Upgrade Pathological Incinerators Phase 1 (c)	3,200,000
Animal Room Utilization Study (S)	150,000
Miscellaneous Projects	500,000
Total	[1] 5,200,000

[1] Includes APHIS contribution of $3.2 million.

Proposed fiscal year 1999

Power Plant Phase 19c	2,700,000
Renovate Animal Wing (D)	300,000
Miscellaneous Projects	500,000
Sewage Decontamination Plant Phase 1 (c)	3,200,000
Total	[1] 6,700,000

[1] Assumes APHIS Contribution of $3.2 million.

Proposed fiscal year 2000 and beyond

Sewage Decontamination Plant Phase 2 (c)	3,000,000
Power Plant Phase (c)	23,200,000
Miscellaneous Projects	500,000
Environmental Remediation	1,500,000
Total	8,200,000

In fiscal year 1995 future modernization planning was estimated at $81.0 million. Since that projection, $8.2 million was funded in fiscal years 1996 and 1997 and an additional $5.2 million in fiscal year 1998. A reassessment of current infrastructure, environmental and physical plant repair and maintenance need reflect a future funding need of $61.0 million as a result of shifts and or changes in project scopes/costs and the inclusion of appropriate escalation to the midpoint of construction.

Question. Please provide the Committee with an update of the costs and projects completed and planned for the modernization of each of the ARS Regional Research Centers, giving the funds required in each future fiscal year by project.

Answer. The status of modernization efforts at the four Regional Research Centers is as follows:

Southern Regional Research Center (SRRC).—The SRRC Modernization initially involved a complete renovation of the surrounding site and Chemical Wing, and included such items as asbestos abatement, new and upgraded drainage, landscaping, equipment pads, pavement repairs, retaining walls, and handicapped ramps. Work to the interior of the building will include replacement of HVAC systems, reconfiguring each laboratory module, new stairwell to comply with safety codes, replacement

of floor finishes, new windows and complete patched, primed, and painted walls and ceilings as necessary. Total cost was estimated at $17.8 million, phased over 9 years.

Construction for Phase I of the Chemical Wing was awarded in fiscal year 1991 for $1.4 million. Phase II was awarded in fiscal year 1992 for $2.4 million using Agency funds. Phases III, IV, and V were awarded in fiscal year 1992 for $5 million. In fiscal year 1994, $2.667 million was appropriated for Phase VI of the Chemical Wing and in fiscal year 1995, $2.934 million was appropriated for construction of Phase VII. These phases were awarded in fiscal year 1996.

With regard to the renovation of the surrounding site, design and construction of Phase I site repair work was funded using $1,651,000 in fiscal year 1993 appropriations. The fiscal year 1996 appropriation of $900,000 was used for Phase 2 of the site repair work. In fiscal year 1998, $1.1 million was appropriated for the design of the renovation to the Industrial Wing. It is expected that construction will occur in four phases. Phase I in fiscal year 1999 at $6 million, Phase 2 in fiscal year 2001 at $5.5 million; Phase 3 in fiscal year 2003 at $4.5 million; and Phase 4 in fiscal year 2005 at $4 million.

The remaining sections of SRRC that need to be modernized are the Administration and Textile Wings.

Eastern Regional Research Center (ERRC).—ARS completed the Facility Modernization Study for ERRC in fiscal year 1993. The findings indicate that the utilities and building infrastructures have reached the end of their useful lives, and the facility itself has been overtaken by the evolution of codes, Agency criteria, and research needs over the past 50 years. The proposed modernization program will occur in 9 phases with a Total planning, design, and construction budget of $39 million over nine years.

In fiscal year 1994, ARS funded design of Phase 1 (Service Building) and Phase 2 (Engineering Research Laboratory in Pilot Plant) with $595,000 in Repair and Maintenance funds. In fiscal year 1995, ARS funded construction of Phase 1, and design of Phases 3 through 7, using $4,175,000 in Repair and Maintenance funds. In fiscal year 1996, ARS funded construction of Phase 2 using $4,100,000 in Repair and Maintenance funds. In fiscal year 1997, $4,700,000 was needed to fund construction of Phase 3, and $4 million was appropriated. In fiscal year 1998, $5,200,000 was needed to complete funding of Phase 3 and fund construction of Phase 4, and $5 million was appropriated. The Agency intends to award construction of Phases 3 and 4 with the $9 million available.

Future modernization phases are planned in fiscal year 1999 ($3.3 million),fiscal year 2000 ($4.4 million),fiscal year 2001 ($3.2 million). These phases will cover the remainder of the Chemical Wing. An additional phase in fiscal year 2001 for the Service Wing ($1.1 million) and another phase in fiscal year 2002 for the Pilot Plant ($7.8 million) will complete the current plan.

Western Regional Research Center (WRRC).—WRRC modernization includes the upgrade of outside utilities and complete renovation of the North Wing. The renovation includes asbestos and lead abatement, upgrade of existing HVAC system, laboratory reconfiguration to comply with safety and accessibility codes, replacement of all laboratory counters and tops, replacement of floor and windows, and completely patch, prime, and paint walls and ceilings as necessary. Total cost was $29.6 million phased over a 7-year period.

Phases 1 and 2 were awarded in fiscal year 1990 for $5.9 million. Phase 3 was awarded in fiscal year 1991 in the amount of $3.4 million. Phase 4 was awarded in fiscal year 1993 in the amount of $3.0 million. Phases 5 and 6 were awarded in fiscal year 1993 in the amount of $4.4 million and $3.2 million. Construction for Phase 6 was completed in the third quarter of fiscal year 1997.

In fiscal years 1994, 1995, and 1997, $1.161 million, $919 thousand, and $4.0 million, respectively, were appropriated for construction, construction management, and contingency for Phase 7. The Area funded all necessary fine tuning costs. Construction for Phase 7 is expected to be completed by the first quarter of fiscal year 1999.

In addition, renovation of the Small Animal Facility (West Annex Building) was completed at a cost of $5.0 million from the Agency's Repair and Maintenance funds.

Also, a construction contract was awarded in September 1995 using Agency funds in the amount of $800,000 to upgrade the building envelope of the Research and Development Facility (Pilot Plant) which includes Food Processing Laboratory and Industrial Processing Laboratory. A program of requirements was concurrently developed using Agency funds, $180,000, for the modernization of the Pilot Plant and was completed in fiscal year 1997. This facility occupies the south wing of WRRC encompassing approximately 21,000 square feet of space. The estimated design and construction cost for this project is $17.6 million.

National Center for Agricultural Utilization Research (NCAUR).—The National Center for Agricultural Utilization Research is currently proceeding with a facilities upgrade design and construction program as follows:

Phase IA—Utility Tunnel, Steam Lines, and Boiler: Construction contract was awarded in the fourth quarter of fiscal year 1991. Construction was completed in the second quarter of fiscal year 1995. Total project cost of $2.5 million is for construction.

Phase IB—Electrical and Drain System Upgrade: Construction contract was awarded in the third quarter of fiscal year 1992. Total cost of $.9 million is for construction. Construction was completed in the first quarter of fiscal year 1994.

Phase IID—Pilot Plant and Semi-Works Building Upgrades: Total cost for design is $1,825,000 which was appropriated in fiscal year 1992. The design for Phase II was awarded in fiscal year 1992 and is complete.

Appropriations to date include the following: Fiscal year 1992—$1,825,000, planning and design for Phase II Pilot Plant. Fiscal year 1993—$1,545,000 was redirected for Phase IID Modernization. In fiscal years 1996, 1997, and 1998, $3.9 million, $1.5 million, and $8.0 million were appropriated. In fiscal year 1996, a revised plan was developed which recommended a three-phased renovation for the North Wing. The initial phase (Segment I of Phase IID) will renovate four modules of the Pilot Plant, add mechanical rooms and an exterior stairway. Estimated planning, design, and construction cost is $6.9 million for this segment. Construction was awarded in the fourth quarter of fiscal year 1997 and will be completed in the third quarter of fiscal year 1999.

The remaining two segments are: Segment 2 of Phase IID will renovate adjoining areas in the North Wing. General laboratory, support space, and testing facilities will be provided to support the Pilot Plant modules. The Semi-Works Building will be renovated to support infrastructure of the Center. Estimated planning, design, and construction cost of $8.0 million. Design will be completed in the third quarter of fiscal year 1998 with construction awarded in the fourth quarter of fiscal year 1998. Segment 3 of Phase IID will renovate additional laboratory, support space, and testing facilities will be provided to support the Pilot Plant modules. Estimated planning, design, and construction cost of $8.4 million is requested in the fiscal year 1999 Budget.

Additional funding needed which has been escalated to the planned year of implementation is $62.2 million. This will complete planned modernization efforts at the Center.

Question. How did the ARS use funds appropriated to it for repairs and maintenance of facilities in fiscal year 1997?

Answer. The fiscal year 1997 repair and maintenance budget was $18.262 million. This amount includes $14.246 million in Agency funds, $900,000 for the National Agricultural Library, $740,000 for the USNA, and $2.376 million in BARC Renaissance 1993 funds. Some of the types of repair and maintenance projects funded in fiscal year 1997 include: roof repair, HVAC repair, plumbing repairs, upgrade to sewage lines, electrical repairs, fencing replacement, painting, pavement repair, asbestos and lead abatement, accessibility projects, and replacement of fire alarm systems.

Question. What are the planned use of Repair and Maintenance funds for fiscal year 1998? Please give project and funding.

Answer. The planned use of Repair and Maintenance funds for fiscal year 1998, by project and funding, will be provided for the record.

[The information follows:]

State/location/project	*Amount*
Nationwide—National Seismic Studies	$253,000
Arkansas, Booneville—Upgrade Sewage Lagoon	90,000
Arizona, Phoenix—Renovate Three Labs	171,000
California:	
Albany:	
Upgrade Mechanical Rooms	350,000
Exterior Manlift/Accessibility Issue	65,000
Riverside—Upgrade Electrical Service	58,000
Salinas—New Replacement Well	106,000
Delaware, Newark—Remove/Replace Greenhouse Benches and Sidings	30,000
District of Columbia, U.S. National Arboretum:	
Exterior Lighting	250,000
Paths, Irrigation, Drainage and Lighting	300,000
Bonsai Courtyard	35,000
Auditorium/Lobby Renovation	20,000

State/location/project	*Amount*
Trim and Remove Trees	25,000
Street Signs	22,000
Miscellaneous	87,633
Florida:	
Canal Point—Repair/Modify Various Buildings	250,000
Gainesville:	
Replace Fire Alarm System	300,000
Phase 2 Modernization/Renovation	5,900,000
Georgia, Athens:	
Elevator/Stair Construction	75,000
300 KV Energy Generator	127,000
Idaho:	
Dubois:	
Repair 1.5 Mi. of Entrance Road	225,000
Repair Gravel Road	35,000
Kimberly—Repair Roof Bldg. 2, 3, 4, and 5	165,800
Illinois, Peoria:	
Replace Cooling Water Tower	125,000
Install Additional Fire Hydrants	75,000
Replace Steam Traps	25,000
Upgrade Ventilation Basement/Center Wing/Other Areas	65,000
Indiana, West Lafayette:	
Fume Hood	10,000
Install Insulation in Grinding Room	15,000
Iowa, Ames:	
Construct Bldg. 5 Improvements	120,000
High Priority Research List 400 NADC Master Plan	617,000
Maryland:	
Beltsville Agricultural Research Center (BARC):	
Annual Demolition	300,000
Mod Office Salaries	197,327
Inspection	51,052
Replace CFC Refrigerants	20,000
Telecommunications East and West	150,000
Road Repairs	100,000
Roof Repairs	100,000
Install Deaeratro Bldg. 014	70,000
Replace Storm/Sanitary Lines 3rd St	100,000
Convert 10 Boilers to Gas	160,000
Replace Steamlines, Bldgs. 307 and 306	150,000
Remove Pipe Chase Asbestos, Bldg. 200	150,000
Correct Water Leak, Bldg. 008, Rms. 10 and 12	20,000
Install Backflow Prevention on BARC	175,000
Install Fall Protection at Sites	70,000
Install Fence at Manure Pit	10,000
Install Smoke Indicator, Bldg 309	10,000
Repair/Replace Granary Docking/Turnheads	15,000
Replace Roof, Bldg. 161	150,000
Replace Roof, Bldg. 301	40,000
Replace Variable Frequency Drives, Bldg. 007	30,000
Correct Drainage, Bldg. 50, GH 2/Section 2	10,000
Install O/H Garage Doors, Bldgs. 029, 1124, and 1125	70,000
Replace HVAC System, Bldg. 046	45,000
Contingencies	182,683
Frederick—Upgrade HVAC/Lab Infrastructure Bldg. 1301	400,000
National Agricultural Library:	
Sprinkler System, Phase II	250,000
Replace Cooling Tower	375,000
Miscellaneous/Emergency Repairs	100,000
Facility Seismic Study	30,000
Clean Air Ducts	145,000
Michigan, East Lansing:	
Sewage Disposal Improvements	18,000
Replace Roofs	143,000
Minnesota:	
Morris:	
Install Fire Alarm System	50,000

State/location/project	*Amount*
Upgrade Micro-Biology Laboratory	45,000
St. Paul:	
Glazing on Greenhouse #2	15,000
Repair Structure of Building	132,000
Mississippi:	
Mississippi State—Replace Telephone System	220,000
Oxford—Renovate Chemistry Labs	150,000
Poplarville—Replace HVAC Systems and Lights in Bldgs. 1 and 2	50,000
Stoneville:	
Repair Pond Levees	88,000
Renovation of Laboratory/Quarantine Facility	100,000
Replace Underground Water Supply	100,000
Missouri, Columbia:	
Emergency Exits	32,000
Retaining Wall	12,000
Improve Ventilation	53,000
Repair Concrete	8,000
Pond Drainage System	100,000
Montana, Sidney:	
Asbestos Abatement	100,000
Upgrade HVAC System	840,000
New York, Ithaca:	
Replace Fume Hoods, Fans, Stacks	165,000
Construct Stairway Enclosure, Bldg. 004	15,000
Repair Air Handling Unit, Main Bldg	25,000
Ohio, Coshocton:	
Repair Air Exchange System	16,000
Historic Survey	10,000
Repair Lysimeters	9,000
Oklahoma:	
El Reno:	
Develop Facilities Historic Preservation Plan	100,000
Renovate Existing Cattle Barn	440,000
Lane—Replace Automated Telephone System	30,000
Stillwater—Repair/Renovation of 3 Greenhouses	46,000
Woodward:	
Design/Analysis for HVAC/Electrical Upgrade	45,000
Install UFAS Elevator	44,000
Oregon, Burns—Upgrade Access Road	30,000
Pennsylvania:	
Wyndmoor—Replace Underground Storage Tank	85,000
University Park—Upgrade/Replace HVAC	30,000
South Carolina, Florence—Replace and Expand Exterior Office Walls	106,000
Texas:	
Bushland:	
Replace 500 sf. Gas House	25,000
Upgrade for Accessibility	20,000
College Station:	
Energy Audit	20,000
Replace Electrical Distribution Panels, Bldgs. 11 and 12	42,000
Houston:	
Comprehensive Energy Audit	20,000
Comprehensive Roof Evaluation	7,000
Kerrville—Repair Polymer Roof Coating	80,000
Temple:	
Upgrade Interior Building Ceiling Light	130,000
Asbestos Removal	155,000
Weslaco—Replace Boiler Bldg. 203	20,000
West Virginia:	
Beckley:	
Master Plan/Deficiency Study/Energy Conservation	35,000
Alter Soils Prep Bldg	85,000
Kearneysville—Maintain and Repair HVAC	30,000
Wisconsin, Madison—Upgrade Building Access	60,000
Agency Unassigned Funds	412,900
Total	18,262,395

Question. The fiscal year 1998 Appropriations Act provides $700,000 in unrequested funding for planning and design of the Jornado Range Research Center, Las Cruces, NM. Please describe the need for this Center, the projected schedule for design and construction of the project, and what additional funds will be required, by fiscal year, to complete the project.

Answer. The Jornada Experimental Range Program investigates ecosystem processes, then uses that knowledge to develop best forage-livestock management practices and strategies for remediation and protection of desert rangelands. The Jornada programs have outgrown their temporary quarters on New Mexico State University's main campus. The scientists are currently housed in mobile trailer facilities. The laboratory and computer capabilities are inadequate for the research and information-sharing needs of Jornada's investigators and the cooperative approach necessary for the success of their program.

The projected schedule for design and construction are as follows: Start Design, July 1998; Complete Design, December 1999 (18 months); Start Construction, May 1999; Complete Construction, November 2000 (18 months).

In fiscal year 1999, $6.7 million will be needed for construction, construction management services, and contingency.

Question. The fiscal year 1998 Appropriations Act provides $5,200,000 in unrequested funding for planning and design work and initial construction costs for the Western Human Nutrition Research Center, Davis, California. Please describe the need for this project, the schedule for design and construction of the project, and the remaining funds required to complete the project, indicating the fiscal year for which the funds will be required.

Answer. The mission of the Western Human Nutrition Research Center (WHNRC) is to conduct research on human nutritional needs with emphasis on developing ways to measure these needs and assess nutritional status in large populations. The research directly supports the National Health and Nutrition Examination Surveys conducted jointly by USDA, FDA, and the Centers for Disease Control. WHNRC, created by Congress in 1980, is located in the former Letterman Army Institute of Research (LAIR) building at the Presidio in San Francisco now called The Letterman Complex. In October 1994, the Presidio was transferred to the National Park Service and became part of the Golden Gate National Recreation Area.

ARS has negotiated an agreement with the National Park Service to remain in the LAIR facility with about 37,000 gsf. It currently is the only tenant in the 300,000 gsf building. Beginning in fiscal year 1999, it is anticipated that the rental cost charged by the National Park Service will increase substantially from the current rate due to the Park Service's insistence on recouping facility operating costs.

ARS is currently undertaking a Master Plan Analysis of the proposed project site at Davis, California, where it plans to construct a replacement facility on the campus of the University of California. This analysis is scheduled to be complete by July 1998, with the remainder of the project schedule contingent upon appropriations received, as follows: Complete Predesign, December 1998; Complete Design, January 2000; Award Construction Contract, April 2000; Complete Construction, April 2002.

The Total project cost (planning, design, and construction) is estimated to be $17.5 million.

In fiscal year 1998, $5.2 million was appropriated for design and construction, resulting in a remaining need of $12.3 million in future years.

Question. The President canceled the $600,000 provided in the fiscal year 1998 Appropriations Act for the ARS Poisonous Plant Laboratory (PPRL) in Logan, Utah. Are the current ARS office and laboratory space and related facilities at this location adequate?

Answer. A new laboratory/office building (approximately 17,000 gsf) is needed and recommended for the ARS Poisonous Plant Laboratory by the Agency. The existing lab/office (early 1960's pre-engineered metal building)has exceeded its expected life and its occupants are crowded in its 7,500 square feet. The existing building is functionally inefficient due to the 5 different additions done over its 30-year life.

Question. Are replacement facilities recommended by ARS?

Answer. Funds for replacement facilities are not included in the fiscal year 1999 budget. As explained, the existing facilities have reached their useful life expectancy, and are inadequate for state-of-the-art research. Long term plans include a recommendation for replacement of these facilities.

Question. If so, when will these facilities be needed?

Answer. The fiscal year 1999 budget does not propose funding for this facility.

Question. On March 17, 1997, the Department of Agriculture submitted a report to the Committee on ARS' insect rearing capabilities. A copy of that report is submitted for the record. When will each of the two new facilities which the report indi-

cates are needed to mass produce high quality and effective agents at economically acceptable costs be required?

Answer. USDA/ARS recognizes the need to move forward with construction and completion of the Waimanalo, Hawaii, and Stoneville, Mississippi, rearing facilities. However, the funding for other facilities' construction and modernization is more urgent in the fiscal year 1999 budget request.

Question. What is ARS' recommended schedule for construction of each of these project?

Answer. Once funds are appropriated, planning and design will be complete in 18 months. Construction will take approximately 24 months.

Question. Please provide a status report on each of the ARS buildings and facilities for which funds were provided for fiscal year 1997 and 1998, indicating a current status of the work funded and what additional funds will be required, if any, to complete the project, by fiscal year.

Answer. The status of the fiscal year 1997 and fiscal year 1998 Building and Facilities funds, and additional funding required, will be provided for the record.

[The information follows:]

[Dollars in thousands]

Location/project status	Appropriation—		Additional funding needs
	1997	1998	
Albany, CA, Chemical Wing: Construction of Phase 7 is scheduled for completion in the 1st quarter of fiscal year 1999. This will conclude modernization of Chemical Wing	$4,000	.....	.....
Davis, CA: Design is scheduled for award in the 2nd quarter of fiscal year 1998 for completion by January, 2000. Construction, which is projected at $15.8 million, is partially funded with the $3.5 million (within the $5.2 million) appropriated in fiscal year 1998	.....	$5,200	$12,300
Parlier, CA: Design is complete. Construction is scheduled for award in April, 1998	.....	23,400	.....
Montpellier, France: Construction is fully funded and contract was awarded March 23, 1998	.....	3,400	.....
Ft. Pierce, FL: Construction is fully funded and is scheduled for completion in the 3rd quarter of fiscal year 1999	27,000	.....	.....
Edwardsville, IL, Ethanol Pilot Plant: Fiscal year 1997 appropriation was provided as grant award to Southern Illinois Univ. for design of facility. Construction of facility is projected at $19.7 million	1,500	.....	19,700
Peoria, IL, Pilot Plant: $8.4 million is requested in the fiscal year 1999 Budget to complete construction of pilot plant	1,500	8,000	8,400
Manhattan, KS: $1.4 million requested in fiscal year 1999 Budget to complete total funding required for construction of Phases 1 and 2	500	.....	9,300
New Orleans, LA, SRRC Industrial Wing: Design is scheduled for completion in December, 1998. $6 million of the total $20 million required for construction is requested in the fiscal year 1999 Budget	.....	1,100	20,000
Beltsville, MD, BARC: $2.5 million is requested in the fiscal year 1999 Budget for construction of a new Poultry Production facility and for other miscellaneous projects	4,500	3,200	98,000
Beltsville, MD, NAL: $1.2 million is requested in the fiscal year 1999 Budget for replacement of air handler units	.....	2,500	17,500
East Lansing, MI: Design is fully funded and contract is scheduled for award in the 4th quarter of fiscal year 1998. Construction of the facility is projected at $17.2 million	.....	1,800	17,200
Oxford, MS: Fiscal year 1998 appropriation was transferred to CSREES for award to Univ. of Mississippi for construction of Animal Facilities	.....	7,000	.....
Sidney, MT: Design of 27,780 GSF lab office and biocontainment facility is scheduled for award in the 3rd quarter of fiscal year 1998. Construction of the facility is projected at $7.3 million	.....	606	7,300
Las Cruces, NM: Design of 29,000 GSF lab office building is scheduled for award in the 3rd quarter of fiscal year 1998. Construction of the facility is projected at $6.7 million	.....	700	6,700
Greenport, NY, PIADC: $3.5 million is requested in the fiscal year 1999 Budget for construction of Building 101 Incinerator and for accomplishing CERCLA remediation activities	5,000	2,000	61,000
Grand Forks, ND: Full restoration of Nutrition Center is scheduled for completion in the 2nd quarter of fiscal year 1999	.....	4,400	.....

[Dollars in thousands]

Location/project status	Appropriation—		Additional funding needs
	1997	1998	
Wyndmoor, PA: $3.3 million is requested in the fiscal year 1999 Budget for construction of Phase 5. Appropriation provided in Fiscal years 1997 and 1998 is being used for construction of Phases 3 and 4	4,000	5,000	20,722
Charleston, SC: Construction of Phase 1 is fully funded and is scheduled for award in the 4th quarter of fiscal year 1998 for completion by the 4th quarter of fiscal year 2000. Design and construction of Phase 2 is projected at $7.3 million	3,000	4,824	7,324
Lubbock, TX: Construction is fully funded and is scheduled for completion in the 1st quarter of fiscal year 1999	8,100	.....	.....
Weslaco, TX: Construction of laboratory, office and greenhouse is scheduled for completion in the 1st quarter of fiscal year 1999. Future modernization costs are projected at $14.1 million	4,000	.....	14,108
Leetown, WV: Design is scheduled for completion in January, 1999. Construction, which is projected at $12 million, is fully funded	6,000	6,000	.....
Total	69,100	79,130	319,554

APPROPRIATIONS LAW

Question. The fiscal year 1999 budget requests statutory language to facilitate land exchanges by providing the Agricultural Research Service authority to pay more than $100 up to 25 percent of the value of land or interest transferred out of Federal ownership in order to equalize the value of exchange. Please explain why this language is needed.

Answer. In the past, ARS has received requests from non-federal entities, (state, county, and local governments including the Commonwealth of Puerto Rico) to use Federally-owned land in the custody of ARS for the construction of new schools, roads, flood control projects, etc., in exchange for land of equal value. Under ARS' current authority, the value of the land received in exchange must be within $100 of the value of the Federally-owned land. This creates an undue burden on the non-federal entity to find a parcel of land acceptable to ARS that is equal in value within $100. The proposed change provides more flexibility for ARS to accommodate land exchange requests from local jurisdictions.

Question. The fiscal year 1999 budget requests statutory language to grant easements at the Beltsville Agricultural Research Center, including for the construction of the Transgenic Animal Facility. Please explain in more detail why this language is required.

Answer. The Transgenic Animal Facility (TAF) will be constructed by the University of Maryland (UM) using grant funds received from the Cooperative State Research, Education and Extension Service. Section 523 of Pub.L. No. 100–202, a joint resolution making continuing appropriations for the fiscal year 1988, and other purposes, prohibits the use of appropriations "for the purpose of the sale, lease, rental, excessing, surplusing, or disposal of any portion of land on which [BARC] is located at Beltsville, Maryland, without the specific approval of Congress." Easements are considered disposals, thus this law prohibits BARC from issuing easements.

Question. Does the Transgenic Animal Facility the University of Maryland will construct and this language allow the Secretary to accept replacement of an existing USDA facility?

Answer. The proposed fiscal year 1999 appropriation language provides the necessary provision for the Secretary to accept the gifted TAF building as a replacement building for an existing USDA temporary facility.

Question. Why is the University constructing this facility and not the USDA?

Answer. The University of Maryland is constructing the facility because the funds for constructing this facility are University of Maryland funds, not ARS appropriated funds. This will be a cooperative venture with USDA.

Question. What will be the annual operating costs of this facility to the ARS?

Answer. The new facility is currently under design. Therefore, we are unable to determine the actual operating costs. The current facility costs approximately $110,000 per year for operation and maintenance. This is a temporary structure that has outlived its usefulness. With the construction of a modern facility that is energy efficient, the operating costs should be reduced.

The fiscal year 1999 budget requests statutory language for the purpose of appropriately responding to requests to make Federally-owned land and facilities available for special use and to allow fees to be charged as authorized by law.

Question. What law authorizes these fees? Please give citation.

Answer. Current laws authorizing ARS to collect fees are as follows:

—Easement law 40 USC 319, allows us to collect monetary or other consideration.

—31 USC 9701, provides the Government generally with the authority to charge fees for Government services and things of value.

—20 USC 196, subsection a, (4), authorizes the Secretary of Agriculture to charge fees for use of grounds and facilities of the U.S. National Arboretum.

—GSA Bulletin FPMR D–242, dated June 11, 1997, issued in accordance with President Clinton's memorandum of August 10, 1995, entitled "Facilitating Access to Federal Property for the Siting of Mobile Services Antennas", and section 704(c) of the Telecommunications Act of 1996, PL 104–104, (47 USC 332 note), provides authorization for agencies to charge and collect site fees and access fees.

Question. If these fees are authorized by law, why does the requested appropriations bill language "authorize" the agency to charge fees "commensurate with the fair market value, for any permit, easement, lease, or other special use authorization for the occupancy or use of land and facilities...as authorized by law"? Why doesn't the language simply permit fees authorized by law to be credited to the account and available until expended for authorized purposes?

Answer. Since existing authorities to collect fees are distinct and scattered in law, the language simply authorizes the collection and use of these fees to assure that there is no question that Congress intended ARS to collect fees for these purposes, and credit those fees to its appropriations.

Question. Please give some examples of special use permits which would be issued by the agency and what fees would be charged.

Answer. ARS is requesting the authority to issue specific use authorization, such as land use agreements or memorandum of understanding, for instances where the Federal or non-Federal entity does not use a standard lease, permit, or easement document. Special Use Permits is a general term used by some local jurisdictions or non-federal entities in place of Permits, Revocable Permits, Leases or Easements. For example, the University of California at Davis issues Land Use Agreements and CSX Railroad issues Special Use Agreements. Having authority to issue Special Use Permits would give ARS the authority to use the documents and terminology preferred by the local jurisdiction or non-federal entity. Fees, when applicable, would be based on the fair market value of the land under Special Uses Permit and would be similar to those currently charged by ARS for Easements.

FISCAL YEAR 1999 ARS SALARIES AND EXPENSES REQUEST

Question. The President's fiscal year 1999 budget recommends a number of project terminations and elimination of "Congressional add-ons" to fund "high priority" research. Why do you consider each of these projects to be of lower priority?

Answer. The fiscal year 1999 Federal budget submitted by the President recommends a number of new initiatives to address changing priorities facing agriculture and the American consumer. The research budget proposed for ARS reflects an increase of $32 million over the current year. However, the Department is focusing on many priority agricultural issues that must be addressed now by our research scientists. This requires that ARS terminate ongoing projects and reallocate these resources to the new or expanded initiatives as recommended by the President. In this effort a number of projects were identified as less critical. As a result, a cost-effective decision was made to recommend project terminations and elimination of projects to fund higher priority research.

Question. What criteria did you impose to determine the projects and increases proposed for termination?

Answer. In order to provide financing for new and expanded high priority research in a fiscally constrained budget, it was determined that the restored projects proposed for termination in the fiscal year 1998 budget as well as all the Congressionally added projects included in the 1998 Appropriations Act be proposed for reduction in fiscal year 1999.

Question. Please explain what the Department is doing to make sure that the additional ARS positions and research program increases funded for fiscal year 1998 but not included in the President's fiscal year 1999 budget are executed?

Answer. ARS is moving forward with implementing the initiatives funded in the 1998 Appropriations Act. All new positions have been established. Recruitment ac-

tions are underway with vacancy announcements to open April 6. Research plans for these funded projects have been established and are underway.

Question. Please provide a status report on the execution of each of the following funding increases provided to ARS in fiscal year 1998:

—Vomitoxin in Wheat, $500,000;
—Fusarium Head Blight, MN, $500,000;
—Karnal Bunt, KS, $500,000;
—Citrus Tristeza, $750,000;
—Ergot Disease in Sorghum, $300,000;
—Asian Long Horn Beetle, $500,000;
—Apple E.Coli research, PA, $250,000;
—Food Safety Agency Study (National Academy of Sciences), $420,000;
—Hydrology, Canal Point, FL, $500,000;
—Hydrologist, Dade County, FL, $250,000;
—Melaleuca research, $500,000;
—Appalachian Soil and Water Conservation Lab, WV, $250,000;
—Arctic Germplasm Repository, $650,000;
—Coastal Wetlands and Erosion Control, LA, $1,000,000;
—Cotton Genetics, MS, $250,000;
—Cotton Ginning, TX, $500,000;
—Fish Disease, AL, $250,000;
—Food Fermentation, NC, $250,000;
—Formosan Termite, Southern Regional Research Center LA, $5,000,000;
—Grain Legume, WA, $250,000;
—Honeybee, TX, $500,000;
—Hops research, OR, $100,000;
—Lyme Disease, $200,000;
—National Aquaculture Research Center, AR, $500,000;
—National Center for Cool and Cold Water Aquaculture, WV, $250,000;
—National Warmwater Aquaculture Center, MS, $500,000;
—Natural Products, MS, $700,000;
—Northwest Nursery Crops, OR, $500,000;
—Organics Management Research, $500,000;
—Plant Genetics Equipment/Greenhouse, MO, $200,000;
—Poisonous Plant, UT, $100,000;
—Poult Enteritis Mortality Syndrome, GA, $250,000;
—Reproductive Efficiency of Beef Cattle, MT, $250,000;
—Rice Research, Beaumont, TX, $250,000;
—Rice Research, Stuttgart, AR, $700,000;
—Small Fruits, MS, $250,000;
—Small Grains, Raleigh, NC/Aberdeen, ID, $450,000;
—Sugarcane Biotechnology Research, LA, $200,000;

Answer. ARS is in the process of releasing each of these program increases added by Congress in fiscal year 1998 in the amounts and for the purposes authorized in accordance with the fiscal year 1998 Appropriations Act. A detailed listing of the distribution of these increases will be provided for the record.

[The information follows:]

AGRICULTURAL RESEARCH SERVICE—IMPLEMENTATION OF FISCAL YEAR 1998 PROGRAM INCREASES

Funding increase	Amount	Research location	Status/purpose	Status of new scientist(s) position(s)
Vomitoxin in wheat ($500,000)	$500,000	St. Paul, MN	Negotiations are underway with the 12 State Consortium to enter into Specific Cooperative Agreements.	Not applicable.
Fusarium Head Blight ($500,000)	500,000	St. Paul, MN	Funds have been released for research on Fusarium head blight in wheat and other grain crops.	A Plant Pathologist and Pathologist/Microbiologist will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Karnal Bunt ($500,000)	500,000	Manhattan, KS	Funds have been released for research to improve resistance of wheat varieties to karnal bunt.	An Agronomist/Geneticist/or Molecular Biologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Citrus Tristeza ($750,000)	540,000	Headquarters	Funds temporarily held at HQ. Funds will be used to fund cooperative agreements on citrus tristeza virus research. Proposals have been submitted and are under review.	Not Applicable.
	150,000	Beltsville, MD	Funds have been released for collection of isolates of citrus tristeza virus.	
	60,000	Orlando, FL	Funds have been released for establishment of full-time program on Citrus Tristeza Virus.	Not Applicable.
Ergot Disease in Sorghum ($300,000)	300,000	Headquarters	Funds temporarily held at HQ. Negotiations are underway with Texas A&M and Puerto Rico University to fund cooperative research on ergot disease. In-house research is underway in Lincoln, NE, Frederick, MD, and Mayaguez, PR.	Not Applicable.
Asian Long Horn Beetle ($500,000)	400,000	Newark, DE	Funds have been released to develop integrated pest management and biological control technology for Long Horn Beetle. Negotiations are underway for a Specific Cooperative Agreement with Cornell University to provide entomology and integrated pest management support.	An ARS Research Entomologist has been reassigned to Newark, DE to work on this research.

AGRICULTURAL RESEARCH SERVICE—IMPLEMENTATION OF FISCAL YEAR 1998 PROGRAM INCREASES—Continued

Funding increase	Amount	Research location	Status/purpose	Status of new scientist(s) position(s)
	100,000	Headquarters	Funds temporarily held at HQ. Negotiations are underway to enter into a Specific Cooperative Agreement with Cornell University as outlined in a proposal from the University of Vermont to support taxonomic activities.	Not Applicable.
Apple E. coli ($250,000)	250,000	Wyndmoor, PA	Funds have been released and research is underway to determine the source of zoonotic pathogens in apples (E. coli) and to identify methods of effectively killing these pathogens.	A Food Technologist/Microbiologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Food Safety Agency Study (NAS) ($420,000)	420,000	Headquarters	Funds have been released to fund a grant with the National Academy of Sciences to conduct the Food Safety Agency Study.	Not Applicable.
Hydrology, Canal Point, FL ($500,000)	500,000	Canal Point, FL	Funds have been released and research is underway to develop high water table management practices for sugarcane breeding and microbiology programs.	An Agronomist and Geneticist or Soil Microbiologist will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Hydrologist, Dade County, FL ($250,000)	250,000	Miami, FL	Funds have been released and research is underway to develop a hydrologic model to define the risk of flooding to the agricultural community in Dade County.	This position has been filled by an ARS Hydrologist selected to work on this research project.
Melaleuca Res. ($500,000)	250,000	Ft. Lauderdale, FL	Funds have been released and research is underway to expand current research on biological control technology for Melaleuca in the Everglades.	A Research Entomologist will be hired. A position description has been developed and is currently being reviewed. Recruitment action will follow upon approval.
	250,000	Headquarters	Funds have been released and research is underway to develop Melaleuca control at the Australian Biological Control Laboratory, Brisbane, Australia.	A Research Entomologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Appalachian Soil and Water Conservation Lab. WV ($250,000)	250,000	Beckley, WV	Funds have been released. Research is underway on the effects of timber management and accelerated harvesting on forest biosystems.	A Plant or Soil Scientist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.

Arctic Germplasm Repository ($650,000)	650,000	Pullman, WA	Funds have been released and research is underway on the preservation, evaluation, regeneration and storage of disease free germplasm adapted to northern soils. A Specific Cooperative Agreement with the State of Alaska Plant Materials Center to support a germplasm repository at Palmer, AK, has been completed.	A Horticulturist/Plant Pathologist or Geneticist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Coastal Wetlands and Erosion Control, LA ($1,000,000)	1,000,000	Baton Rouge, LA	Funds have been released and research is underway on coastal wetlands and erosion control. Proposals have been submitted by Louisiana State University Agricultural Center and the Natural Resources Conservation Service for cooperative research with ARS.	An Ecologist/Water Management scientist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Cotton Genetics, MS ($250,000)	250,000	Stoneville, MS	Funds have been released. Research is underway to develop new germplasm that will increase the genetic yield potential of upland cotton.	A Geneticist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Cotton Ginning, TX ($500,000)	500,000	Lubbock, TX	Funds have been released. Research is underway to improve cotton quality through improved harvesting and ginning.	Two Agricultural Engineers will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Fish Disease, AL ($250,000)	250,000	Auburn, AL	Funds have been released and research is underway to develop and implement methods to detect and prevent losses due to infectious diseases of cultivated fish.	A Fish Health Management Scientist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Food Fermentation, NC ($250,000)	250,000	Raleigh, NC	Funds have been released. Research is underway to improve product quality and safety of brined and fermented vegetables while reducing the amount of waste generated.	A Microbial Ecologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Formosa Termite SRRC, LA ($5,000,000)	5,000,000	New Orleans, LA	Funds have been released and research is underway. Proposals have been received from the University of Florida for cooperative research on testing existing termite control technologies.	Nine Research Scientists will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Grain Legume, WA ($250,000)	250,000	Pullman, WA	Funds have been released and research is underway to expand the pea, lentil and legume program in basic genetics and varietal improvement.	A Geneticist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.

AGRICULTURAL RESEARCH SERVICE—IMPLEMENTATION OF FISCAL YEAR 1998 PROGRAM INCREASES—Continued

Funding increase	Amount	Research location	Status/purpose	Status of new scientist(s) position(s)
Honeybee, TX ($500,000)	500,000	Weslaco, TX	Funds have been released and research is underway on the control of parasitic bee mites and management of Africanized bees.	An Insect Toxicologist and Research Entomologist will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Hops Research, OR ($100,000)	100,000	Corvallis, OR	Funds have been released and research is underway for hops breeding and collection. Proposals have been received for cooperative research with Washington State University.	Not Applicable.
Lyme Disease ($200,000)	200,000	Beltsville, MD	Funds have been released and collaborative research is underway with Yale University and the states of CT, RI, MD, NY and NJ to support the Northeast Regional Lyme Tick Control Project.	Not Applicable.
National Aquaculture Research Center, AR ($500,000)	500,000	Stuttgart, AR	Funds have been released. Research is underway to conduct a comprehensive program to advance the cultivation of emerging warmwater aquaculture species with economic potential.	Two Aquaculture Research Scientists will be hired. Position descriptions are currently being reviewed. Recruitment action will follow upon approval.
National Center for Cool and Cold Water Aquaculture, WV ($250,000)	250,000	Leetown, WV	Funds have been released and research is underway to address high priority research needs of the nation's cool and cold water aquaculture. The research program will be a cooperative and collaborative arrangement between the Leetown Science Center, West Virginia University and the ARS Appalachian Fruit Research Lab, Kearneysville, WV.	A new scientist will be hired to serve as Research Leader. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
National Warmwater Aquaculture Center, MS ($500,000)	500,000	Stoneville, MS	Funds have been released and research is underway on the catfish genetics and breeding program. Action is also underway to modify the existing Cooperative Agreement with the MS Agr. and Forestry Experiment Station to increase funding.	An Aquaculture Production Systems scientist will be hired. Recruitment action is underway with a vacancy announcement opening April 6. 1998.

Natural Products, MS ($700,000)	700,000	Oxford, MS	Funds have been released and research is underway to develop natural products beneficial to agriculture. The existing Cooperative Agreement with the University of Mississippi has been modified to add additional funding.	A Research Microbiologist was selected and reported for duty in December 1997.
Northwest Nursery Crops, OR ($500,000)	500,000	Corvallis, Or	Funds have been released and research is underway to develop physiological studies on improving transplant survival to stress and to develop cultural procedures that lead to improved root development. Proposals have been submitted for competitive cooperative agreements.	A Plant Physiologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Organics Management Research ($500,000)	500,000	Beltsville, MD	Funds have been released and will be used to increase cooperative funding to Rodale Institute, N-Viro International and the Composting Council Research and Education Foundation.	Not Applicable.
Plant Genetics Equipment/Greenhouse, MO ($200,000)	200,000	Columbia, MO	Funds have been released. Negotiations are underway to purchase equipment to support Seed Storage and Greenhouse Facility.	Not Applicable.
Poisonous Plants, UT ($100,000)	100,000	Logan, UT	Funds have been released and research is underway to support poisonous plants containing pyrrolizidine alkaloids which cause excessive economic losses for the U.S. livestock industry.	Not Applicable.
Poultry Enteritis Mortality Syndrome, GA ($250,000)	250,000	Athens, GA	Funds have been released and research is underway to address the identification and molecular characterization of agents causing Poultry Enteritis-Mortality Syndrome.	Not Applicable.
Reproduction Efficiency of Beef Cattle, MT ($250,000)	250,000	Miles City, MT	Funds have been released and research is underway to identify the factors that affect reproduction efficiency of beef under range conditions.	An Animal Physiologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Rice Research Beaumont, TX ($250,000)	250,000	Beaumont, TX	Funds have been released and research is underway to develop new technologies for evaluating and improving rice milling, cooking and processing quality.	A Research Chemist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.

AGRICULTURAL RESEARCH SERVICE—IMPLEMENTATION OF FISCAL YEAR 1998 PROGRAM INCREASES—Continued

Funding increase	Amount	Research location	Status/purpose	Status of new scientist(s) position(s)
Rice Research Stuttgart, AR ($700,000)	700,000	Stuttgart, AR	Funds have been released and research is underway to improve domestic rice quality needs and breeding methods so the United States can remain competitive in the world market.	A Research Chemist and Geneticist will be hired. Recruitment actions are underway with vacancy announcements opening April 6, 1998.
Small Fruits, MS ($250,000)	250,000	Poplarville, MS	Funds have been released and research is underway to study insect biology and develop improved methods of control in small fruit crops in the southeastern states.	A Research Entomologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
Small Grains, Raleigh, NC/Aberdeen, ID ($450,000)	250,000	Raleigh, NC	Funds have been released and research is underway to control fungal pathogens of small grains.	A Plant Pathologist will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.
	200,000	Aberdeen, ID	Funds have been released and research is underway for improving both barley and oat genetic stocks.	Not Applicable.
Sugarcane Biotechnology Research, LA ($200,000)	200,000	Houma, LA (New Orleans).	Funds have been released and research is underway to expand sugarcane biotechnology and to develop new varieties of sugarcane with improved quality and field performance.	A Geneticist/Plant Breeder will be hired. Recruitment action is underway with a vacancy announcement opening April 6, 1998.

Question. Provide for each of the increases requested for fiscal year 1999, how and where the new funding will be allotted.

Answer. An Implementation Plan for the requested fiscal year 1999 increases will be provided for the record.

[The information is provided:]

AGRICULTURAL RESEARCH SERVICE FISCAL YEAR 1999 BUDGET ESTIMATE IMPLEMENTATION PLANS

OBJECTIVE I: SOIL, WATER, AND AIR SCIENCES—$4,750,000

Watershed Health/Pfiesteria Research—$1,000,000 ($1,000,000 under Objective III)

—Water Quality, Nutrient Management, and Watershed Health ($1,000,000)

Beltsville, MD, $300,000.—Develop and evaluate management practices to prevent movement of nutrients and pathogens in manure to surface and ground water. Data will be used to enhance natural resource inventory and monitoring programs.

Beltsville, MD, $300,000.—Evaluate and predict where best management practices to protect surface and ground water quality can be most effectively used. Data will enhance natural resource inventory and monitoring programs.

Florence, SC, $300,000.—Develop improved methods for handling, storage, and application of manure to protect water quality. Data will be used to support natural resource inventory and monitoring programs.

Beltsville, MD, $100,000.—Develop aquatic plant based systems to remove excess nutrients from waste and runoff water.

Global Change/Agricultural Practices and Mitigation of Climate Change Impacts—$3,000,000

Phoenix, AZ, $600,000.—Determine how the availability of water and plant nutrients will interact with rising temperatures and atmospheric carbon dioxide levels to affect rates of deposition of atmospheric carbon in soils of irrigated croplands. Data will enhance natural resource inventory and monitoring programs.

Ft. Collins, CO, $400,000.—Develop a balance sheet approach to the modeling of agricultural emissions and sequestrations of greenhouse gases at the national scale as a basis for evaluating management practices and policies for reducing greenhouse gas levels and mitigating climate change impacts.

Athens, GA, $300,000.—Develop and apply technology for monitoring methane emissions from cattle, livestock waste lagoons, and other agricultural sources, and accurately document total methane emissions attributable to agricultural activities. Data will support natural resource inventory and monitoring programs.

Auburn, AL, $400,000.—Determine the extent of emissions or sequestration of greenhouse gases associated with various tillage systems, with and without cover crops, and develop soil management systems which mitigate against adverse effects of climate change on soil "health".

Temple, TX, $300,000.—Determine how a changing climate and rising concentrations of atmospheric greenhouse carbon dioxide alter the carbon cycle on rangelands with emphasis on rates of accumulation of carbon in vegetation and soils.

Beltsville, MD, $300,000.—Determine the effects of elevated atmospheric carbon dioxide levels, rising temperatures, and their interaction on physiological and other factors which influence the ability of weeds to reduce crop yields under multiple weed management systems.

Gainesville, FL, $400,000.—Determine how water table management and other management options can be manipulated to reduce methane emissions and avoid yield losses due to elevated temperatures in rice and sugar cane.

Tucson, AZ, $300,000.—Develop basin-scale simulation models of soil-vegetation-atmospheric fluxes of water and energy suitable for testing of proposed approaches to mitigation of climate change effects on the function and productivity of grazed, semi-arid watersheds.

South Florida Ecosystem Restoration—$750,000

Miami, FL, $250,000.—Develop farm-scale model to assess water quantity and quality for the Everglades restoration plan and assist action agencies and farmers in selection of Best Management Practices.

Ft. Lauderdale, FL, $500,000.—Evaluation of natural enemies and assessment of approved natural enemies for Melaleucacontrol including economic and environmental impact assessment of control measures.

OBJECTIVE II: PLANT SCIENCES—$11,300,000

Emerging Infectious Diseases—$2,300,000

—Emerging Plant Diseases ($1,100,000)

Beltsville, MD, $300,000.—Identify, characterize, and develop the systematics and taxonomy of bunt and smut fungal pathogens.

St. Paul, MN, $300,000.—Characterize the ecology and epidemiology of wheat scab and improve the genetic resistance of wheat to scab through conventional breeding and introduction of alien germplasm.

Ithaca, NY, $250,000.—Characterize potato late blight development and develop integrated control strategies.

College Station, TX, $250,000.—Characterize the biology, ecology, and epidemiology of sorghum ergot and develop disease management strategies.

—Biological Control of Existing Weed Infestations ($600,000)

Albany, CA, $300,000.—Evaluate insect biological control agents to enable effective suppression of Western invasive weeds.

Montpellier, France, $300,000.—Collect, characterize, and process exotic microbial biological control agents in Eurasia.

—Combating New and Emerging Noxious Weed Pests ($300,000)

Weslaco, TX, $300,000.—Develop remote sensing technology to identify new or expanding weed infestations at early stages.

—Integrated Management and Maintenance of Lands ($300,000)

Reno, NV, $300,000.—Develop knowledge of natural stand renewal processes to maximize the reestablishment of desirable native grass and forage species following control of introduced weeds on rangelands and riparian areas.

Environmental Quality and Natural Resources—$5,500,000

—Development of Biologically-Active Compounds to Replace Hazardous Agricultural Chemicals ($2,600,000)

Gainesville, FL, $300,000.—Identify plant emitted volatiles that naturally attract beneficial insects to control crop pests.

Oxford, MS, $300,000.—Develop safe natural product-based algacides to selectively remove blue green algae from catfish ponds and eliminate the problem of off flavor.

Headquarters, $2,000,000.—Competitively awarded grants to develop alternatives to Methyl Bromide.

—IPM and Areawide IPM ($1,400,000)

Beltsville, MD, $250,000.—Develop a molecular systematic entomology program to support pest and natural enemy taxonomic identification and characterization for ARS and APHIS implementation programs.

College Station, TX, $250,000.—Develop new/improved areawide IPM technology in support of the boll weevil eradication program now being conducted by APHIS and grower run foundations.

Stoneville, MS, $250,000.—Develop mass propagation technologies of beneficial insects for control of arthropods and weed pests, such as lygus bugs and leafy spurge.

Beltsville, MD, $250,000.—Develop technologies for management of Entomopharga Maimaiga a fungal pathogen of the gypsy moth in support of the Forest Service's "slow-the-spread" initiative.

Columbia, MO, $400,000.—Develop pesticide resistant natural enemies in support of new augmentative biological control programs targeting significant insect and weed pests.

—USDA Office of Pest Management ($1,500,000)

Headquarters, $1,500,000.—Provide coordinated approach to minor use pesticides; interact with grower groups, and EPA; and provide more rapid response of FQPA data analysis needs.

Genetic Resources—$3,500,000

—Food Genome Initiative ($2,500,000)

Pullman, WA, $275,000.—Identify genetic Loci in scrapie and other TSE.

Geneva/Ithaca, $600,000.—Curate genome data bases for NY tomato-potato, and apple-prome fruits. Sequence rice expressed sequence tags and curate them and other information in rice genome data base. Coordinate effort with Japanese rice mapping andsequencing programs. Reconcile rice map with those for maize-sorghum, and wheat-barley-oats.

Albany, CA, $600,000.—Sequence wheat, barley, and oat expressed sequence tags, and manage them and other information in genome data bases. Reconcile maps with those for maize-sorghum and rice.

Columbia, MO, $500,000.—Maintain and manage genome data base for maize and sorghum. Sequence a select number of maize expressed sequence tags (probably 200,000 or fewer). Reconcile maize-sorghum maps with those for rice and wheat-barley-oats.

E. Lansing, MI, $275,000.—Identify quarantine trail loci for disease and production traits in poultry.

Ames, IA, $250,000.—Sequence soybean, expressed sequence tags, and manage them and other information in soybean genome data bases. Reconcile soybean maps with those for other legumes, e.g. peanuts, dry beans, alfalfa.

—Expansion of the Animal Germplasm Repository Program ($500,000)

Headquarters, $500,000.—Develop GRIN (Genetic Resources Information Network) data base for animals.

—Expansion of Microbial/Insect Genetic Resources Management Programs ($250,000)

Peoria, IL, $250,000.—Evaluate collections of yeast and fungi for improved agricultural and industrial applications for food and medicine utilizing new technologies of genetic analysis.

—Preservation of Plant Genetic Resources ($250,000)

Urbana, IL, $250,000.—Acquire collections of genetic stocks of maize endangered because of the death or retirement of researchers, and improve genetic stocks by introgressing mutants into superior, adapted inbred lines.

OBJECTIVE III: ANIMAL SCIENCES—$14,700,000

Emerging Infectious Diseases—$3,700,000

—Emerging Exotic Infectious Diseases of Livestock ($1,300,000)

Ames, IA, $300,000.—Johne's disease.

Pullman, WA, $300,000.—Develop molecular markers and improved diagnostic tests to prevent importation of exotic tick-borne diseases of livestock.

Athens, GA, $500,000.—Develop molecular vaccines and immune modulatory strategies to prevent outbreaks and spread of exotic poultry diseases, such as avian influenza.

Headquarters, $200,000.—Build U.S. expertise in emerging diseases through joint international collaboration to develop new diagnostic tests and control strategies for exotic pathogens of livestock.

—Emerging Domestic Infectious/Zoonotic Diseases of Livestock ($2,400,000)

Laramie, WY, $600,000.—Develop control strategies for arbo-viral diseases of livestock, such as vesicular stomatitus, bluetongue and related viruses which prevent U.S. livestock exports.

Ames, IA, $300,000.—Develop improved vaccine control strategies to prevent porcine reproductive and respiratory syndrome (PRRS), and gain an understanding of the epidemiology of the disease.

Ames, IA, $300,000.—Identify causes and develop interventions for emerging swine enteric diseases, such as transmissible gastroenteritis.

Beltsville, MD, $600,000.—Develop integrated control strategies to enhance immunity in livestock to drug resistant parasites.

Ames, IA, $300,000.—Develop improved diagnostic tests for tuberculosis in wildlife and develop novel vaccines.

Pullman, WA, $300,000.—Investigate the role tick-borne rickettsial bacteria as the cause of abortion in cattle.

Preharvest Food Safety—$3,500,000

—Preharvest Food Safety ($3,500,000)

Beltsville, MD, $900,000.—Develop new disinfection methods and farming systems for improved sanitation of animal production facilities, and effective animal waste handling systems that will prevent the transmission of bacterial and parasitic pathogens to food producing animals and food crops.

Peoria, IL, $300,000.—Determine how plants and Fusarium fungi interact during the infection and toxin production processes and how the fungi maintain resistance to their own toxins in order to develop tools to interfere with the infection process and production of the mycotoxins, such as deoxynivalenol (DON).

College Station, TX, $500,000.—Develop techniques for manipulating the microbial ecology of the intestinal tract of agricultural and aquaculture animals to prevent the development of antibiotic resistance, particularly competitive exclusion techniques (probiotics).

Clay Center, NE, $300,000.—Develop information on the dynamics and ecology of foodborne zoonotic pathogen transmission in cattle and their environment in order to prevent initial colonization of plants and animals.

Ames, IA, $300,000.—Develop information on the dynamics and ecology of foodborne zoonotic pathogen transmission in swine and their environment in order to prevent initial colonization of plants and animals.

Athens, GA, $300,000.—Develop information on the dynamics and ecology of foodborne zoonotic pathogen transmission in poultry and their environment in order to prevent initial colonization of plants and animals.

Clay Center, NE, $300,000.—Correlate production practices and transportation systems used for cattle with post processing contamination of food products.

Ames, IA, $300,000.—Correlate production practices and transportation systems used for swine with post processing contamination of food products.

Athens, GA, $300,000.—Correlate production practices and transportation systems used for poultry with post processing contamination of food products.

Preharvest Food Safety (Presidential Initiative)—$4,500,000

Athens, GA, $500,000.—Develop methods to identify pathogens as they are found in animal waste, define their survival characteristics, and develop methods to handle and treat poultry manure during production in order to preclude transmission of pathogens to land and/or crops for human food.

Athens, GA, $500,000.—Develop methods to handle manure on crop lands that will prevent transmission of pathogens to run off and irrigation waters, crops and to food producing animals.

Albany, CA, $500,000.—Develop methods to identify pathogens as they are found in animal waste, and to define their survival characteristics, so that systems for sanitation to kill these pathogens can be developed for production facilities, particularly those of cattle and swine, to prevent their transmission to human foods.

Riverside, CA, $500,000.—Define the survival and transport of pathogens from animal manures on crop lands in order to develop methods that will prevent their transmission to irrigation and drinking waters, crops and food producing animals.

Beltsville, MD, $700,000.—Develop livestock and crop production systems to reduce nutrients and minerals that affect algal blooms.

New Orleans, LA, $650,000.—Identify the life history states of major species oftoxic algae, determine what factors control transitions between stages, and establish the role of stages in bloom dynamics in order to form the basis for effective control measures.

West Lafayette, IN, $650,000.—Develop knowledge of animal behavior and combine with that of other sciences (animal physiology, immunology, and microbiology) to develop methods for producers to use to help assure that animals, including poultry, will arrive for slaughter following transport with fewer pathogens.

Ames, IA, $500,000.—Develop knowledge of animal physiology, immunology, and microbiology and combine with that of animal behavior to develop methods for producers to use to help assure that food producing species will arrive for slaughter following transport with fewer pathogens.

Environmental Quality and Natural Resources—$2,000,000

—Livestock Management Systems ($2,000,000)

Ames, IA, $600,000.—Identify components of swine diets that influence odor, and identify alternatives that can reduce odor from production environments.

Ames, IA, $600,000.—Identify microbial populations responsible for the generation of major components of volatile odor compounds in fresh and stored manure.

Ames, IA, $500,000.—Determine dietary fracture and feed management practices affecting entire microbial populations contributing to volatile organic odors.

Ames, IA, $300,000.—Develop and evaluate environmental computer models to predict movement of volatile organic compounds from production facilities and manure store areas.

Watershed Health/Pfiesteria Research—$1,000,000 ($1,000,000 under Objective I)

—Aquatic Ecology and Aquaculture ($1,000,000)

Auburn, AL, $250,000.—Develop immunological reagents and rapid presumptive tests to detect and monitor anti-Pfiesteria antibodies and antigens in menhaden and other species of cultivated and wild fish to determine exposure to Pfiesteria.

Auburn, AL, $250,000.—Develop and apply specific mono-clonal antibodies to identify and detect different species, strains, and life history stages of Pfiesteria and Pfiesteria-like organisms.

New Orleans, LA, $250,000.—Determine the effects of agricultural nutrients,including interactions between specific nutrients and other water quality parameters, on outbreaks and toxicity of Pfiesteria and Pfiesteria-like organisms.

Auburn, AL, $250,000.—Develop and apply immunodetection methods for epidemiological studies of coastal areas affected by Pfiesteria and Pfiesteria-like organisms.

OBJECTIVE IV: COMMODITY CONVERSION AND DELIVERY—$9,970,000

Postharvest Food Safety—$3,470,000

—Postharvest Food Safety ($2,220,000)

Athens, GA, $300,000.—Develop an understanding of the etiology of multidrug antibiotic resistance, including site specific integration into multidrug resistant plasmids using DNA integrons and elucidate factors in animal and plant production systems that influence the development of resistance.

Wyndmoor, PA, $300,000.—Determine how microorganisms associated with foodborne disease become tolerant to various types of antimicrobials and to traditional food safety safeguards, such as heat or cold, low pH, high salt, and disinfectants, and elucidate factors in processing environments that influence the development of resistance.

Wyndmoor, PA, $400,000.—Develop alternatives to traditional heat-based preservation technologies that will achieve adequate pathogen control while preserving the freshness qualities of fruits and vegetables.

Beltsville, MD, $300,000.—Develop accurate user friendly detection methods for Cryptosporidia, Toxoplasma, and Cyclospora in animal- and plant-based foods.

Athens, GA, $300,000.—Develop microbial sampling technologies to more accurately estimate true pathogen burden of food products for HACCP.

Wyndmoor, PA, $320,000.—Develop computerized expert systems based on food pathogen inactivation and survival in order to evaluate both food processing systems and process controls.

Wyndmoor, PA, $300,000.—Develop sensors to place on food products that will alert processors and consumers of products not stored safely.

New Technology to Maintain Safety/Quality of Fresh Fruits/Vegetables ($1,250,000)

Albany, CA, $600,000.—Develop knowledge of the attachment and detachment properties of pathogens on various fruits and vegetables.

Beltsville, MD, $300,000.—Develop new handling systems and pathogen decontamination technology, including disinfectants and terminal pasteurization procedures for use in conjunction with packing, storing and/or processing of fresh fruits and vegetables to maintain their beneficial attributes.

Wyndmoor, PA, $350,000.—Develop new handling systems and pathogen decontamination technology, including disinfectants and terminal pasteurization procedures for use in conjunction with packing, storing, and processing of fresh fruits and vegetables to maintain their beneficial attributes.

Postharvest Food Safety (Presidential Initiative)—$2,500,000

Beltsville, MD, $500,000.—For whole and minimally processed produce define the dose and conditions of treatment for both chemical and physical agents and technologies which will assure both microbiological safety and product quality in a cost effective process, and provide the necessary support for regulatory approvals.

Albany, CA, $500,000.—For whole and minimally processed produce define the dose and conditions of treatment for both chemical and physical agents and technologies which will assure both microbiological safety and product quality in a cost effective process, and provide the necessary support for regulatory approvals.

Fargo, ND, $500,000.—Identify and quantify toxins for algae, and develop methods for their detection and quantification in both human and animal food sources in order to help producers prevent their occurrence.

Ames, IA, $500,000.—Develop reproducible, sensitive, and accurate laboratory tests to detect viruses of food safety concern by combining the necessary basic biological information about the viruses with the newer biotechnology being used for detection and differentiation of bacterial and animal genetic material.

Athens, GA, $500,000.—Develop reproducible, sensitive, and accurate laboratory tests to detect viruses of food safety concern by combining the necessary basic biological information about the viruses with the newer biotechnology being used for detection and differentiation of bacterial and animal genetic material.

Global Change/Biomass for Energy—$4,000,000

—Improve and Expand Feedstocks ($3,000,000)

Lincoln, NE, $600,000.—Develop improved varieties and management practices for producing switchgrass and other promising grass species for conversion to ethanol or for combusting to produce electricity.

Madison, WI, $600,000.—Develop processes and machinery for harvesting, transporting, and storage of crop residues and dedicated energy crops, and to develop processes for biomass separation into efficient energy and coproduct streams.

St. Paul, MN, $600,000.—Develop improved varieties and management practices for producing alfalfa and other promising legume species for conversion to ethanol or for combusting to produce electricity.

Tifton, GA, $600,000.—Develop more productive varieties and improved management practices for switchgrass and other grasses with potential for conversion to ethanol or combustion to produce electricity.

Mississippi State, MS, $600,000.—Develop persistent and productive legume/grass mixtures for biofuel production, which minimize nutrient inputs and energy requirements for nitrogen fertilizer production and application.

—Increase Biofuel and Biochemical Conversion Efficiency ($1,000,000)

Peoria, IL, $1,000,000.—To accelerate work to develop efficient processes for converting crop cellulose and hemicelluloses to ethanol, and to develop high-valued co-products that will substitute for petrochemical derived industrial products.

OBJECTIVE V: HUMAN NUTRITION—$10,500,000

Presidential Initiative—$10,500,000

—Nutrient—Gene Interactions ($2,400,000)

Boston, MA, $300,000.—Determine the regulation of the synthesis of fatty acids in response to oxidative stress and how the regulation is responsive to diet.

Little Rock, AR, $900,000.—Determine the precise relationship between nutrients in the diet and the development of cognition inchildren at the molecular level.

Grand Forks, ND, $650,000.—Identify the regulatory genes that are responsive to trace minerals in the diet with the aim of determining the regulatory genes of importance.

Houston, TX, $550,000.—Genetic evaluation of fat metabolism in children.

—Diet and Immune Function ($1,400,000)

San Francisco, CA, $500,000.—Define the relationship between nutrition and the induction of the synthesis of immunoglobulins.

Boston, MA, $250,000.—Determine changes in the immune response that occur throughout the aging process and determine if dietary antioxidants can delay or prevent such changes.

Beltsville, MD, $250,000.—Define the role of phytonutrients to increase the immune response by looking at the induction of T-cell lymphocytes in response to foods of plant origin.

Little Rock, AR, $400,000.—Determine foods in the diets of young children that have a positive effect on growth and development.

—Role of Nutrition throughout the Life Cycle ($1,550,000)

Houston, TX, $1,000,000.—Define the relationship of nutritional status at various stages of childhood to the long term needs for nutrients and the risk of nutritionally related diseases.

Boston, MA, $550,000.—Develop an understanding of the relationship between diet and the development of vascular dementia in the elderly.

—Update the National Nutrient Databank ($650,000)

Beltsville, MD, $650,000.—Utilize key foods approach to update the National Nutrient Databank by analyzing the nutrient content of those foods that supply the bulk of the important nutrients in the American diet.

Diet and Human Performance—$2,400,000

Beltsville, MD, $500,000.—Adapt or develop methods for measuring the emerging class of putative phytonutirents which considers regional, seasonal, and maturity at harvest and can be used in field-evaluation of dietary patterns of health.

San Francisco, CA, $750,000.—Define specific effects of energy intake on the impact of protective factors in foods on human performance.

Little Rock, AR, $400,000.—Define material on child dietary components that affect cognitive development in children.

Houston, TX, $250,000.—Study ethnic differences in the effect of diet on body composition in children.

Grand Forks, ND, $500,000.—Establish influence of mineral-containing or mineral-influenced phytonutrients on marker for human performance.

Increasing the Scope of Food Nutrition Survey Efforts—$850,000

Beltsville, MD $550,000.—Expand the scope of the Continuing Survey of Food Intakes by Individuals to include the NHANES measures ofbiological/functional indicators of nutritional status within individuals.

San Francisco, CA, $300,000.—Assess the biological impact of the food assistance program to improve the cost-effectiveness of proper dieting.

Development of Food Consumption Methods—$1,250,000

Beltsville, MD, $500,000; Boston, MA, $250,000; Little Rock, AR, $500,000.—Develop analytical methods that will be used to determine the concentration of phytonutrients in food. Efforts will concentrate onthose components suspected of having health promoting properties, particularly in carotenoids, flavonoids, glucosinylates and phenolic compounds.

NOTE.—In fiscal year 1998, an appropriation of $5 million was provided to conduct a supplemental children's survey to the current 1994–96 Continuing Survey of Food Intakes by Individuals (CSFII). In fiscal year 1999, ARS recommends the use of these resources as follows:

Beltsville, MD, $1,500,000.—Increase the CSFII sample size to include population groups that will require special attention as pesticide registration decisions are made under the Food Quality Protection Act.

Little Rock, AR, $450,000.—Identify markers of nutritional well-being for use in epidemiological evaluations of disease risk.

Little Rock, AR, $250,000.—Elucidate roles of phyto- and micronutrients in improving cognitive development.

Boston, MA $450,000.—Examine the roles of anti-oxidants in maintaining cognitive function in the elderly.

Boston, MA, $250,000.—Conduct epidemiological studies focused on the nutritional factors needed to prevent or delay diseases associated with aging, such as Alzheimer's disease, cardiovascular disease, and cancer.

Grand Forks, ND, $700,000.—Determine biological functions of ultra trace elements, such as boron, aluminum, and manganese.

San Francisco, CA, $700,000.—Improve the understanding of relationships between diet and chronic disease by evaluating commonly consumed phytonutrients' roles in minimizing oxidative damage and reducing cancer risk.

Houston, TX, $700,000.—Determine how nutrients and other dietary constituents, including phytonutrients, act to turn on the synthesis of proteins that are required for metabolism as an essential step in developing meaningful dietary advice.

EMERGING DISEASES AND EXOTIC PESTS

Question. The fiscal year 1999 budget proposes a $6 million increase for emerging diseases and exotic pests. What is now being spent for research on emerging diseases and exotic pests?

Answer. Emerging diseases and exotic pests are an increasing problem in the United States. USDA believes that this problem is linked to expanding intercontinental transport of goods and people, and that we should anticipate further increases in the rate of emerging diseases and exotic pests in the future. In fiscal year 1998, ARS is spending $5,244,800 on emerging diseases and exotic pests of plants in addition to what is being spent on these pest problems through research reported under Areawide Integrated Pest Management (IPM) and IPM component research.

Question. Please provide for each of fiscal years 1997 and 1998 a summary of the funding provided and a brief description of the research funded and where it is being conducted.

Answer. A summary of the funding, research and research locations for fiscal years 1997 and 1998 will be provided for the record.

[The information follows:]

Research area	Fiscal year—	
	1997	1998
Vomitoxin/Fusarium Head Blight	$275,100	$1,273,500
Karnal Bunt	218,100	714,200
Citrus Tristeza	[1] 1,513,700	[1] 2,457,100
Ergot Disease in Sorghum	.....	[2] 300,000
Asian Longhorn Beetle	.....	500,000
Total	2,006,900	5,244,800

[1] In fiscal year 1997, Total includes a Specific Cooperative Agreement with the University of Florida ($386,000). In fiscal year 1998, approximately $1.1 million will be used to fund competitive research proposals.

[2] Total includes Specific Cooperative Agreements with Texas A&M University ($80,000) and Kansas State University ($30,000).

Vomitoxin/Fusarium Head Blight

Peoria, IL.—1997 and 1998, Scientists in Peoria are characterizing the genetics and biosynthesis of vomitoxin, and studying the biological control of vomitoxin production.

St. Paul, MN.—1997, Scientists in St. Paul are characterizing the genetic resistance and identification of genes involved in head blight.

St. Paul, MN.—1998, Scientists in St. Paul are continuing the research begun in 1997 and are initiating a $500,000 extramural program to support a national consortium to enhance plant germplasm to limit disease and toxin production. This research is being conducted to describe disease development and spread, and to develop new control strategies. With an additional $500,000 appropriation, scientists at St. Paul will initiate research to evaluate the epidemiology of this disease, and describe pathogen ecology and pathotype variability.

Karnal Bunt

Frederick, MD.—1997 and 1998, Scientists in Frederick are conducting research on pathogen characterization, detection, and identification, and on disease epidemiology under field conditions.

Manhattan, KS.—1998, Scientists in Manhattan are evaluating the genetics of host plant resistance, and are conducting studies on the enhancement of host plant germplasm.

Citrus Tristeza

Fresno, CA.—1997 and 1998, Scientists in Fresno are conducting studies on disease epidemiology and identification of management strategies for tristeza under California production conditions.

Orlando, FL.—1997 and 1998, Scientists in Orlando are conducting studies on virus characterization, germplasm enhancement, disease control strategies, pathogen detection/identification methods, and virus-vector relationships.

Beltsville, MD.—1997 and 1998, Funds are used to maintain a worldwide collection of citrus tristeza virus strains. In 1998, the operation of the collection activities were increased and Headquarters held funds ($500,000) are being used to support intramural and extramural competitive grants program that is addressing priority research objectives of the citrus tristeza problem.

Ergot Disease in Sorghum

Beltsville, MD.—1998, Headquarters held funds ($300,000) are temporarily being allocated to: Mayaguez, PR, for research on chemical control, disease epidemiology, and germplasm evaluation and enhancement of Ergot resistant varieties; to Lincoln, NE, for pathogen detection and monitoring, evaluation of disease spread, and to determine alternate host plants; and to Frederick, MD, for research on pathogen variability.

Asian Longhorn Beetle

Newark, DE.—1998, Research is being conducted under both field and quarantine laboratory conditions on basic beetle biology, detection sampling, and control methodologies, including cultural and biological control. A Specific Cooperative Agreement was developed with the Department of Entomology at Cornell University to assist in this research effort.

Beltsville, MD.—1998, The ARS Insect Chemical Ecology Laboratory is conducting research on pheromone isolation and characterization to enhance field detection and sampling. The Systematics Entomology Laboratory is working cooperatively with the Department of Entomology at Cornell University to conduct research on beetle systematics, basic biology and pest identification methods.

Question. Of the $6 million increase proposed for fiscal year 1999, $3.7 million is proposed to be used to enhance the development of diagnostic tests, vaccines, and other immune strategies that prevent outbreaks and spread of exotic and zoonotic diseases, and pathogens. Please indicate for each of fiscal years 1997 and 1998 the research being funded in each of these areas and describe the progress we have made to date and why additional funds are required.

Answer. ARS has funded exotic and domestic animal disease research at a level of $40,590,800 for fiscal year 1997 and $39,943,900 for fiscal year 1998, respectfully. New funding is urgently needed because a number of new disease issues have emerged that are negatively impacting livestock production in the U.S. or have the potential to be introduced into the U.S. as exotic animal diseases. Recent outbreaks in 1995 and 1997 of the vector-borne disease vesicular stomatitis has cost approximately $100 million. Tick-borne parasitic diseases and arbo-viral vector-borne diseases restrict U.S. export markets. Porcine reproductive respiratory syndrome (PRRS) emerged in the U.S. during the 1990's and is now considered the most im-

portant disease constraint for swine production. New variants of the PRRS virus caused major disease losses in 1997 in the Midwest. The emergence of several zoonotic diseases in wildlife such as tuberculosis and brucellosis pose new barriers to disease eradication in several states. The 1997 emergence of diseases such as foot and mouth disease (FMD) in Taiwan, hog cholera in Europe, and avian influenza in poultry in Hong Kong have each cost billions of dollars to animal agriculture in the respective countries where these diseases emerged. Bovine spongiform encephalopathy (BSE) in Great Britain and Europe continues to be a trade barrier issue. In summary, because of the emergence of new diseases within the borders of the U.S. and new disease outbreaks abroad, there is an urgent need for the U.S. to invest in animal disease research in order to protect our animal industries. Improved methods of disease prevention will enable U.S. livestock industries to provide the safest and most disease free livestock and livestock products in the world. This will lower production costs and allow the U.S. to continue to gain competitive advantages in international trade markets.

Highlights of progress made to date in animal infectious disease research are listed below:

Scrapie is now an endemic disease in sheep in the U.S. ARS scientists developed a non-invasive preclinical diagnostic test that will help the United States Sheep Industry significantly reduce the risk of infection from scrapie in their herds. A voluntary "scrapie free" flock certification has been established.

ARS scientists developed and evaluated a new vaccine strain of Brucella (RB51) that protects cattle from brucellosis and does not produce false-positive results in brucellosis screening tests, and preliminary efficacy studies show the vaccine to be effective in bison calves. However, the vaccine proved to be unsafe in pregnant bison, causing abortions after it was administered. Adaptation of the cattle vaccine for use in pregnant bison would significantly enhance efforts to control and eradicate brucellosis in bison.

ARS researchers used polymerase chain reaction (PCR) technology to identify the mycobacterium that causes TB in tissues submitted for pathologic examination. The PCR technique will benefit not only the TB eradication program but also will provide a significant contribution to agencies that must assess potential public health risks posed by the presence of mycobacterial infections in animals.

ARS scientists at the Plum Island Animal Disease Center, Greenport, Long Island, New York, have cloned the genes responsible for FMD viral proteins and expressed them in a non-infectious vector thus providing a safe source of reagents for a new diagnostic test. The availability of this type of test will reduce the risk of international trade of animals from countries free from FMD that still practice vaccination, as well as in the effective use of FMD vaccines for control strategies in the event of an outbreak in the U.S.

ARS scientists have tested two vaccine technologies using genetic material from the hemagglutinin gene of the H5 influenza virus. Both vaccines provided protection against illness and death from deadly strains of H5 avian influenza virus. The vaccines will provide a tool for use by the poultry industry and APHIS to be used in an overall eradication strategy emphasizing quarantine, biosecurity and controlled-slaughter.

ARS scientists developed a polymerase chain reaction (PCR) test that detects one form of Avian Leukosis virus-subgroup J in blood and other tissues of affected chickens. Using the PCR test, broiler breeder companies will be able to determine the incidence of this new virus infection in their breeder flocks. Additional PCR tests are needed to detect other strains of the virus.

ARS scientists have shown that Culicoides variipennis, a small biting midge, transmitted vesicular stomatitis virus to a vertebrate host. The understanding of the role of insects in disease transmission is essential to the U.S. ability to protect animals, humans, and U.S. agriculture against emerging pathogens.

ARS found a protein in bluetongue virus that binds to a protein in the insect vector species. This virus protein provided a first demonstration that the insect and animal host interact with this virus by different mechanisms. Blocking the attachment of the protein with this vector provides a new strategy that may prove useful in interrupting transmission.

ARS developed an electrostatic space charge supplier that removes about 95 percent of dust and airborne bacteria, such as Salmonella. Hatching cabinets are known to be one of the primary sources for Salmonella contamination of poultry. This system greatly reduces the need for chemical disinfectants, could greatly reduce cleanup and disinfection time, and is effective for dust control in other types of poultry environments.

ARS scientists developed a customized live vaccine to protect birds from losses due to coccidiosis and have shown that bird performance is comparable to birds

which are drug treated. So far, over 60 million birds have been treated with this ARS technology. This breakthrough is a major contribution in eliminating the need for chemicals in production of poultry. In addition, coccidiosis in chickens develop resistance to chemicals used for control.

Preempt, a new product created by ARS scientists, significantly reduces the potential of Salmonella contamination in broiler chickens. This new product preempts the growth of Salmonella in chicken intestines by introducing a blend of 29 live, nonharmful bacteria naturally present in healthy adult chickens. The newly developed mixture can be sprayed in a mist over newly hatched chicks to give them the protection necessary to significantly reduce potentially dangerous Salmonella in the chicken Americans eat. Preempt is the successful result of the public-private partnership where USDA patented the mixture and granted a private company a licensing agreement to market the product.

FOOD GENOME INITIATIVE

Question. A $3.5 million increase in the ARS budget is proposed for fiscal year 1999 as part of the Food Genome Initiative. Please summarize why this funding is important and what you hope to accomplish. Is ARS doing any work in this area now or is this a completely new undertaking?

Answer. Among the major challenges facing humankind in the next century is the need for substantial increases in the production of high quality food. The Food Genome Initiative is an essential part of the USDA's and ARS' research strategy to meet that demand. The Initiative includes the mapping, identification, and understanding of the function and control of genes responsible for economically important traits in crops and livestock. ARS now devotes more than $3 million annually to support plant genome databases and additional funds for genetically mapping of plant and animal species. This has contributed to the development of databases for nine crop species. However, there is a need to fill in gaps and expand databases on other crops and animal species. With the information gained from the genome initiative, scientists will be able to develop plants and animals with increased production traits such as growth efficiency, disease resistance, tolerance to adverse soil and climate conditions and improved nutritional quality.

FOOD SAFETY

Question. A $14 million increase in the ARS budget is proposed for fiscal year 1999 for the President's Food Safety initiative. Please describe the Total amount of ARS funding now being committed to food safety research, where this research is being conducted, what is being accomplished, and why additional funds are required.

Answer. The Total amount of funding for ARS food safety research in fiscal year 1998 is $54,949,400.

This research is being conducted in the following locations: Fayetteville, AR; Albany, CA; Athens, GA; Dawson, GA; Tifton, GA; Ames, IA; Peoria, IL; New Orleans, LA; Beltsville, MD; Mississippi State, MS; Fargo, ND, Clay Center, NE; Ithaca, NY; Wyndmoor, PA; College Station, TX; and Logan, UT and Headquarters.

Accomplishments of the ARS food safety research program are listed as follows by subject area:

Pathogen reduction research program.—To improve detection methods, ARS has developed:

(1) Methods for Campylobacter culture and identification for the Food Safety Inspection Service (FSIS).

(2) A rapid test for detecting E. coli 0157:H7 for use by producers and industry.

(3) Serologic tests to detect animals which have been infected but may not be actively shedding E. coli or Salmonella. (4) A single procedure Multiplex PCR assay for detection of E. coli 0157:H7 and Salmonella.

(4) PCR and immunohistochemical methods to detect Cryptosporidia.

Pathogen reduction research program.—To develop prevention techniques for pathogen avoidance, reduction, and elimination, ARS has demonstrated or developed:

(1) how infection of E. coli 0157:H7 can occur in neonatal and weaned calves, and that it requires 2 factors, intimin and Shiga toxin.

(2) that viable Cryptosporidia can be transmitted into oysters, clams and other aquaculture animals.

(3) bacterial cultures (preempt) to competitively inhibit Salmonella in broiler chicks, and natural substances to enhance the immune response in chicks and neonatal swine.

(4) irradiation procedures to kill Cyclospora on certain fruits and vegetables.

(5) steam pasteurization for poultry to kill pathogens on poultry skin.

(6) information identifying specific equipment materials in poultry processing facilities that are conducive to the formation of biofilms (bacterial films difficult to remove from surfaces).

(7) spray scalding procedures to reduce cross contamination in poultry processing plants.

(8) new methods to prevent spillage of fecal matter during initial processing and evisceration of poultry.

(9) a hot water and quick chill (thermoflux) procedure that significantly reduces Salmonella incidence in specific, highly contaminated pork cuts.

(10) that Salmonella and Campylobacter are increased during transportation of broilers to slaughter and that consumption of litter during fasting is a contributing factor.

(11) that fecal shedding of E. coli 0157:H7 increases in cattle that are alternatively fasted and fed.

(12) that swine carry Salmonella into the slaughter plant, because the Salmonella serotypes in trailers used for hauling swine are similar to those found in preslaughter holding pens.

Pathogen reduction research program.—In the area of risk assessment, ARS has:

(1) Helped simplify the use of predictive microbiology in microbial risk assessment by updating the USDA Pathogen Modeling Program to the Fifth Edition. The models are now available to the public via Internet.

(2) Targeted the interactions of organic acids and temperature in relation to E. coli 0157:H7 for modeling studies, particularly to determine the rapidity at which this pathogen can adapt to change.

(3) Developed a technique, together with an international committee, for estimating dose-response curves based on microbiological survey and epidemiological data for foodborne pathogens for which direct human data is unlikely to be available.

Drug residues and chemical contaminants research program.—ARS research confirmed that levels of regulatory concern of dioxins in chickens resulted from ball clay that was added to soybean meal as an anticaking agent. Identification of these dioxin sources provides producers with the knowledge needed to produce dioxin-free food products. Studies of the disposition of the animal drug clenbuterol identified metabolites of clenbuterol and determined that they can be converted back to the parent drug in the GI tract; this will help to evaluate the risk of toxicity to humans. A monoclonal antibody capable of binding animal drug hygromycin B was formulated into a rapid ELISA assay, a patent issued, and the antibodies licensed to a private test kit manufacturing company.

Research program to prevent mycotoxins.—Specific genetic markers were identified in corn which contribute to resistance to both Aspergillus colonization and aflatoxin formation. Reporter strains of aflatoxin-producing fungi were developed and tested which allowed quantification of the amount of fungal invasion in kernels, a critical measurement in the assessment of resistance during corn varietal development by plant breeders. The reporter strains are also being used to detect compounds in corn kernels that modulate aflatoxin production. In cotton, genetic engineering has been able to transform embryos with antifungal genes to induce resistance to aflatoxin producing fungi. With walnut and peanut, ARS has significantly contributed to the germline transformation with antifungal genes that will enhance resistance to A. flavus in these crops. Biological control with competitive non-aflatoxin producing strains of the fungus now shows great promise with cotton, corn and peanut. In cotton, continued large-scale testing under the EPA Experimental Use Permit in Arizona resulted in reduced infection of cottonseed by toxigenic strains and, thus, in reduced aflatoxin levels. Experiments in GA with corn showed for the first time that biological control with a toxigenic strains of A. flavus and A. parasiticus could reduce aflatoxin contamination. Additionally, field-grown peanuts from the 1997 drought-stressed crop treated with the biocompetitive strains had aflatoxin levels reduced by 90 percent compared with untreated peanuts. To control the effects of Fusarium graminearum and its toxin, deoxynivalenol (DON), in wheat and barley, ARS has introduced partial resistance into wheat from lines that are more resistant under optimal conditions to the pathogen. The toxin, DON, was demonstrated to be a virulence factor for the pathogenesis of F. graminearum on wheat, a finding which suggests that wheat or barley germplasm with increased resistance to trichothecenes might have improved resistance to Fusarium diseases as well. Fungal genes that confer resistance to or detoxify DON have been identified and will be incorporated into wheat and barley to determine if they improve resistance to Fusarium caused head scab diseases.

Research to control the effects of toxic plants.—A study was conducted to quantify swainsonine in tissues of locoweed-poisoned sheep and determine the rate of

swainsonine clearance from animal tissues. Poisoned animals have significant tissue swainsonine concentrations and animals exposed to locoweed should be withheld from slaughter for at least 28 days to assure that the locoweed toxin has been cleared from all animal tissues. Lupine alkaloids have been detected in the blood plasma of cattle, sheep and goats after consumption of the lupines. Serum elimination times were found to vary for different individual alkaloids and measurements will be continued in order to determine definitive clearance times. Larkspur is the most important poisonous plant problem in cattle in the mountainous regions of the western United States.

Additional funds are being requested to support research initiatives to both establish a better biological understanding of pathogens and to make possible the technological advances to assure food safety and meet the expectations of the American consumer. Food safety research must meet the challenge of solving the problems resulting from emerging pathogens, changing production practices, increased pathogen resistance, increased numbers of food products, and poor food storage and preparation practices.

Question. Of the $14 million increase requested, $8 million is for pre-harvest food safety research to design effective control programs to prevent the spread of bacteria and parasites from animals to humans and to improve post-harvest handling practices for fruits and vegetables. Where will this research be carried out?

Answer. The requested increases for preharvest food safety research to design effective control programs to prevent the spread of bacteria and parasites between animals and humans will be carried out at the following locations: Albany, CA; Riverside, CA; Athens, GA; Ames, IA; Peoria, IL; West Lafayette, IN; New Orleans, LA; Beltsville, MD; Clay Center, NE; and College Station, TX.

Question. Are we doing any research in these areas currently? If so, what research is being conducted, where is it being carried out, and what is its cost?

Answer. ARS currently carries out food safety research in areas for which increases have been requested. Preharvest food safety research is currently being conducted at Fayetteville, AR ($297,400); Albany, CA ($2,153,200); Athens, GA ($4,937,400); Dawson, GA ($754,800); Tifton, GA ($571,400); Ames, IA ($3,367,100); Peoria, IL ($3,384,100); New Orleans, LA ($2,972,000); Beltsville, MD ($1,971,700); Mississippi State, MS ($677,300); Fargo, ND ($2,024,400); Clay Center, NE ($1,588,200); Ithaca, NY ($320,100); College Station, TX ($3,010,600); Logan, UT ($1,973,700); and Headquarters ($1,445,000).

Question. Of the $14 million increase requested, $6 million is for post-harvest research in support of the Hazard Analysis and Critical Control Point (HACCP) model implemented by the Food Safety and Inspection Service. Please describe this research proposal more fully.

Answer. This proposal provides for research to determine how microorganisms associated with foodborne disease become tolerant to antibiotics and to traditional food safety safeguards, to develop accurate user-friendly detection methods for pathogenic parasites and viruses in foods, to develop microbial sampling technologies to support HACCP, to develop computerized expert systems to evaluate both food processing systems and controls, to develop sensors to alert processors and consumers of food products not stored safely, and to develop new handling systems and pathogen decontamination technologies to control pathogens while preserving the freshness qualities of fruits and vegetables.

Question. Are any research monies being committed to this area currently? If so, where is that research being conducted and what is its cost?

Answer. ARS currently carries out food safety research in areas for which increases have been requested. Post-harvest research is currently being conducted at Albany, CA ($3,876,400); Athens, GA ($3,211,600); Peoria, IL ($1,275,700); New Orleans, LA ($104,400); Beltsville, MD ($1,886,500); Clay Center, NE ($1,738,500); Wyndmoor, PA ($10,391,100); College Station, TX ($806,800); and Headquarters ($210,000).

Question. Funds were provided to the ARS for fiscal year 1998 for a study by the National Academy of Sciences on the scientific and organizational needs for an effective food safety system. Please give us a status report on this effort. When did the National Academy of Sciences receive the funds for the study? Please describe what involvement USDA is having in the study, if any.

Answer. A research agreement between the ARS and the National Academy of Sciences was completed on January 13, 1998, which provided for the agreement period of performance from January 1, 1998 through September 30, 1998. This grant from ARS will provide $420,000 to be transferred to the Academy.

USDA has primarily a consultative and facilitative role in the study. USDA participated in the first open meeting of the committee (March 23–25, 1998) and will

assist in contacting other Federal agencies with responsibilities in food safety, and provide information as requested by the committee.

INTEGRATED PEST MANAGEMENT

Question. How will the $5.5 million increase requested in the budget be utilized by the ARS to reach the Administration's goal of encouraging the adoption of IPM practices on 75 percent of the Nation's crop land by the year 2000?

Answer. The funding increase will be utilized by the ARS to support the Agency's efforts to develop biologically-based components needed in IPM and areawide systems that can be readily adopted by the nation's farming community. The agency is committed to reducing the use of higher risk pesticides and to promoting IPM, including biological and cultural control and other sustainable agricultural practices. The funding increase will be specifically targeted at developing biologically-active natural compounds ($0.6 million) to attract natural enemies for control of crop pests and to control blue-green algae in catfish ponds; accelerating development of alternatives to methyl bromide by a Competitive Grants Program ($2.0 million); developing augmentative biological control and other IPM programs for boll weevil, gypsy moth, and weed control ($1.4 million); and to support the new USDA Office of Pest Management Policy ($1.5 million) by providing a coordinated approach to minor use pesticides and a more rapid response to the Food Quality Protection Act data analysis needs.

The ARS areawide pest management IPM programs are coordinated across the USDA agencies, Directors of research and extension in the Land Grant system, EPA, and State and private IPM practitioners through a Departmental IPM National Coordinating Committee, Regional Coordinator Committees and Project Component Coordinating Committees with memberships from the Federal and State levels. Additionally, a number of research and extension task forces function as coordination and communication bodies, not only for the areawide IPM programs, but also for other major pest management programs administered by ARS. These task forces include representatives from Federal, State and private sectors.

HUMAN NUTRITION RESEARCH

Question. What amount of funding is currently being utilized for Human Nutrition Research?

Answer. The current funding for human nutrition research will be provided for the record.

[The information follows:]

Human Nutrition

Location	*Fiscal year 1998*
Arkansas Children's Hospital Research Institute, Little Rock, AR	$2,769,500
Western Human Nutrition Research Center, San Francisco, CA	5,537,500
Jean Mayer USDA Human Nutrition Research Center on Aging, Boston, MA	14,909,000
Beltsville Human Nutrition Research Center, Beltsville, MD	18,645,200
Grand Forks Human Nutrition Research Center, Grand Forks, ND	8,204,400
Children's Nutrition Research Center, Houston, TX	11,191,700
National Agricultural Library	675,000
Lower Mississippi Delta Intervention Research Initiative (LA, AR, MS)	3,147,700
Other Locations	1,265,000
Headquarters (Survey of Children's Food Intake)	5,000,000
Totals	71,345,000

Question. Please describe the human nutrition research being carried out by each of the ARS Human Nutrition Research Centers and the overall objectives of this research.

Answer. The research carried out by each of the ARS Human Nutrition Research Centers and the overall objectives of this research will be provided for the record.

[The information follows:]

Beltsville Human Nutrition Research Center, Beltsville, Maryland.—Defines the role of food and its components in optimizing health and reducing the risk of nutritionally related disorders in the diverse American population. To accomplish this mission, the Center develops new methods of food analysis; determines the role of nutrients and their interactions in maintaining health; monitors nutritional intakes and maintains the database of the nutrient content of foods; studies the expenditure

of energy by using direct and indirect calorimetry; and investigates the consequences of altered nutrient intakes in free-living humans.

Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, Massachusetts.—Defines safe and adequate nutrient intakes and identifies factors that may contribute to degenerative processes associated with aging. To accomplish this mission, the Center determines factors related to prevention of age-related loss of bone density leading to osteoporosis and fracture, and the preservation of muscle strength; identifies dietary factors critical in slowing or preventing cataract development; determines the relation of antioxidant food components to heart disease and immune function; and explores relationships between vitamins and brain function, stroke, and dementia.

Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota.—Determines nutrient needs for humans with an emphasis on mineral element requirements that prevent disease and promote health and optimal function throughout life. To accomplish this mission, the Center determines the importance of mineral elements at the molecular level with an emphasis on chronic disease; identifies detrimental functional changes, especially in bone, brain, cardiovascular and reproductive systems, that occur in the U.S. population because of improper mineral element nutriture; identifies and validates biochemical and physiological status assessment indicators for use in the study of populations at risk from inadequate mineral element nutrition; and defines the impact of environmental, dietary, physiological and psychological stressors on specific mineral requirements.

Children's Nutrition Research Center at Baylor College of Medicine, Houston, Texas.—Defines the nutritional needs of pregnant and lactating women and of their infants and children from conception through adolescence. To accomplish this mission, the Center establishes nutrient requirements to prevent low birth weight babies, particularly in pregnant adolescents; elucidates nutrient-gene interactions that regulate metabolism and disposition of nutrients; determines nutrient requirements for growth and development of school-aged and adolescent children; and establishes nutritional relationships to acute and chronic childhood diseases. Western Human Nutrition Research Center, San Francisco, California—determines the impacts of dietary, environmental, behavioral, and genetic factors on nutrient requirements and functions. To accomplish this mission, the Center establishes markers of nutritional status in relation to maintenance of healthy body weight, nutrition, infection and immune disorders; and protective factors in foods.

Arkansas Children's Nutrition Research Center, Little Rock, Arkansas.—Determines the role of nutrition in cognitive and behavioral function, and the health consequences of infant consumption of dietary factors (phytochemicals) such as phytoestrogens on endocrine and metabolic development and prevention of chronic diseases.

Question. What is an additional $10.5 million required for Human Nutrition Research for fiscal year 1999 following the $7.5 million increase provided for this research program for fiscal year 1998?

Answer. The Human Nutrition Initiative is a comprehensive multi-year plan for nutrition research, fiscal year 1998-fiscal year 2003 for which we request $10.5 million this year. The research of the Human Nutrition Initiative will serve all Americans throughout the entire lifecycle, from maternal nutrition prior to conception through nutrition and the elderly, and includes diverse research strategies including molecular, biochemical, metabolic, behavioral, and agricultural research techniques. The Nutrition Research Initiative can help us reap benefits in terms of reduced health care costs, less morbidity and early mortality associated with chronic diseases, and improved quality of life. The Initiative harnesses the strengths of modern nutrition science and combines them with the fundamental mission of the ARS to conduct research that will define relationships between diet, genetics, and lifestyle and the risk for chronic disease in order to reduce health care costs and enhance health and life quality for Americans, improve the scientific basis for more effective Federal assistance programs, and generate a more nutritious food supply by conducting research that defines the basis for modifying the health promoting properties of plant and animal foods.

Question. How will the $10.5 million requested be allocated, by Center, and what research will this additional funding support at each of the Centers? Please list the research projects for which increased funding is requested in order of priority.

Answer. The $10.5 million would be allocated to the respective Centers to undertake research within the following human nutrition initiatives:

I. Nutrient—Gene Interactions ($2,400,000)

Boston, MA, $300,000.—Determine the regulation of the synthesis of fatty acids in response to oxidative stress and how the regulation is responsive to diet.

Little Rock, AR, $900,000.—Determine the precise relationship between nutrients in the diet and the development of cognition in children at the molecular level.

Grand Forks, ND, $650,000.—Identify the regulatory genes that are responsive to trace minerals in the diet with the aim of determining the regulatory genes of importance.

Houston, TX, $550,000.—Determine which genes and nutrients interact and how they interact to mediate growth and weight gain in children.

II. Diet and Human Performance ($2,400,000)

Beltsville, MD, $500,000.—Adapt or develop methods for measuring the emerging class of putative phytonutrients which considers regional, seasonal, and maturity at harvest and can be used in field-evaluation of dietary patterns of health.

San Francisco, CA, $750,000.—Define material on child dietary components that affect cognitive development in children.

Little Rock, AR, $400,000.—Define material on child dietary components that affect cognitive development in children.

Houston, TX, $250,000.—Study ethnic differences in the effect of diet on body composition in children.

Grand Forks, ND, $500,000.—Establish influence of mineral-containing or mineral-influenced phytonutrients on markers for human performance.

III. Role of Nutrition throughout the Life Cycle ($1,550,000)

Houston, TX, $1,000,000.—Define the relationship of nutritional status at various stages of childhood to the long term needs for nutrients and the risk of nutritionally related diseases.

Boston, MA, $550,000.—Develop an understanding of the relationship between diet and the development of vascular dementia in the elderly.

IV. Update the National Nutrient Databank ($650,000)

Beltsville, MD, $650,000.—Utilize key foods approach to update the National Nutrient Databank by analyzing the nutrient content of those foods that supply the bulk of the important nutrients in the American diet.

V. Diet and Immune Function ($1,400,000)

San Francisco, CA, $500,000.—Define the relationship between nutrition and the induction of the synthesis of immunoglobins.

Boston, MA, $250,000.—Determine changes in the immune response that occur throughout the aging process and determine if dietary antioxidants can delay or prevent such changes.

Beltsville, MD, $250,000.—Define the role of phytonutrients to increase the immune response by looking at the induction of T-cell lymphocytes in response to foods of plant origin.

Little Rock, AR, $400,000.—Determine foods in the diets of young children that have a positive effect on growth and development.

VI. Increasing the Scope of Food Nutrition Survey Efforts ($850,000)

Beltsville, MD, $550,000.—Expand the scope of the Continuing Survey of Food Intakes by Individuals to include the NHANES measures of biological/functional indicators of nutritional status within individuals.

San Francisco, CA, $300,000.—Assess the biological impact of the food assistance program to improve the cost-effectiveness of proper dieting.

VII. Development of Food Composition Methods ($1,250,000)

Beltsville, MD, $500,000; Boston, MA, $250,000; Little Rock, AR, $500,000.—Develop analytical methods that will be used to determine the concentration of phytocompounds in food. Efforts will concentrate on those components suspected of having health promoting properties, particularly in carotenoids, flavonoids, glucosinylates and phenolic compounds.

Question. What additional funding will be required in each future fiscal year, by Center, to meet the objectives of the Administration's Initiative on Human Nutrition?

Answer. The plan for the Administration's Human Nutrition Initiative published in the President's fiscal year 1998 Budget, called for increases in the research programs at the six human nutrition laboratories over the 1998–2002 period. This plan, updated to reflect actual 1998 appropriations, is provided for the record. However, as you know, budgets are developed on a year-by-year basis and funding estimates change based on current budget targets. The fiscal year 1999 President's Budget, submitted to Congress in February, included an additional $10.5 million (for a Total of $18 million) in fiscal year 1999.

[The information follows:]

AGRICULTURAL RESEARCH SERVICE HUMAN NUTRITION INITIATIVE AS PROPOSED IN THE 1998 PRESIDENT'S BUDGET—5-YEAR FUNDING

	Fiscal year—				
	1998 (actual)	1999 (estimate)	2000 (estimate)	2001 (estimate)	2002 (estimate)
Beltsville Human Nutrition Research Center (BHNRC)	$250	$4,200	$7,300	$10,500	$14,000
Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA)	250	2,300	3,700	5,100	6,000
Children's Nutrition Research Center (CNRC)	500	3,000	5,100	7,100	9,000
Grand Forks Human Nutrition Research Center (GFHNRC)	250	2,100	3,200	4,300	4,900
Western Human Research Center (WHNRC)	250	2,500	4,000	5,400	6,500
Arkansas Children's Hospital Research Institute	1,000	3,900	6,700	9,600	12,600
Headquarters (Survey of Children's Food Intake)	5,000	.....	.....	.....	.....
Total	7,500	18,000	30,000	42,000	53,000

Question. Will the Administration's Initiative on Human Nutrition continue to be funded at the expense of ARS' existing research programs?

Answer. The Human Nutrition Initiative is important. Its implementation will be consistent with priorities set by the Administration. The Initiative on Human Nutrition complements ARS' existing research program. Knowledge about health-promoting foods and components of foods can be used by animal, plant, soil, and post-harvest scientists for development of methods that modify food composition both during production and processing, expand food choices, and provide more options for healthful diets. The National Nutrient Databank and the Continuing Survey of Food Intake in Individuals will both be strengthened by the Initiative. Both provide information which is foundational to agriculture production and food industries.

Question. For fiscal year 1998, one-time funding of $5 million was provided for ARS to conduct a survey on food consumption by infants and children. Where is this reduction in funding for the one-year cost of this study reflected in the fiscal year 1999 budget?

Answer. The $5 million allocated to ARS to conduct a survey on food consumption by infants and children in fiscal year 1998 was held at Headquarters for a one-time allocation to the survey. In fiscal year 1999, the $5 million will be combined with a proposed increase of $10.5 million for a Total of $15.5 million to be allocated to the Human Nutrition Centers at Boston, MA ($2.05 million), Little Rock, AR ($2.9 million), Grand Forks, ND ($1.85 million), Houston, TX ($2.5 million), San Francisco, CA ($2.25 million), and Beltsville, MD ($3.95 million).

Question. Please provide the Committee with an update on the Dietary Intakes Survey.

Answer. The final year of data collection was released for the 1994–96 Continuous Survey of Food Intakes by Individuals (CSFII) and a CD–ROM of data for the entire survey was just released. The CSFII has been widely praised for its timely release of data, high response rate, ease of use of the data, and the quality of the survey. Current efforts are underway with a feasibility study directed at developing a new, computer assisted telephone interview technology to reduce the costs of conducting future surveys by providing an effective alternative to the costly on-site interview process. At the same time, data collection has begun on the year-long Supplemental Childrens Survey that will be combined with the just completed CSFII to provide the sample size needed by EPA to comply with the Food Quality Protection Act of 1996. ARS plans are to combine the Supplemental Children's Survey with the National Health and Nutrition Examination Survey (NHANES) conducted by the Department of Health and Human Services whereby food intake data can be linked to health status. This combined survey will be consistent with the National Nutrition Monitoring and Related Research Act of 1990.

Question. Why does the fiscal year 1999 request propose an increase of $1.5 million to expand the sample size on the ongoing dietary surveys?

Answer. ARS proposes to reallocate $1.5 million to enhance the surveys. The proposed Continuing Survey of Food Intakes by Individuals (CSFII) will increase sample size by 2,000 to assess dietary intakes by low income populations and populations at risk for disease such as the elderly and children. The data will be used by governmental policy makers to monitor effectiveness of food assistance programs.

Question. Why wasn't this expansion of the survey proposed last year?

Answer. Continued support for the survey is an integral part of the Human Nutrition Initiative to maintain baseline data on the food consumption patterns and to understand their likely impact on health and well-being. The proposal to reallocate $1.5 million from the $5 million 1998 increase for surveys to a specific survey in fiscal year 1999 is to meet research needs not met by the survey in fiscal year 1998. Specifically, the survey size will be increased for low income populations and populations at risk of disease.

ENVIRONMENTAL RESEARCH

Question. An increase of $7 million is requested to support the President's Climate Change Technology Initiative. Please explain what research ARS will carry out and how this research will complement that undertaken by the Forest Service.

Answer. The $7 million in the request would be utilized in two areas: (1) $3 million of the proposed increase would be used to accelerate "Agricultural Practices and Mitigation of Climate Change Impacts" research which focuses on agriculture's opportunities for removing carbon dioxide from the atmosphere and storing it in soils as organic carbon (carbon sequestration). The Kyoto protocol provides credit for sequestering carbon in sinks as a portion of reductions in greenhouse gas emissions. Previous research by ARS has demonstrated that conservation practices such as the shift from conventional to minimum- or no-till systems are very effective in enhancing the uptake of soil carbon by the soil and storage in the soil. However, much remains to be done to document the various agricultural sinks, and to determine the sequestration potential of alternative management practices. (2) The remaining $4 million will be used to initiate new research under the title "Biomass for Energy." The program's objectives are twofold: (1) the development of more productive plant materials as sources of fuel (biomass); thus, reducing the use of fossil fuels and the associated carbon-producing combustion; and (2) the development of more efficient processes for converting plant materials like switchgrass to ethanol and high-value chemicals which can substitute for petrochemicals in the manufacture of a variety of products like coatings, fuel additives, and livestock feed additives. This would provide farmers and rural communities with a more diversified commodity portfolio by adding energy-producing crops to traditional food and fiber production. The research complements that of the Forest Service by focusing on the production and utilization of highly productive grasses, as opposed to trees, and by developing methods for using stalks and other crop residues as a biomass source. ARS and the Forest Service cooperated in drafting the initiative, and ARS program leaders have begun meetings with their Forest Service counterparts to explore coordinated implementation of the research program. The research will also be coordinated with the Department of Energy.

Question. Increased funding of $2 million is requested for ARS research on the Pfiesteria outbreak in the Chesapeake Bay. Please explain ARS' role in this research.

Answer. The increased funding will be used to develop detection methods for Pfiesteria, to determine the effect of Pfiesteria toxins on aquaculture and fish production, and to develop specific management practices and treatment technologies at the farm and watershed scale to protect water quality in order to prevent outbreaks of Pfiesteria and other harmful algal blooms. ARS research locations identified for the program increase are Beltsville, Maryland; Florence, South Carolina; Auburn, Alabama; and New Orleans, Louisiana. The ARS research program was developed in coordination with other Federal agencies as part of a national research strategy on Pfiesteria and harmful algal blooms. This multi-agency strategy was developed in the fall of 1997 through the Committee on Environment and Natural Resources of the National Science and Technology Council.

Question. Why is an additional $500,000 requested for Melaleuca research for fiscal year 1999?

Answer. Melaleuca, the Australian paperbark tree, was introduced into Florida from Australia at the turn of the century. Well adapted to wetland areas, it escaped cultivation and now occupies about 1.5 million acres, and expands at a rate of about 50 acres per day. In the wild, Melaleuca displaces native wetland vegetation in the Everglades and other areas/waterways of south Florida, where damage from this tree is estimated at $168 million per year. Herbicidal and mechanical control of

Melaleuca have proven ineffective in many situations, particularly for long-term control. ARS believes that biological control may provide the best option for sustainable management of Melaleuca. Although ARS has identified several potential biological control agents of this pest, safety testing, release and evaluation of these agents requires significant additional scientific research. The first biological control agent for Melaleuca, the weevil, Oxyops vitosa, was released in April 1997 following detailed quarantine tests that documented both the safety and effectiveness of this agent. Although the weevil is established and is beginning to cause damage to Melaleuca, ARS believes that a complex of several natural enemies will be required to effectively control this weed. In support of this program, ARS has identified many other natural enemies that are in various stages of assessment for biological control of Melaleuca. The proposed $500,000 increase will be used to hire two new scientists at the ARS Ft. Lauderdale Laboratory to accelerate biological and safety assessments for these agents and to field release those where regulatory permits have been granted.

Question. What amount of funding is currently available for Melaleuca research, and how has ARS utilized the $500,000 increase provided for this purpose for fiscal year 1998?

Answer. In fiscal year 1998, ARS allocated $663,400 to research on Melaleuca control. These resources have been used in conjunction with temporary resources ($225,000) provided by cooperators such as the Army Corps of Engineers, the South Florida Water Management District, the Florida Department of Natural Resources, the Florida Department of Environmental Regulations, and Dade County to initiate an international biological control program for management of this invasive tree. To accomplish this, ARS has stationed scientists in Australia and Florida to accelerate the biological control program for Melaleuca. Of the $500,000 allocated to ARS in fiscal year 1998, $250,000 was allocated to the ARS International Research Programs to hire a new scientist to locate, identify, collect and test new Melaleuca biological control agents in the weeds home range of Australia. The remaining $250,000 is allocated to the ARS Laboratory at Ft. Lauderdale, Florida to hire a new scientist to safety test and release biological control agents onto Melaleuca in south Florida.

ALTERNATIVE SOLUTIONS TO METHYL BROMIDE

Question. What is the status of your research work to find alternative solutions to methyl bromide?

Answer. ARS is conducting research at 20 locations to find alternatives to current soil fumigation and postharvest methods requiring methyl bromide. ARS is seeking alternatives through several approaches: (1) new cultural practices; (2) improved host-plant resistance to pests and diseases; (3) biological control systems using beneficial microorganisms; (4) safer fumigants; and (5) combinations of the above. For postharvest treatment, research is directed at (1) creation of pest-free agricultural zones; (2) finding new physical methods such as heat or cold treatment or storage in modified atmospheres; (3) alternative fumigants; (4) methyl bromide trapping and recycling technologies; (5) biological control; and (6) combinations of the above.

ARS is supporting, through cooperative agreements, methyl bromide alternatives research by university scientists in Florida and California for crops that will be especially impacted by the methyl bromide ban in 2001. ARS has regular and frequent meetings with affected industry representatives to make sure that ARS research efforts as well as ARS-supported university research are properly focused on the most pressing industry problems. ARS is also working with the USDA Animal and Health Plant Inspection Service (APHIS) to develop quarantine treatment technology to interdict and eradicate exotic pests arriving at U.S. ports of entry on imported commodities, packing and crating materials, returning military equipment, etc.

Methyl bromide was only recently identified as an ozone depleting material. However, because ARS has for many years been developing non-chemical procedures to replace chemical soil and postharvest fumigations, ARS has several accomplishments in this area.

In relation to postharvest treatments ARS developed or assisted in developing include cold treatment for citrus and carambola from Florida to Japan, pest-free certification for walnuts to New Zealand, heat treatments for papaya and cold treatment for carambola from Hawaii to Japan and mainland U.S., phosphine fumigation of hay to Japan, gamma irradiation treatment of litchi, rambutan, papaya and carambola exported to the mainland U.S. and blueberry production in Florida, and forced hot air protocol for control of medfly in citrus. In addition, ARS scientists have worked with USDA Animal and Plant Health Inspection Service (APHIS) per-

sonnel to devise a risk-based quarantine standard which will be more amenable to non-methyl bromide treatments for some low-risk quarantine situations.

Accomplishments pertinent to replacing methyl bromide as a soil treatment include improved strawberry and vegetable varieties with increased resistance to some soilborne diseases and pests; microbiological agents for the biological control of some soilborne diseases of vegetables and ornamental crops; improved cultural practices, such as improved soil preparation, crop rotation systems, and altered planting dates, to mitigate the effects of some soilborne pests of strawberries, vegetable, and ornamental crops; and improved pesticide formulation and application technology for available chemicals other than methyl bromide to control plant parasitic nematodes.

Non-pathogenic variants of a tomato-infecting fungus were shown to be effective in controlling pathogenic strains. Grapevine, peach and prune rootstocks with improved nematode resistance have been developed. Methods were devised for mass-producing and stabilizing mycoherbicidal fungi for control of several weed species. Solarization of soil was shown to be effective for controlling weeds in vegetable production. Root-knot nematode resistance has been incorporated into commercial bell peppers. Impermeable films were shown to dramatically reduce the emissions of methyl bromide to the atmosphere. Fumigation with alternative chemicals was shown to be effective under some conditions for strawberries and tomatoes.

Question. What is the current level of funding for this research and how are those funds being allocated?

Answer. The current level of funding and where these funds are allocated will be provided for the record.

[The information follows:]

Location	Fiscal year—		
	1997 funds	1998 funds	1999 funds
Davis, CA	$230,100	$228,800	$228,800
Fresno, CA	3,531,600	3,542,400	3,542,400
Riverside, CA	128,900	128,200	128,200
Salinas, CA	545,600	542,500	542,500
Washington, DC	245,500	244,100	244,100
Gainesville, FL	196,500	215,600	215,600
Miami, FL	1,241,300	1,234,300	1,234,300
Orlando, FL	1,626,000	1,616,800	1,616,800
Byron, GA	85,400	84,900	84,900
Tifton, GA	470,500	467,800	467,800
Hilo, HI	1,686,100	1,705,500	1,705,500
Manhattan, KS	.....	71,700	71,700
Beltsville, MD	1,140,800	1,061,100	1,061,100
Stoneville, MS	185,500	184,500	184,500
Corvallis, OR	501,000	493,900	493,900
Charleston, SC	336,600	334,600	334,600
Weslaco, TX	1,509,700	1,501,100	1,501,100
Wenatchee, WA	213,000	211,800	211,000
Yakima, WA	262,700	261,200	261,200
Kearneysville, WV	442,900	440,400	440,400
Headquarters	.....	.....	[1] 2,000,000
Totals	14,579,700	14,571,200	16,571,200

[1] Proposed fiscal year 1999 program increase of $2 million (Environmental Quality/Bio-Active Compounds).

The fiscal year 1999 budget requests an increase of $2 million for research on alternatives to methyl bromide. Dr. Horn, you indicate in your prepared statement that grower groups will work with ARS to develop the priorities for a competitively awarded program focusing on crops or uses most threatened by the loss of methyl bromide.

Question. Would you please explain how this will work and why ARS rather than CSREES will be responsible for a competitive grants program?

Answer. ARS has primary responsibility in USDA for methyl bromide alternatives research. As such, ARS has developed a broad network of State, university, and industry personnel who are interested in finding methyl bromide replacements for a

wide range of uses. ARS will use these contacts to assure that only high priority issues are addressed by any research projects funded by competitive grants funds ARS may receive. The ARS National Program Staff will ensure that funded projects will be coordinated and complementary to existing methyl bromide alternatives research. We think this program serves as an excellent model to ensuring coordination of in-house and extramural research directed toward a given problem.

EVALUATION STUDIES

Question. The fiscal year 1999 request proposes the restoration of $913,000 for Evaluation Studies. Please provide a list of studies for the record which will be conducted with the funding proposed, including the purpose and cost of each study.

Answer. The funds appropriated for the Evaluation Studies Program are essential to provide valuable analyses and assessments from outside experts on high priority research and related issues relating to the broad Research, Education, and Economics (REE) program. These resources support studies examining the current status, results and promising future directions of research on specific issues within the scope of the REE mission. They have also allowed us to gain important assessments of the effectiveness of programs and potential ways to enhance that effectiveness to promote the highest return on investments in REE agencies. As such, these studies have provided invaluable input for planning and implementing the REE programs, resulting in stronger programs with promising outcomes.

A partial listing of projects for funding if monies are again made available are listed below. Additional study proposals are anticipated on other high-priority concerns such as food safety, transmissible spongiform encephalopathies, water quality, and other emerging issues.

1. The National Academy of Sciences Committee on Animal Nutrition—compiles nutrient requirement tables used for preparing balanced feed rations for all animals	$100,000
2. Calcium and Related Nutrients: American Needs—reviews current information on nutrient intake to determine data gaps and to recommend adjustment of food consumption	100,000
3. Assessing the Overall Impacts of the USDA IPM Initiative—examination of IPM programs having the most significant impact on farm productivity	60,000
4. Evaluation of the National Research Initiative—review of the impact of competitive grants on agricultural technology	100,000
5. The Benefits of USDA's Investment in the 1890's—evaluation of USDA program contribution to the viability of 1890 universities	75,000
6. The Industrialization of Agriculture and Publicly-Funded Agricultural Research—evaluation of the impact of modern industrial farming enterprise on the structure of agriculture	100,000
Total	535,000

GERMPLASM

Question. Please identify the current ARS and State resources committed to maintaining plant germplasm repositories. Provide a listing of the repositories, showing federal and state resources committed to each.

Answer. The estimated funding for maintaining the ARS plant germplasm system repositories for fiscal year 1998 is $21,405,000.

Location	Fiscal year—		
	1997 funds	1998 funds	1999 funds
Davis, CA	$572,300	$619,000	$619,000
Fresno, CA	217,000	325,800	325,800
Riverside, CA	383,900	431,700	431,700
Ft. Collins, CO	2,960,200	3,193,400	3,193,400
Washington, DC	368,100	366,000	366,000
Miami, FL	670,300	666,500	666,500
Griffin, GA	1,502,800	1,494,300	1,494,300
Hilo, HI	447,400	494,900	494,900
Ames, IA	1,445,600	1,437,400	1,437,400
Aberdeen, ID	843,900	839,100	839,100

Location	Fiscal year—		
	1997 funds	1998 funds	1999 funds
Urban, IL	636,800	543,100	543,100
Beltsville, MD	3,688,600	3,539,300	3,539,300
Stoneville, MS	314,200	312,400	312,400
Fargo, ND	220,600	219,400	219,400
Geneva, NY	1,145,000	.....	.....
Ithaca, NY	.....	1,249,000	1,249,000
Corvallis, OR	767,600	813,200	813,200
Mayaguez, PR	943,900	1,159,900	1,159,900
College Station, TX	522,500	109,100	109,100
Logan, UT	145,000	144,200	144,200
Pullman, WA	1,120,600	2,312,100	1,662,100
Madison, WI	294,200	292,500	292,500
Headquarters	847,400	842,700	842,700
Total	20,057,900	21,405,000	20,755,000

State resources committed to certain repositories include both direct commitments and in-kind support to Regional Plant Introduction Stations (RPIS) and the Interregional Potato Station. In Total, these commitments are $2,591,000. The direct commitments of the States can be identified and reported more accurately as off-the-top formula funding through the Regional Directors' Associations and local funds as direct contributions from the host State Agricultural Experiment Stations. These resources are identified for fiscal year 1998:

Location/site	Formula funds	Local funds
Griffin, GA, Southern RPIS	$250,000	$350,000
Ames, IA, North Central RPIS	497,000	324,000
Geneva, NY, Northeastern RPIS	144,000	155,000
Pullman, WA, Western RPIS	346,000	250,000
Sturgeon Bay, WI, IR Potato Station	151,000	124,000
Totals	1,388,000	1,203,000

Question. What are our unmet germplasm requirements? Please identify by repository.

Answer. The U.S. General Accounting Office's study of the U.S. National Plant Germplasm System (report GAO/RCED–98–20, October, 1997) identified some unmet germplasm requirements that fall into three principal areas. These include: the need to increase the genetic diversity in the national collections, the inadequate information on the germplasm in the collections, and the failure of the system's preservation activities to keep pace with the collections' needs. The needs encompass all activities of the germplasm system, but specific needs vary by location and crops. We have identified a number of specific activities that are of the highest priority to prevent the loss of genetic materials and to replenish long term storage and distribution centers with fresh stocks. Other activities are identified that make the collections more useful to researchers in publicly supported institutions and private industry who continue to place increased importance on having access to a broad range of genetic diversity that is critical to the improvement of plants for human and animal food, industrial, and ornamental use. All collections established must be rationalized, duplicates eliminated and core collections established which contain maximum diversity in the smallest number of samples.

LOCATION AND PRIORITY NEEDS FOR LOCATION

Palmer, AK (Pullman, WA worksite)

Acquire high latitude germplasm for the Arctic germplasm collection (barley, wheat, potato, forages, small fruits).

Develop an adequate infrastructure to preserve an Arctic germplasm collection.

Maintain virus-free potato germplasm.

(Activities of primary interest to 6 Crop Germplasm Committees (CGC's))

Davis, CA

Develop cultural practices to optimize use of the available space and long term maintenance of stone fruit, grape, and walnut germplasm collections.
Document (passport, inventory, evaluation, and distribution data) collections in Germplasm Resources Information Network (GRIN) database.
Conduct therapy on and maintain virus-free stone fruit collections.
Characterize useful traits of stone fruit, grape and walnut collections.
Conduct research to develop backup preservation technologies.
Institute major regeneration effort for stone fruit, grape and walnut collections.
(Activities of primary interest to 3 CGC's)

Fresno, CA

Conduct field regeneration of annual, biennial, and perennial seed-propagated crops requiring a long season, arid environment.
Characterize germplasm during regeneration and document in GRIN database.
(Activities of primary interest to 24 CGC's)

Riverside, CA

Acquire additional genetic diversity to fill gaps in the citrus collection.
Conduct therapy on and maintain virus free citrus plants.
Acquire adequate screenhouse space to accommodate the virus-free citrus collection.
Conduct research to develop backup preservation technologies.
Institute major regeneration effort for citrus collection.
(Activities of primary interest to 2 CGC's)

Ft. Collins, CO

Develop reliable techniques for cryopreservation of a wide range of clonally-propagated species. Perform seed germination tests on accessions maintained in base and active collections.
Provide backup to active collections by preserving seed, vegetative buds, in vitro plants and pollen.
Develop methodologies for the long-term preservation of non-orthodox seeds.
(Activities of primary interest to all CGC's)

Washington, DC

Acquire and maintain field plantings of woody and herbaceous ornamental germplasm.
Characterize horticultural value of assembled woody and herbaceous ornamental collections.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database. Cooperate with botanic gardens and arboreta to document woody plant collections in the U.S. Conduct research to develop backup preservation technologies.
(Activities of primary interest to 5 CGC's)

Miami, FL

Conduct therapy on and maintain virus free sugarcane and fruit collections.
Maintain collections of tropical and sub tropical fruit germplasm of important and potentially important species.
(Activities of primary interest to 3 CGC's)

Griffin, GA

Regenerate, backup to base collection, and make available for distribution, 1481 diverse species.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Maintain in vitro the sweet potato germplasm collection in alternate location (Ft. Collins). Rationalize major collections (sorghum, cowpea, peanut) for redundancy.
Complete the elimination of seedbourne viruses from all peanut and cowpea accessions.
Conduct research to develop backup preservation technologies.
(Activities of primary interest to 7 CGC's)

Hilo, HI

Conduct therapy on and maintain virus-free fruit and nut collections.
Conduct research to develop backup preservation technologies.
(Activities of primary interest to 1 CGC)

Ames, IA

Regenerate, backup to base collection, and make available for distribution, 1770 diverse species.
Expand regeneration and characterization of the maize collection; expand germplasm enhancement of maize (GEM) project.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Conduct research to develop backup preservation technologies.
Institute major regeneration effort for maize, sunflower, melon, and cucumber collections.
(Activities of primary interest to 9 CGC's)

Aberdeen, ID

Regenerate wheat, barley, oat, and rice accessions on a regular basis to insure availability.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Regenerate and maintain the integrity of the barley genetic stock collection.
Acquire additional accessions of wheat wild relatives to increase the collections genetic diversity.
Acquire adequate quarantine greenhouse space for increasing weedy relatives of small grains.
Upgrade seed storage facility.
Institute major regeneration effort for small grain wild relatives.
(Activities of primary interest to 4 CGC's)

Urbana, IL

Acquire additional genetic diversity to fill gaps in the soybean collection.
Upgrade seed storage facility.
Regenerate maize genetic stocks and fill requests for seed.
Acquire necessary greenhouse space for maintaining soybean wild relatives and maize genetic stocks.
Institute major regeneration effort for maize genetic stocks.
(Activities of primary interest to 2 CGC's)

Beltsville, MD

Maintain and improve the GRIN database support for all sites.
Develop acquisition priorities across all crop species.
Provide taxonomic support for GRIN and all active collection sites.
Maintain prohibited species in quarantine and conduct required tests to determine pathogen status.
Conduct research to develop improved quarantine testing methods.
(Activities of primary interest to all CGC's)

Stoneville, MS

Institute major regeneration effort for soybean accessions adapted to Southern latitudes.
(Activities of primary interest to 1 CGC)

Ithaca, NY

Backup apple germplasm collection as cryopreserved, vegetative buds.
Conduct research to develop backup preservation technologies for grape and sour cherry germplasm.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database. Institute major regeneration effort for apple, onion, brassica, and winter squash collections.
(Activities of primary interest to 5 CGC's)

Fargo, ND

Maintain flax collection.
Document (passport, inventory, evaluation, and distribution data) collection in GRIN database.

Corvallis, OR

Maintain field greenhouse and screenhouse plantings of small fruit germplasm.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Develop cultural practices to optimize use of the available space and long term maintenance of pear and temperate nut germplasm collections.

Conduct therapy and maintain virus-free small fruit collections.
Institute major regeneration effort for small fruit pear, temperate nut, mint, and hops collections.
(Activities of primary interest to 2 CGC's)

Mayaguez, PR

Conduct quarantine growout of sorghum and maize accessions introduced into the U.S.
Maintain accessions of tropical fruit and nut species.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Maintain sorghum genetic stocks.
Institute major regeneration effort for sorghum (see Griffin, GA).
(Activities of primary interest to 2 CGC's)

College Station, TX

Upgrade seed storage facility.
Regenerate cotton collection on a timely basis. Document (passport, inventory, evaluation, and distribution data) cotton and pecan collections in GRIN database.
Maintain and distribute cotton genetic stocks.
Acquire additional genetic diversity to fill gaps in the pecan collection.
Conduct research to develop backup preservation technologies.
Institute major regeneration effort for cotton and pecan collections.
(Activities of primary interest to 2 CGC's)

Logan, UT

Maintain in-field rangeland grass collection. Document (passport, inventory, evaluation, and distribution data) collection in GRIN database.
(Activities of primary interest to 1 CGC)

Pullman, WA

Regenerate backup to base collection, and make available for distribution 2427 diverse species.
Regenerate difficult to grow alfalfa, clover, and sugarbeet accessions to make them available.
Complete the elimination of seedbourne viruses from all bean and pea accessions.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Institute major regeneration effort for alfalfa, sugarbeet, chickpea, lentil, clover, pea, and bean collections.
(Activities of primary interest to 10 CGC's)

Madison, WI

Acquire additional potato wild relatives to fill gaps in the genetic diversity of the collection.
Study the effect of the genebank's procedures on the genetic diversity of the potato collection.
Complete taxonomic identification of potato wild relatives in the collection.
Document (passport, inventory, evaluation, and distribution data) collections in GRIN database.
Institute major regeneration effort for potato collection.
(Activities of primary interest to 1 CGC)

FUNDS AND RESEARCH MANAGEMENT

Question. How much money budgeted for positions was due to lapse at the end of each of fiscal years 1996 and 1997?

Answer. Money budgeted for positions in fiscal years 1996 and 1997 was due to lapse in the amount of $12.4 million and $12.9 million, respectively.

Question. What was done with this savings in each of these years? Please be specific as to the purposes for which these funds were used and the extent to which funds were obligated at the location at which they were saved.

Answer. A portion of these projected lapsed funds accrued to Headquarters and were reallocated as follows:

Use of funds	Fiscal year—	
	1996 funds	1997 funds
Area-Wide Priorities (Research Equipment and Other High Cost Needs)	$2,343,900	$5,325,500

Use of funds	Fiscal year—	
	1996 funds	1997 funds
Location Closures, Conversions, and Transfers	2,299,500	602,700
Food Nutrition Study (Beltsville, MD)	.....	500,000
Remedial Investigation and Feasibility Study (Beltsville, MD)	.....	1,400,200
Removal Actions (Hazardous Waste Material)	436,900	.....
RCRA Closure Sites (Orient Point, NY)	360,000	.....
Senior Executive Service and Other Relocations	309,500	194,000
Oil Spill (Orient Point, NY)	164,500	.....
M. Shahan Repairs(Orient Point, NY)	.....	113,000
Docks and Harbors Repairs (Orient Point, NY)	.....	1,027,300
Environmental Site Assessment Phase II Sampling (El Reno, OK)	70,000	.....
Agency-Wide Hazardous Waste Cleanup	68,400	.....
Subtotal	7,452,900	7,762,500

The balance of accrued lapsed salaries was retained at ARS field locations for locally-based spending decision. Approximately, 40 percent of the savings were obligated at the locations where they were lapsed. The primary uses of these funds were for research equipment, employee relocations, facilities repair and maintenance, safety and health improvements, and unanticipated operating needs. The remaining 60 percent, as reflected in the funding table above, was used for Agency priorities not necessarily at the location where the funds were lapsed. An example of this would be the funding provided for location closures; no lapse occurred at these locations, however, funds were obligated at these sites for closure costs.

Question. How many active research projects does ARS currently engage? How many of these are to support production agriculture?

Answer. There are currently 1,078 active research projects. Seventy percent of these projects support production agriculture.

Question. How does the ARS assess the needs of producers in determining its research priorities?

Answer. As an Agency committed to finding solutions to "agricultural problems of high national priority," ARS actively maintains close interaction with its customers. The enactment of GPRA has encouraged ARS to make these lines of communication more formal and more explicit. At the headquarters level, ARS senior managers, including the members of the National Program Staff, are in regular contact with a wide range of organizations representing all aspects of agricultural production, processing, distribution, and consumption. Area Directors are continually interacting with producers within their jurisdiction. At the Laboratory level, our scientists are in almost daily contact with farmers, ranchers, and other users that have an interest in their research. We sometimes enter into agreements with local producers to test new practices or technologies under actual conditions. ARS conducts a large number of workshops annually to review its research programs and results. Customers of the research are usually included in order to get their input into the research. The accumulated effect of all these interactions is a research program that is relevant and able to meet the most critical needs of American agriculture. In addition, ARS is currently reorganizing its research activities into 25 National Programs. On February 23, 1998, we placed 25 descriptive statements on the ARS Home Page at the Internet address http://www.ars.usda.gov, and invited our customers, stakeholders, partners, and the general public to review and comment on them. The input we receive from our customers will play a major role in shaping our new national programs. We will continue to receive comments until the end of April 1998.

Question. How many scientists are currently on board? How many were on board at the beginning of each of fiscal years 1996 and 1997?

Answer. Currently the Agricultural Research Service employs 1,804 full time, permanent research scientists. At the beginning of fiscal year 1996, there were 1,849. There were 1,824 research scientists at the start of fiscal year 1997.

EXTRAMURAL FUNDING

Question. Please list the funding ARS commits to land grant universities. Please identify the amounts by recipient.

Answer. A list of funding committed to land grant universities will be provided for the record.

[The information follows:]

School	*Fiscal year 1997*
Alabama Agri and Mech College	$10,000
Alcorn State (MS)	450,200
Auburn University	81,600
Central Oregon Experiment Station	18,500
Clemson University	43,900
Colorado State University	810,000
Cornell University	1,157,900
Florida Agri and Mech University	25,200
Georgia Coastal Plain Expt. Station	54,600
Illinois Ag. Expt. Station	42,000
Iowa State University	529,700
Kansas State University	483,600
Langston University	3,500
Louisiana State University	145,900
Michigan State University	248,700
Mississippi Ag. and Forestry Expt. Sta	1,501,300
Mississippi State University	918,600
Montana State University	262,400
New Mexico State University	831,100
New York Ag. Expt. Station	25,000
North Carolina State University	676,200
North Central Ag. Expt. Station	134,300
North Dakota State University	453,500
Ohio State University	64,000
Oklahoma State University	322,500
Oregon State University	526,000
Pennsylvania State University	220,700
Prairie View A&M College	10,000
Purdue University	1,157,500
Rutgers University	54,500
South Dakota State University	80,500
Southern University	289,700
Texas A&M University	682,600
Texas Ag. Expt. Station	8,000
Tuskegee Institute	61,900
University of Arizona	203,100
University of Arkansas	489,800
University of California	2,853,200
University of Connecticut	50,000
University of Delaware	12,500
University of Florida	1,143,300
University of Georgia	253,200
University of Hawaii	1,573,600
University of Idaho	276,600
University of Illinois	325,500
University of Kentucky	15,000
University of Maine	32,800
University of Maryland	755,000
University of Massachusetts	14,800
University of Minnesota	209,900
University of Missouri	765,400
University of Nebraska	695,500
University of Puerto Rico	25,000
University of Tennessee	40,000
University of Vermont	45,000
University of Wisconsin	861,700
University of Wyoming	155,000
Utah State University	193,900
Virginia Polytechnic Institute and State University	70,800
Washington State University	727,400
Total	24,173,600

Question. Please identify other extramural recipients of ARS research contracts.

Answer. In fiscal year 1997 ARS committed $11.64 million to Tufts University and $.646 million to The Consortium for International Earth Science Information Network (CIESIN) for research contracts. In addition, Westat Inc. received $3.4 million

from ARS of which $.5 million was provided by Food, Nutrition, and Consumer Services.

Question. In fiscal year 1998, the Committee directed that general reductions be taken across each program, project and activity. What was the magnitude of the fiscal year 1998 general reduction and explain how this was implemented?

Answer. As directed by the Congress, the agency applied general reductions Totaling $3.8 million in fiscal year 1998. This was implemented through an across-the-board reduction of all research projects.

Question. Provide for the record fiscal year 1997 obligations incurred and your current fiscal year 1998 funding estimates for the following areas of research: canola, hops, kenaf, guayale, lesquerella, and sunflowers. Similarly, provide the Committee with information on the following pests: bollworm, boll weevil, whitefly, karnal bunt, fire ant, and gypsy moth.

Answer. Obligations incurred for fiscal year 1997 and fiscal year 1998 estimated funding for crops and pest research are provided as follows:

CROPS AND PESTS RESEARCH

CROPS AND PESTS RESEARCH	Fiscal year	
	1997 obligations	1998 funding
Crops:		
Canola	$349,110	$350,000
Hops	382,751	491,000
Kenaf	1,318,353	737,100
Guayule	598,601	564,500
Lesquerella	482,591	329,200
Sunflower	2,514,329	2,252,300
Pests:		
Boll Worm/Corn Earworm	4,206,110	4,182,500
Boll Weevil	1,768,202	2,586,100
Whitefly	5,527,905	5,883,400
Karnal Bunt	423,542	714,200
Fire Ant	1,028,646	1,152,800
Gypsy Moth	1,675,631	1,832,100

CENTERS OF EXCELLENCE

Question. For fiscal year 1999, please identify the proposed funding for ARS Centers of Excellence, where they are located, how they were selected, and their proposed funding and staffing levels as compared with fiscal year 1997 and fiscal year 1998.

Answer. The ARS Centers of Excellence are selected by matching the critical and/or priority needs of ARS and the collaborating 1890 Universities which possess the expertise and excellence required to address the program mission and goals. These matches are often based on expansion of existing cooperative research programs and the institution's strength.

The location, funding and staffing levels of the ARS Centers of Excellence for fiscal years 1997, 1998 and 1999 are as follows:

Location	Fiscal year—					
	1997		1998		1999	
	Funds	Scientists	Funds	Scientists	Funds	Scientists
University of Arkansas Pine Bluff, AR	$373,300	1.0	$537,900	2.0	$537,900	2.0
Delaware State University Dover, DE	250,000	1.0	248,500	1.0	248,500	1.0
University of Maryland Princess Anne, MD	245,600	1.0	244,400	1.0	244,400	1.0
Alcorn State University Lorman, MS	165,700	1.0	164,700	1.0	164,700	1.0
Langston University Langston, OK	.....	.....	199,000	.....	199,000	.....
Tennessee State University McMinnville, TN	491,200	2.0	488,400	2.0	488,400	2.0

Location	Fiscal year—					
	1997		1998		1999	
	Funds	Scientists	Funds	Scientists	Funds	Scientists
Total	1,525,800	6.0	1,882,900	7.0	1,882,900	7.0

Question. Describe the programs at each of the Centers.

Answer. The research programs at each of the Centers will be provided for the record.

[The information follows:]

Swine Production at Alcorn State University.—The objective of the program is to develop an efficient system for the production of meat type hogs in the Southern United States. The research includes the evaluation of breeds of swine suitable for production in Southern climates, the use of local feeds, and development of feeding systems to obtain efficient production of pork.

Aquaculture Products at Delaware State University.—This program will develop rapid detection and monitoring methods for pathogens and spoilage microorganisms in aquaculture processes and products and improving the efficiency of purging contaminants in order to prevent human illnesses.

Grazing Lands at Langston University, Oklahoma.—The objective of this program is to determine impact of pasture design and grazing animals on quality of water emerging from watersheds, and develop pasture management systems that will optimize water quality and productivity in the semi-arid U.S.

Horticulture at Tennessee State University, McMinnville.—The objective of the program is to develop new and improved ornamental trees and shrubs for the U.S. nursery industry. The research includes development of basic genetic and physiological information related to nursery crop species; reduce pesticide use and fertilizer runoff during nursery crop production; develop improved nursery crop propagation methods; and evaluate existing germplasm or ornamental trees and shrubs for pest resistance, tolerance of environmental stress, and superior ornamental value.

Aquaculture at University of Arkansas at Pine Bluff.—The ARS Aquaculture Systems Research Unit develops and evaluates new or alternative aquaculture production systems, particularly small scale systems, and develops new components of these systems to improve the efficiency of fresh water fish farming. Research also addresses improvement of cultivation and processing methods to enhance the quality of farm-raised fish and their products.

Critical Control Points in Model Systems at University of Maryland Eastern Shore (UMES).—The program seeks to determine the natural prevalence of bacterial pathogens in poultry grow-out houses, processing plants, and in distribution channels; to conduct challenge studies on critical control points in model systems to provide data for predictive model development; and to develop risk assessment models for use in hazard management systems. In particular, the laboratory is developing risk assessment and predictive models to provide the scientific basis for Hazard Analysis Critical Control Point (HACCP) systems in poultry production, processing, and distribution. ARS research is conducted in close collaboration with the USDA Food Safety & Inspection Service (FSIS), providing critical research to support their regulatory mission.

Question. What working relationship and accomplishments have resulted from these collaborations?

Answer. The working relationship and accomplishments that have resulted from these collaborations will be provided for the record.

[The information follows:]

Alcorn State University.—Through meetings and visits of Alcorn personnel to ARS laboratories, ARS scientists have developed a good working relationship with the Center. As a result, new breeds of swine have been purchased for evaluation and an artificial insemination program utilizing semen from superior boars, has been initiated.

Delaware State University at Dover.—The ARS aquaculture program is housed in the Delaware State University (DSU), Department of Agriculture and Natural Resources. Close working relationships have been established with DSU's two aquaculture faculty members who have also participated in the recruitment for an ARS aquaculture research scientist to be based at DSU. The ARS research program will complement DSU's aquaculture research program. The ARS National Program Leader for Aquaculture is a cooperator in a Capacity Building Grant application for aquaculture research submitted to the USDA Cooperative State Research, Education, and Extension Service.

Langston University, Oklahoma.—ARS will assist Langston University in establishing a Grazing Lands Center of Excellence in fiscal year 1998. It is a worksite of the ARS grazing land research laboratory at El Reno, Oklahoma. The details of the program have not yet been developed, but it is expected to focus on pasture management by small farmers. ARS will soon station a plant physiologist at the Grazing Land Center of Excellence.

Tennessee State University at McMinnville.—A Director of the new research facility has been appointed by Tennessee State University (TSU). An excellent collaboration has been established between TSU, ARS and the Tennessee Nursery industry. This partnership has resulted in jointly establishing research objectives including breeding for resistance to dogwood anthracnose and the development and use of natural products for pest and disease control on nursery crops. Evaluation of several new shrubs and trees has been initiated in the genetics program of plant improvement for the Tennessee industry.

University of Arkansas at Pine Bluff.—The ARS Aquaculture Systems Research Unit (ASRU) and University of Arkansas at Pine Bluff (UAPB) have entered into a cooperative partnership to promote and facilitate the expansion of aquaculture in Arkansas and the surrounding areas of the Mississippi Delta. The location of the ASRU at UAPB has enabled ARS to hire UAPB students as aquaculture technicians and has enhanced ARS' ability to recruit from a broadened pool of highly-trained and competent minority candidates from the UAPB Aquaculture Center of Excellence program. As part of an effort to enhance production related research capabilities at UAPB, ARS funded a grant to UAPB for the construction of a research pond complex of 21 ponds (0.25 acre each) and a support building at the UAPB Aquaculture Research Station.

University of Maryland Eastern Shore (UMES).—The working relationships of ARS with the UMES are very close. ARS established a work site at the UMES, Princess Anne, MD, in fiscal year 1994 as a satellite laboratory of its Eastern Regional Research Center (ERRC). The ARS laboratory uses UMES laboratory space and UMES scientists and students to provide support for the research program. UMES students are employed by the ARS staff to conduct modeling studies. A UMES faculty member is employed during the summer months. The ARS laboratory at UMES has developed The Salmonella Risk Assessment Modeling Program for Poultry, version 1.0 as a guide for processors and regulatory personnel to evaluate the public health consequences of changes in the poultry grow-out to consumption continuum. It is now being evaluated by two of the largest U.S. poultry processors.

AIR QUALITY (PM–10) RESEARCH

Question. Where does ARS perform Air Quality (PM–10) research. Please describe the program, funding, and staffing by location.

Answer. At Pullman, Washington, 1.3 scientist years (SY's) and $477,800 are allocated to PM–10 and PM–2.5 research which refers, respectively, to atmospheric particulates equal to less than the 10 and 2.5 micrometers in size that are said to reach and endanger human lungs. The research is directed to a) understanding how particulates are emitted from agricultural fields during field operations and wind storms, b) determining the origination of particulates, c) developing methods for reducing particulate emissions, and d) developing a PM–10 prediction technology for use in assessing alternative methods of controlling particle emissions.

At Manhattan, Kansas, 1.0 SY and $166,800 are allocated to research on PM–10 and PM–2.5 particulates and on developing a PM–10 and PM–2.5 module for inclusion in a wind erosion model (Wind Erosion Prediction System—WEPS). The erosion prediction model will be used to select, from among alternative land treatments, the most appropriate treatments for controlling wind erosion and particulate emissions.

At Lubbock, Texas, 1.5 SY and $317,600 are allocated to field measurement and documentation of particulate fractions during wind erosion events.

Question. What funding is included in the fiscal year 1999 budget for PM–10 research. Please give program, funding, and staffing by location.

Answer. The fiscal year 1999 budget and staffing is the same as that for fiscal year 1998; as described above.

Question. What major accomplishments have come from your research in this area?

Answer. (a) Considerable progress has been made in identifying how PM–10 emissions occur during weathering, tillage, traffic, and abrasion by wind-blown soil clods. (b) Progress has been made in establishing typical emission rates under field conditions for various tillage practices. (c) The PM–10 module for inclusion in the wind erosion model has been developed, but still needs validation. (d) The prediction model being developed for Washington is an interim model pending completion of

the wind erosion model. (e) A scientist in Pullman, WA, has developed a biologically-based method for determining the sources of particulates (e.g. agricultural fields, roads, parking lots).

Question. How is the ARS research effort connected at all to the San Joaquin Valley PM–10 study funded in part through CSREES?

Answer. The ARS program and the CSREES-administered PM–10 program in the San Joaquin Valley of California are funded separately. However, there is coordination, communication, and cooperation between the programs. California personnel participate in the review and planning meetings of the Washington study (which is a jointly funded study between ARS, CSREES-administered Washington State University projects, EPA and State of Washington agencies), and ARS and other cooperators in the State of Washington participate in similar California meetings.

PRECISION AGRICULTURE

Question. Dr. Horn, I understand that ARS scientists at Stoneville and Mississippi State have been working with scientists at the National Aeronautics and Space Administration (NASA) and Mississippi State University on precision agriculture. Please bring the Committee up to date on your current activities and future plans, including possible matching funds from NASA.

Answer. The ARS Application and Production Technology Research Unit (APTRU) at Stoneville has been informally collaborating with NASA's Space Remote Sensing Center (SRS) at the John C. Stennis Space Center. Negotiations are proceeding regarding a more formal collaborative arrangement. The Crop Simulation Research Unit (CSRU) at Mississippi State is currently a participant, with Mississippi State University (MSU), in the 5-year National Site Verification Index Program that is funded by NASA. Under the terms of this participation, CSRU has access to $25,000 of the $50,000 annual Total provided to MSU under the grant. CSRU is also a member of the Mississippi Coalition for Applications in Remote Sensing (MCARS), of which MSU and SRS are also members. MCARS is currently developing a proposal for funding under the Mississippi Challenge program, which is a matching funds program between NASA and the State of Mississippi. At both Stoneville and Mississippi State, the purpose of the research is to improve the tools and technologies of precision agriculture (i.e., remote sensing, geographical information systems, yield monitors) to assist producers in treating crop fields on a site-specific basis. The role of the APTRU is to conduct research on the application of various crop inputs (e.g., fertilizers, pesticides) to counteract crop stresses. The role of CSRU is, through simulation of crop growth, to provide decision support and even control of settings on equipment that apply various crop inputs. A major goal of each location is to produce precision agriculture tools that are economical, effective, and easy to use and understand.

INTEGRATED WATERSHED RESEARCH

Question. The Joint Explanatory Statement of the Conferees accompanying the conference report on the fiscal year 1998 appropriations Act directed that the USDA-ARS National Sedimentation Laboratory initiate an integrated watershed research program in the Yalobusha River Basin, stream estuaries, and Grenada Lake. What is ARS doing to carry out this directive?

Answer. The National Sedimentation Laboratory (NSL) has initiated several research activities in the Yalobusha River Basin (YRB) to meet the Congressional mandate. These research activities were primarily designed to establish a reference database against which the effect of evolutionary and proposed channel adjustment measures by the Army Corps of Engineers (COE) for flood control, as well as their environmental impact on Grenada Lake, can be assessed and to provide the COE with needed information for selecting locations for channel stabilization measures.

A geomorphic study was conducted which summarizes the historical background of channel changes, hydrologic conditions, stages of channel evolution, dominant watershed processes, bed material, and streambank stability conditions for the preconstruction phase. As part of this partially COE-funded study, geographic information (GIS) based maps were prepared showing stages of channel evolution, location of migrating scour holes, bed material type, and sampling locations. This information has been provided to the COE to assist them in selecting the most suitable locations for the placement of grade control structures and other channel improvement and stabilization measures, while at the same time providing the NSL with essential background information for river evolution studies.

Intensive studies were conducted to characterize water depth, velocity, habitat, fish and wildlife communities in the lower Yalobusha River above and below an existing debris jam. Contour maps of the channel bottom in limited reaches upstream

and downstream of the Yalobusha debris/sediment jam have been developed to obtain background information on quantity and quality of in channel aquatic habitats and to assess the impact of changes in channel geometry on flow regime and habitat following channel adjustments for flood control. Exploratory studies in cooperation with the U.S. Corps of Engineers Waterways Experiment Station are underway to obtain continuous records of water stage above and below the debris jam.

Water quality measurements have been made at several sites in the Yalobusha River main stream, tributaries, and at inflow and outflow points of Grenada Lake for determining concentrations of sediment, agricultural chemicals, and naturally occurring contaminants. The data will assist in selecting erosion control/conservation practice research on upland areas and will serve as documentation for determining the impact and effectiveness of channel stabilization and watershed restoration measures on water quality. A preliminary monitoring program, incorporating the biological and habitat components of the channel system prior to adjustments, has been initiated at 33 sites in the Yalobusha River and its tributaries. This program will facilitate the assessment of environmental and ecological changes during construction phases and the selection of low-cost remedial measures.

Discussions are underway to explore the use of funding from the Environmental Quality Improvement Program (EQIP) managed by the Natural Resources Conservation Service (NRCS), for stabilizing small tributaries and erosion control of adjacent land with edge-of-field bufferstrips and other soil erosion control measures, in order to reduce sediment and non-point source pollutants entering into streams and to rehabilitate in-stream habitat conditions.

AQUACULTURE

Question. Since we continue to hear that aquaculture is the fastest-growing sector of U.S. agriculture and you have provided to the Committee your research requirements to support this new industry, would you please tell us why the President's budget proposes to eliminate funding increases provided for fiscal year 1998 for ARS research in this area?

Answer. The President's fiscal year 1999 budget proposal calls for $51.2 million in program spending for new and expanded research, plus $14.5 million in pay increases and $.9 million for evaluation studies, for a Total of $66.6 million, however, proposed increased funding is only $32 million. To cover the difference, the budget proposal calls for $34.6 million in program reallocations. Specifically, fiscal year 1998 program increases added by the Congress are proposed for termination and redirected to support the Administration's priority programs in fiscal year 1999.

Question. Please list those locations involved in aquaculture research, their specific programs and mission, and current funding and staffing levels. Please list future funding and staffing requirements, by location.

Answer. The current and future funding and staffing levels for locations involved in aquaculture research will be provided for the record. The projections are based on the staffing and funding levels that will be required for fully functional programs at each location.

[The information follows:]

Location/program and mission	Fiscal year 1998—		Total funds required	Total scientists required
	Funds	Scientists		
Auburn, AL: Diagnosis and control of diseases and parasites of cultured fish	$1,087,000	4.0	$1,800,000	6.0
Pine Bluff, AR: Aquaculture production and processing technology	537,900	2.0	537,900	2.0
Stuttgart, AR: Research on therapeutics evaluation, health mgmt. and culture systems for farm-raised fish	1,728,600	5.0	3,590,00	11.0
Albany, CA (Hilo, HI) Oceanic Institute: Tropical aquaculture feeds and culture technology development	1,603,300	.....	.....	.....
New Orleans, LA: Improve flavor quality of farm-raised catfish	755,100	2.4	1,005,10	3.4
Beltsville, MD (NAL): Aquaculture Information Program provides the public with information on all aspects of aquaculture.	34,000	.....	34,000	.....
Stoneville, MS: Improve production efficiency, including breeding, genetics, nutrition, health, harvesting, and product quality of catfish	3,639,200	5.0	5,298,60	8.0
Wyndmoor, PA (Dover, DE, Worksite): Food safety of farm-raised fish	248,500	1.0	248,500	1.0
College Station, TX: Food safety of catfish	363,200	.....	363,200	.....

Location/program and mission	Fiscal year 1998—		Total funds required	Total scientists required
	Funds	Scientists		
Kearneysville, WV: Water Quality control and intensive culture of fish	1,439,600	.....	1,439,600	.....
Leetown, WV: Cool and cold water aquaculture research	250,000	.....	4,000,000	12.0
Total	11,686,40	19.4	18,316,900	43.4

Question. In its report to this Committee on Aquaculture, USDA indicated that it was planning a thorough review of the Stuttgart National Aquaculture Research Center to determine the specific directions of future research programs. Is that review, which was to be undertaken during fiscal year 1997, now complete? Please submit the results of this review for the record.

Answer. The review is now complete. The review consisted of three components: (1) a strategic planning session for all ARS aquaculture research locations held in New Orleans, Louisiana, on June 5–6, 1997; (2) an ARS Warmwater Aquaculture Research Meeting held in Memphis, Tennessee, on July 7, 1997; and (3) a review and Program Planning Session for the Stuttgart National Aquaculture Research Center (SNARC) conducted on February 2–3, 1998. As a result of the review, ARS aquaculture scientists and administrators and external stakeholders identified the mission, major program components, future species and research priorities, and funding and personnel needs for the SNARC. These results were shared with review participants and stakeholders in a report dated February 3, 1998, and will be the basis for future implementation of the SNARC research program and staffing.

Key points from the review are: (1) The primary focus of SNARC will be on warmwater species other than catfish. (2) Major research programs at SNARC will be Therapeutic Evaluations and Chemical Registration in support of cold, cool and warm species including catfish; and Aquaculture Production Systems. (3) Priority species identified are: baitfish, striped bass and its hybrids, and polyculture (simultaneous culture of multiple species). (4) Additional research areas identified for emphasis include bird depredation of aquaculture species.

DELTA NUTRITION INTERVENTION RESEARCH INITIATIVE

Question. Please provide the Committee with an update on the Lower Mississippi Delta Nutrition Intervention Project.

Answer. The Lower Mississippi Delta Nutrition Intervention Research Initiative (NIRI) is conducted by a consortium of seven partners: Alcorn State University, Arkansas Children's Hospital Research Institute, Pennington Biomedical Research Center, Southern University and A&M College, University of Arkansas at Pine Bluff, University of Southern Mississippi, and ARS. Each partner participates in attaining the project objectives. The consortium is governed by a steering committee which has representatives from each partner. The research committee develops objectives and protocols and has representation from each partner.

Question. What progress has been made to date?

Answer. The partners reviewed the current state of knowledge of the socioeconomic, nutritional and health status of the Lower Mississippi Delta and published a monograph in 1997 entitled: "Nutritional and Health Status in the Lower Mississippi Delta of Arkansas, Louisiana and Mississippi: A Review of Existing Data," Edited by Gail Harrison.

The partners completed a data collection for validation and pilot study of assessment methodologies to be used for repeated cross sectional surveys. The partners also completed a Key Informant survey to determine the understanding that community leaders have of nutritional status in three Delta counties.

Question. What work on this project is scheduled for each of fiscal years 1998, 1999, and each future fiscal year?

Answer. In fiscal year 1998, the partners will prepare a draft research proposal for an expanded community assessment research program. The partners are analyzing the data of the Key Informant survey and determining community characteristics that will impact possible nutrition intervention strategies. The partners are each developing strategic plans to determine their contribution to obtaining and analyzing data necessary to develop nutrition interventions.

In fiscal year 1999, the partners propose extensive field surveys based on the results of preliminary assessments in 1998. The partnership will focus on data collection and analysis. Extensive collaborative field work will be required. Post fiscal year 1999, research will depend on prior outcomes but will include initial planning, implementation, and validation of targeted nutritional interventions.

Question. Please list objectives and funding by participant.

Answer. The objectives are shared by all members acting as a consortium and the funding of $3,147,700 is shared equally. The members of the consortium are: Alcorn State University, Arkansas Children's Hospital Research Institute, Pennington Biomedical Research Center, Southern University and A&M College, University of Arkansas at Pine Bluff, University of Southern Mississippi, and ARS. The project objectives are listed:

1. To review the existing data describing the socioeconomic, nutritional, and health status of lower Mississippi delta residents.

2. To review the existing nutrition and community assessment research methodologies in order to identify potential assessment methods for the Lower Delta Research Initiative.

3. (a) To conduct an assessment to determine the nutritional status of a population of lower Delta residents (including dietary intake, food consumption behaviors, biochemical and physiologic, and anthropometric measurements) and to conduct similar assessments so that the nutritional status of the population can be measured over time. (b) To assess community factors impacting nutritional status.

4. To identify nutritionally responsive health problems and their determinants or causes in the Lower Mississippi Delta populations so that interventions may be designed for testing.

5. To review intervention research methodologies in order to identify potential interventions aimed at solving the nutritional problems identified in the Lower Delta.

6. To evaluate, in a research setting, potential solutions for the targeted nutritional problems so that successful interventions can be implemented on a larger scale.

Question. What level of funding is included in the fiscal year 1999 budget request for this project?

Answer. A Total of $3,147,700 is budgeted for fiscal year 1999 for the Lower Mississippi Delta Nutrition Intervention Project.

I understand that increased funding for this project is required in fiscal year 1999 to fund a study to determine dietary intake, prevalence of food insecurity, and diet and health knowledge and attitudes as well as to fund a pilot study for nutrition assessment (biological measures and behavioral measures of nutrition status). This information, I am told can not be obtained from other nutritional studies funded by USDA.

Question. Do you agree that these studies are needed? If not, why? If so, when are these studies planned?

Answer. The partners in the Lower Mississippi Delta Nutrition Intervention Research Initiative are currently evaluating two trial studies, a phone survey and a key informant survey, that should dictate methodologies of future surveys. Recommendation for increased funding will be based on the results of these pilot studies. A thorough analysis was not available to make a recommendation for the fiscal year 1999 budget.

Question. Is funding included in the fiscal year 1999 budget request for these studies? If so, how much is included? If not, what funding is needed for fiscal year 1999?

Answer. The funding requests for fiscal year 1999 for the Lower Mississippi Delta Initiative is $3,147,700. This will be satisfactory to analyze the pilot studies and to design large scale studies if warranted.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The ARS Annual Performance Plan parallels the structure of the new ARS Strategic Plan, which was developed to meet the requirements of the Government Performance and Results Act of 1993. In the Annual Performance Plan, the Goals, Objectives, Strategies, and Performance Goals are linked to specific anticipated outcomes that the Agency expects to achieve in fiscal year 1999 with the funds requested. All the activities identified in the Strategic and Performance Plans link directly to the Mission Statement which, in turn, directly reflects the statutory authorities that underpin the Agency's work. A crosswalk is shown at each of the five Goals and at Initiative 2 linking program activities to the budget request.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. ARS carries out its research through 1100 CRIS research projects which are aligned with the 6 Budget Program Activities, 25 National Programs and the

5 Goals of the GPRA driven Strategic and Performance Plan structure. The CRIS research projects are the primary level of funding and accountability and provide the linkage essential to crosswalk this information.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. There are many challenges in making a transition such as this. GPRA requires us to anticipate the longer-term outcomes and impacts of our work, which is more difficult in a research environment than it is in many other areas. Since the spring of 1994 ARS has employed a series of workgroups and teams to help clarify and resolve some of these issues. In addition, ARS helped found the Research Roundtable, an ad hoc group of Federal research agencies, that meets regularly to share information on how best to comply with GPRA. We have tried to adopt and adapt all this information to make GPRA work for ARS. In the Performance Plan submitted last year we relied heavily on numerical measures of outputs. We have since revised our approach and moved to using more tangible intermediate outcomes as the indicators of progress towards our long-term goals.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes, the funding resources are identified at the level of the 5 Agency Goals and Initiative 2, which relates to the work of the National Agricultural Library.

Question. Does each account have performance measures?

Answer. The Performance Goals relate to the new Strategic Plan structure and are linked to the traditional budget accounts by a crosswalk.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. There are substantial differences between the ARS Strategic and Performance planning structure, our National Programs and the Program Activity structure contained in the Budget. The budget activity structure is presented on the following areas: Soil, Water, and Air Sciences; Plant Sciences; Animal Sciences; Commodity Conversion and Delivery; Human Nutrition; the Integration of Agricultural Systems, and Agricultural Information and Library Services. The Strategic Plan is outcome oriented and includes the following 5 broad societal Outcomes: An agricultural production system that is highly competitive in the global economy; A safe and secure food and fiber system; A healthy, well nourished population; An agricultural system which protects Natural Resources and the environment; Enhanced economic opportunity and quality of life for Americans. In addition, three management initiatives, which includes the National Agricultural Library, are identified in the annual Performance Plan.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. No, the Agency will continue to effectively present its budget through the approved Program Activity Structure which is linked to the core, CRIS research project system. This system is utilized in the allocation of resources as budgeted by the President and as directed by Congress. Our accounting system tracks each project to ensure compliance with the Appropriations Act and Congressional reports. These projects also provide the basis for systematic review by the National Program Staff and Area Directors. As stated earlier, the CRIS project system provides the essential linkage to the major Planning and Financial systems utilized by the Agency.

Question. How were performance measures chosen?

Answer. The new ARS Strategic Plan was drafted by an Agency-wide team that was always mindful of the need to measure progress towards achieving the plan's Strategies, Objectives, and Goals. The ARS Annual Performance Plan, that accompanies the fiscal year 1999 budget, was developed by the National Program Staff. Input was obtained from each of the National Program Leaders who, in consultation with the key Research Leaders and Lead Scientists, identified the performance indicators that were incorporated into the Annual Performance Plan.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. ARS has various mechanisms in place to retrieve financial and programmatic data on all aspects of its research program. At the present time, a committee of ARS employees is looking at what data we are currently collecting and what data we should be collecting to support the new Strategic and Performance Plans and the new National Program structure. We do not anticipate that the cost of data collection needed to validate future performance will be much greater than current costs.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Across the five programmatic goals we have identified scores of performance indicators, that can be tracked and reported on by the National Program Staff. Accomplishing these performance measures will clearly demonstrate progress towards achieving the Goals and Objectives identified in the ARS Strategic Plan. We are still developing some of the baseline data, tracking and reporting requirements for several of the performance measures under Initiative 3, Creative Leadership, but we expect to have these mechanisms in place to meet the timetables identified in the Performance Plan.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. Measuring performance in research provides some unique challenges that may not exist in operating programs. The approach used in the fiscal year 1999 ARS Annual Performance Plan is to identify intermediate outcomes that are tangible and measurable. If ARS achieves all or most of these intermediate outcomes it will be a clear indication of progress towards meeting the longer-term Strategies, Objectives, and Goals in the new Strategic Plan. We would recommend that the subcommittee track the performance goals under the 5 programmatic Goals: Goal I: Through Research and Education, Empower the Agricultural System with Knowledge that Will Improve Competitiveness in Domestic Production, Processing, and Marketing. Goal II: To Ensure an Adequate Food Supply and Improved Detection, Surveillance, Prevention, and Educational Programs for the American Public's Health, Safety and Well-Being. Goal III: A Healthy and Well-Nourished Population Who Have Knowledge, Desire, and Means to Make Health Promoting Choices. Goal IV: To Enhance the Quality of the Environment through Better Understanding of and Building on Agriculture's and Forestry's Complex Links with Soil, Water, Air, and Biotic Resources. Goal V: Empower People and Communities, Through Research-based Information and Education, to Address the Economic and Social Challenges of Our Youth, Families, and Communities.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Because of the diversity of the ARS research program we have identified 84 performance indicators in fiscal year 1998 and 86 in fiscal year 1999 in the Annual Performance Plan. As we gain experience in implementing the GPRA performance and reporting processes, we believe we will become better able to identify performance goals and indicators that are meaningful in a research environment.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, the Agency's senior managers are fully aware of the difference in output and outcome.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. ARS has a long history of positive interaction with its customers and stakeholders but a formal process of more systematically measuring customer satisfaction is still evolving. Some components, such as the National Agricultural Library and the National Arboretum, periodically survey their users and visitors to measure and improve the quality of their services and general satisfaction. Many of the Administrative and Financial Management units regularly measure customer satisfaction from the internal agencies and components they support. A National Programs Staff committee is currently working to develop practical ways to measure customer satisfaction in our research programs. In developing our Strategic Plan ARS identified the following Customers, Beneficiaries, Stakeholders, and Partners:

Customers.—Individuals or organizations that directly use ARS products or services.

Producers (farmers, growers, and ranchers) and processors
National and international organizations
Advocacy groups
Commodity and futures markets
International trade organizations
International science and research organizations
Legislative Branch
Executive Branch
U.S. Department of Agriculture

Secretary of Agriculture
Other mission areas
Action and regulatory agencies
Office of Budget and Program Analysis
Inspector General
Chief Financial Officer
Chief Information Officer
Other Federal agencies
Scientific community
Medical community
Health and dietary community
Environmental community
State and local governments
News media

Beneficiaries.—Individuals whose well-being is enhanced by the agency's activities.

Domestic consumers
Foreign consumers of U.S. agricultural exports and technologies

Stakeholders.—Organizations or individuals that have an interest in the work of ARS but do not directly use the agency's products.

Legislative branch
Executive branch
ARS employees
National and international organizations
Producer and processor organizations
Food and commodity organizations
Foreign countries/governments
Trade organizations
Environmental organizations
Retail organizations
Consumer organizations

Partners.—Organizations that ARS works with collaboratively.

Institutions of higher education
Federal research agencies
Private industry

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The fiscal year 1999 Annual Performance Plan and the fiscal year 1999 budget were developed on parallel tracks with crosswalks showing the linkages.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes. The version of the Annual Performance Plan currently before the subcommittee reflects the President's budget proposal for fiscal year 1999. Once the appropriations process is completed, ARS will revise the Annual Performance Plan to show the level of program performance that can be expected with the actual resources that are appropriated.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Within reason, yes. ARS is currently revising the type and amount of data which it requests from each research unit. This enhanced data collection will help the National Program Staff and the Area Offices to better monitor and manage the research program. To avoid an undue burden on the research leaders, we plan to collect most of the data on an annual basis.

The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. This Agency will not have any difficulty linking dollars to results. As stated, ARS CRIS research projects underpin budget and program activities and the goals/outcomes as established under GPRA. The 1100 research projects are the foundation for allocating, accounting and review of the Agency's research. This is "the" level of accountability in this Agency and this information can be cross-walked or translated into the major systems operated by ARS.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. No. The existing budget account structure consisting of 6 Program Activities does not need to be modified.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. The Agency's CRIS projects are the accountability unit and aggregate and crosswalk to the major program, budget, management and review systems.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. There is no need to modify the existing accountability systems for program performance or budget activities.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Annual Performance Plan does not refer to external factors but the unabridged version of the ARS Strategic Plan 1997–2002, which will be printed later this spring, contains the following discussion of the external factors that impact on ARS:

Consumer, Socio-Economic, and Policy Trends.—The abundance and affordability of the American food supply is greatly due to U.S. agricultural research. The Nation's ability to sustain this plentiful and inexpensive food supply continues to be paramount. But in recent years, consumer and producer attention has expanded somewhat to other areas of concern such as food safety and quality, the relationship of agriculture and the environment, the profitability of the agricultural enterprise, and the impact of government regulations, land use restrictions, and economic options that diminish the supply of farm and grazing land. The long-term sustainability of the Nation's food and fiber production systems will be determined not only by the continued profitability of farming and ranching, but also by how these production systems affect the environment. The capacity of U.S. agriculture to adapt to environmental changes is also a concern as are the availability and quality of natural resources. Another key environmental issue is how human activities affect weather patterns, atmospheric composition, and soil and water quality and productivity. Global population increases, demographic changes, and economic growth will substantially increase the demand for agricultural products and lead to the development of new markets. At the same time, increased agricultural efficiency in other countries will force U.S. agriculture to be more competitive.

Funding.—The ability of ARS to respond to the many and diverse needs of producers and consumers is determined by annual appropriations.

1996 Farm Bill and the Pending Revision of the Research Title.—The 1996 Farm Bill, the Federal Agriculture Improvement and Reform Act, set a new direction for American agriculture by beginning the process of phasing out farm subsidy payments based on production levels and introducing free market disciplines. The effect of this legislation will be to heighten the importance of agricultural research as one form of a safety net beneath producers. Research to maintain and improve productivity; to detect, control, and eradicate diseases and pests (insects, weeds, etc.); and to promptly address nontariff trade barriers, especially sanitary and phytosanitary conditions will take on even greater importance in a market environment. The 1996 Farm Bill also updated and expanded the "Purposes of Agricultural Research" which were first enacted in 1990. As described elsewhere, ARS incorporated the Purposes into this strategic plan adopting them as the agency's objectives. Congressional reauthorization of the Research Title will have an impact on ARS, but we are still too early in the legislative process to anticipate what that impact will be.

Competition.—The Department of Labor projects an increase of 19 percent in the size of the general workforce in the next decade, which is slightly lower than the rate of growth for the preceding decade. The labor market during this period is also expected to be highly competitive for many occupations that require an advanced education, including scientists, engineers, economists, and computer specialists. The high earning potential of professions, such as law and medicine, will continue to make a career in science less attractive to many young men and women who have the creative intelligence needed for professional success in agricultural research. Consequently, a major emphasis on recruitment, student employment, upward mobility, and training programs will be needed to attract and retain a quality workforce. The trend toward increasing workforce diversity is also expected to continue, and opportunities for encouraging women and minorities into careers in science, engineering, and economics will need to be given a high priority.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. As indicated above, the issue of external factors was not addressed in the fiscal year 1999 ARS Annual Performance Plan. Having said that, we would like to stress that an in-depth examination of the major external factors affecting American agriculture was part of the strategic planning process and the process for developing the new National Programs. The five Vision Conferences are a specific example of how ARS identified and considered external factors in its strategic and programmatic planning processes. The visioning process consisted of a pilot conference in January 1995, followed by five regional conferences held in June and July of 1995. The conferences brought together over 400 participants, representing a broad cross section of the Agency's customers, stakeholders, and partners, who worked in more than 30 breakout groups to provide input regarding: (1) the key forces that will influence American agriculture during the next 20 to 25 years, (2) how these changes will affect agricultural research, and (3) more specifically, how ARS should respond to these changes. Using the input and information gathered from this process, ARS identified the following 10 major issue areas that will affect agriculture and agricultural research over the next 25 years: international/global issues, population/demographics issues, environmental issues, sustainability of production systems issues, economic issues, government and political issues, consumer/societal issues, food and health issues, technological advancement issues, and education and information issues. Likewise, ARS has been and is continuing to be actively engaged with a wide-range of customers, stakeholders, and partners in developing its new National Program structure.

Question. What impact might external factors have on your resource estimates?

Answer. The most important and direct external factor identified in the ARS Strategic Plan is the level of Administration and Congressional support, both in terms of the reauthorization of the Farm Bill—especially the Research Title, and the level of funds appropriated to support the Agency's research activities. Other external factors such as the heightened concern about the relationship of agriculture and the environment, concerns about food safety, and the impact of government regulations gradually change the focus of ARS research. Global population growth and economic changes also affects American agriculture and the research priorities needed to sustain it. Changes in the American workforce may also impact on ARS' ability to attract and retain the wide range of skills needed to meet the agricultural research needs of the next century.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No. In managing the ARS research program, the National Program Staff seeks to avoid unnecessary duplication while ensuring complementarity and coordination between research units and locations. Agricultural research must be conducted at different locations to account for climatic, regional, and geographic variations as well as different combinations of pests, diseases, and agricultural products, each with unique problems calling for unique research approaches and solutions.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. In developing the Annual Performance Plan we did not find any areas of program duplication.

Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

Question. To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. In our unabridged Strategic Plan which will be printed later this spring, we discuss the difficulty of predicting the ultimate outcome of research and the near impossibility of applying numerical measures to research, especially basic research. Having said that, we are confident that the use of a large number of tangible intermediate outcomes will enable the subcommittee to determine whether ARS is making reasonable progress towards reaching the goals and objectives identified in the Strategic and Performance Plans. Two examples of ARS Performance Goals and the tangible intermediate outcomes we have identified to indicate progress are as follows: Under Performance Goal 2.1.4.1—"During fiscal year 1999, ARS will conduct research leading to registration of a second therapeutic compound useful in treating diseases of farm raised fish." At the end of fiscal year 1999, the subcommittee will be able to determine if ARS completed the research and assembled the data on this compound and provided it to the Food and Drug Administration to support their decision making process on the use of this new drug. In Performance Goal 1.1.3.2—"During fiscal year 1999, ARS will release technology for calibrating HVI strength measurements on cotton fiber which is expected to be adopted worldwide as the official calibration procedure. This adoption will ensure that cottons are all subjected

to the same standards worldwide, allowing those cotton growers who produce a superior high-quality product to receive compensation for it." At the end of fiscal year 1999, the subcommittee will be able to determine if ARS produced a reference measuring technology that is adopted internationally enabling cotton marketers and buyers to compare cotton quality regardless of where it is produced. We have learned many lessons as we developed our new Strategic Plan and the first Annual Performance Plan and we will know a great deal more after we have moved through the entire GPRA planning and reporting cycle.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Certainly there are. Anticipating the longer range outcomes or results of research, especially basic research, runs counter to our long experience with predicting scientific research. The great unpredictability of research, particularly its unanticipated benefits, makes it extremely difficult for scientists to formally offer predictions for fear they will engender unrealistic expectations. Predicting what problems will need to be address, what type of metrics should be used to reasonably measure on-going research, how best to express "future" research accomplishments, and how to align the resources available to out year research results are all areas were we lack experience. As we work our way through one or two planning and reporting cycles, we will gain the experience we need to more meaningfully adapt GPRA to the ARS research environment.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. Not at this time. ARS devoted 2½ years to developing its new GPRA driven Strategic Plan and the first Annual Performance Plan. We used workgroups, a agency-wide Strategic Planning Team, as well as the input we received from outside sources such as the Research Roundtable, an ad hoc group of Federal research agencies formed to address how best to apply GPRA in a research environment. We held visioning conferences, published our draft strategic plan in the Federal Register, and placed several drafts on the ARS Home Page to expedite customer, stakeholder, and partner review and comments. As we move through the early stages of implementing GPRA we are discovering things that might have been done differently. Rather than devoting resources to the revision of the Strategic Plan, we believe that it would be more productive to move forward aggressively with full implementation of GPRA. At the end of the "shake-down" period (a testing under operating conditions of something new for possible faults and defects and for familiarizing the operators with it) we will be in a much better position to meaningfully revise the ARS Strategic Plan.

QUESTION SUBMITTED BY SENATOR GORTON

For two years in a row now, USDA and the Administration have eliminated funding for the operation of the Prosser Research Station in Washington state. I understand that the Agriculture Research Service did not recommend the closure of Prosser in this year's budget. I am told that this was a decision made by the Office of Management and Budget.

Question. Why did USDA and the research arm of USDA (REE) not express to OMB the importance of the Prosser Research Station, and for that matter, the other facilities which are to be eliminated in ARS' budget? Are these research sites not considered to be priorities for production agriculture research?

Answer. The President's budget requires the reallocation of existing resources to finance new, high priority research needs. A number of projects carried out in ARS research stations at Prosser, Washington; Mandan, North Dakota; Orono, Maine and Brawley, California, were identified as less critical. As a result, a cost-effective decision was made to terminate and redirect resources to new research initiatives and recommend closure of these research stations.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

HUMAN NUTRITION INITIATIVE

Question. Please provide an update on the Human Nutrition Initiative and, in particular, the role of Arkansas Children's Hospital.

Answer. The Human Nutrition Initiative is a multi-year plan to enhance the scientific basis for understanding the role of nutrition in well-being. The research areas of the Human Nutrition Initiative are: (1) nutrient-gene interactions, (2) diet and immune function, (3) role of nutrition throughout the life cycle, and (4) diet and

human performance. The Initiative began in fiscal year 1998 with a Congressional appropriation of $7.5 million. Research in the Human Nutrition Initiative is carried out at six human nutrition centers: Arkansas Children's Hospital Research Institute, in Little Rock, AR; Western Human Nutrition Research Center, San Francisco, CA; Jean Mayer USDA Human Nutrition Research Center on Aging, Boston, MA; Beltsville Human Nutrition Research Center, Beltsville, MD; Grand Forks Human Nutrition Research Center, Grand Forks, ND; and Children's Nutrition Research Center, Houston, TX.

The Arkansas Children's Nutrition Center (ACNC) is the newest of the ARS Human Nutrition Research Centers. It provides a research program that focuses on unique issues. Its major efforts focus on the effects of early nutrition on growth, cognitive development in children, and the effect of early nutrition on the subsequent risk of diseases in adulthood. It currently has funding for two major projects. One, is to determine the role of nutrition in brain function, especially cognitive and behavioral function of infants and children. Data from these long-term studies will provide the understanding of how children can improve their learning abilities in the early years and later in the classroom. In addition, it is now thought that these results will have a far reaching impact on child behavior.

The second project involves dietary factors other than the traditionally studied nutrients. There are many factors in diets that affect development and normal metabolic, physiologic and endocrine systems. These factors may have beneficial or adverse effects. ACNC is studying factors in children's diet, such as the soybean products found in infant formula, that are thought to prevent breast cancer later in life based on their animal research model. There are factors that have been isolated in several foods that are likely to have similar effects on such diseases as prostate cancer, colon cancer, osteoporosis, obesity, etc. Thus, the role of the ACNC is to develop new and as yet unexplored areas of child nutrition.

Question. How is this Initiative more than just a simple restatement of the fact that we should all eat more fruits and vegetables?

Answer. The translation of sound nutritional science findings into consumer advice such as 'eat more fruits and vegetables' is certainly one important outcome of the research. Four important trends which affect nutrient intake and nutritional health: (1) Framework condition. This refers to the increasing importance of processed foods, and the declining presence of farming and gardening in most people's daily lives; (2) Acceleration of scientific knowledge about the positive biological effects of compounds within foods, particularly in preventing degenerative processes formerly thought to be obligate consequences of aging; (3) Biotechnology which can drastically alter the composition of many foods now under production; (4) Accelerations in information exchange which result in more rapid communication about nutrition. The Human Nutrition Initiative will strengthen production agriculture by defining the nutritional basis for enhancing the health promoting properties of foods, the scientific basis of dietary recommendations, the effectiveness of food assistance programs, and ultimately human health.

Question. If this Initiative results in a more healthy diet, are there projections on health care savings that might result from this research?

Answer. There are many areas where health care costs will be reduced. Diet is thought to be a major factor in 60–75 percent of all cancers. The delay or prevention of the type of breast cancer being studied at ACNC is thought to involve as much as 60 percent of the Total breast cancers in the United States. Any progress on prevention would result in multi-millions of dollars saved each year. Even if this disease onset could just be delayed for 5 years, there would be enormous savings in medical care costs. This is also true of other potentially diet-related cancers such as prostate cancers and colon cancers that if prevented or delayed would significantly reduce health care cost. In the central nervous system projects, improvement in cognitive function will improve the ability of children to learn and help reduce problems with behavior. Improved learning will enable individuals to more closely attain their full potential to contribute to society through private and public pursuits. It is postulated that diet plays a significant role in behavioral problems now treated with drugs and therapy. Prevention of these problems would also result in substantial cost savings. The success of nutrition research in the last 30 years in reducing the incidence and severity of cardiovascular and digestive disease, is a clear indication that alterations in diet and life-style have beneficial effects both through reduced morbidity and mortality and a concomitant reduction in the cost of health care.

FOOD GENOME RESEARCH INITIATIVE

Question. The proposed budget includes an increase for food genome research. What role might the ARS Rice Germplasm Laboratory play in this initiative?

Answer. The food genome research will vastly expand our knowledge of the genome for species of importance to the food and agricultural sectors. ARS will focus on a government-wide effort to map the genomes of agriculturally important crops and livestock to determine the DNA sequence of the functioning genes in those genomes, and to define and understand the function and control of economically important genes. ARS will build on current genomic research, such as the Human Genome Project and the Arabidopsis Genome Research Project, to understand gene structure and function. This is expected to have considerable payoff in crop species such as rice. The National Rice Germplasm Evaluation and Enhancement Center at Stuttgart, Arkansas, is a national center for genetic improvement of rice. The program to be developed at this new facility will include the genetic improvement of a broad range of traits critical to optimizing rice production and utilization. Thus, scientists at this location will be close collaborators with the food genome research, particularly in the functional genomics component.

Question. What role might the Poultry Center of Excellence in Fayetteville, Arkansas play?

Answer. There is potential for the poultry industry to benefit greatly from the use of molecular markers to select for superior animals. The ARS Avian Disease and Oncology Laboratory, East Lansing, Michigan, has developed a genomic map and a national database system for chickens. The Poultry Center of Excellence in Fayetteville, Arkansas, could work with the East Lansing laboratory to use genetic information, as other universities and ARS locations are doing, to identify genes or groups of genes that may be responsible for desired economic traits such as growth rate, feed efficiency, and resistance to disease. At present, we do not have scientists trained in the appropriate field of science at the Fayetteville, Arkansas laboratory, a necessity in order to initiate a genomics program.

Question. What role might the ARS National Aquaculture Research Center in Stuttgart, Arkansas play?

Answer. The recent review and planning session for future aquaculture research at the SNARC did not identify genome research as an area of emphasis for the Center, and there are no immediate plans to hire geneticists at the SNARC. However, there will be opportunities for genetic improvement of emerging warmwater aquaculture species, including hybrid striped bass, a species which will receive research emphasis at the SNARC.

Question. The proposed budget includes an increase for food genome research. How does the USDA food Genome research Initiative fit with ongoing genome research in other areas of government?

Answer. The USDA Food Genome Initiative expands the scope of a National Plant Genome Initiative to include animals and microbes. USDA will lead the Food Genome Initiative and ensure that there is coordination with other relevant Government agencies and the international research community.

ARS PEST BIOLOGY—FIRE ANTS

The budget proposes $3.5 million for pest biology.

Question. Please provide an update on ARS research related to the control and eradication of the Imported Fire Ant.

Answer. Imported fire ants, Solenopsis richteri, and S. invicta, currently infest over 300,000,000 acres in the South. Continued expansion is expected northward along both continental coasts.

As a result of ARS research, four bait toxicants have been commercialized and two are coming to the marketplace through cooperative programs with industry. In addition, ARS scientists are working closely with Animal and Plant Health Inspection Service-Plant Protection and Quarantine (APHIS-PPQ) and other national and international customers, including seven universities to develop biologically-based IPM strategies for fire ant control.

The ongoing research on the imported fire ant at the ARS Unit in Gainesville, Florida, includes: development and introduction of three biocontrol agents into the United States for non-insecticidal management of fire ant in large-scale areas; pheromone enhancement of bait attractions; basic biology and ecology of fire ant populations; non-toxic, behavioral modification interventions using repellents and semiochemicals; and support of the APHIS program.

Recently, ARS has initiated an effort to introduce some natural enemies of fire ants in South America into the U.S. If successful, imported fire ant populations in the U.S. could be reduced to levels similar to those found in South America.

For example, parasitic flies in the genus Pseudacteon have been shown to stop fire ant foraging and shift the competitive balance to other local ant species. The microsporidian parasite, Thelohania solenopsae, causes reductions in mound density. The parasitic ant Solenopsis (Labauchena) daguerrei has been reported to kill host colonies over a period of several years.

The phorid fly, was released in Gainesville at 3 locations from July through early October. Fly populations successfully cycled to successive generations and were observed continuing to attack fire ants in January. Brood from laboratory colonies of fire ants infected with Thelohania solenopsae has been used to infect previously healthy field colonies in Florida. Preliminary data suggests that limited secondary spread has occurred.

A software and field-deployable hardware system currently is under development by the Gainesville unit that may aid in database management, the evaluation of candidate biocontrol agents, and in developing and implementing pesticide-reduced strategies incorporating existing technologies.

The long-term goals of ARS fire ant research are:

(1) Collect and determine relevant remotely sensed data for selected sites in cooperation with NASA. Merge ground-based biological data with remote sensed data to predict likelihood of success for various biocontrol agents.

(2) Develop computer-based decision support systems to aid fire ant control practitioners in day-to-day operations requiring integration of management technologies.

(3) Develop mass propagation of candidate biocontrol agents found successful in limited field research/demonstration tests.

(4) Develop large area-wide integrated management strategies.

(5) Develop quarantine management that will allow the use of less pesticides.

(6) Develop new technologies with emphasis on biologically-based strategies. These may include classical biocontrol agents, biopesticides, social disruption using semiochemicals (pheromones), genetic manipulation, resource manipulation, manipulation of pathogen virulence.

Question. Is ARS coordinating in any way with the fire ant research underway at the University of Arkansas at Monticello?

Answer. ARS has been cooperating with University of Arkansas at Monticello under a specific cooperative agreement for the development of an integrated fire ant management strategy. The principal objectives of the cooperative research include:

(1) Production of a hazard-rating model of fire ant range expansion into Northern Arkansas.

(2) Studies of fire ant natural enemies in South America to provide the science based knowledge that is needed to manage successfully imported biocontrol agents.

(3) Development of strategies for using existing contact pesticides for prolonged fire ant control.

QUESTIONS SUBMITTED BY SENATOR KOHL

INTEGRATED FARMING SYSTEM PROGRAM

I remain very interested in the Integrate Farming System program of the Agricultural Research Service. It is very important for USDA to be investing in long-term research on sustainable agriculture systems for the 21st century and ARS is well positioned to undertake this mission. The need for new diversified, integrated crop and animal production systems in particularly urgent for your family farmers and for the health of our environment.

Question. Does the budget request include funding for the Wisconsin Integrated Cropping System Trials?

Answer. The fiscal year 1999 budget request includes $497,100 for the Wisconsin Integrated Cropping Systems Trials, the same as for fiscal year 1998. In fiscal year 1997, funding was appropriated for $500,000. This funding is split between the U.S. Dairy Forage Research Center, the University of Wisconsin and the Michael Fields Agricultural Institute in East Troy, Wisconsin. The Agricultural Research Service (ARS), through the U.S. Dairy Forage Research Center, has established a long-term cooperative agreement with the University of Wisconsin in cooperation with the Michael Fields Agricultural Institute to carry out the Wisconsin Integrated Cropping Systems Trials at Arlington and at the Lakeland Agricultural Complex at Elkhorn, Wisconsin. A sum of $810,000 is to be provided to the University for this cooperative project which spans a 5-year period from fiscal year 1997 through 2001. Funding of $270,000 was provided in fiscal year 1997 and $180,000 has been provided so far in fiscal year 1998. Additional in-house research on Integrated Farming Systems by an ARS scientist will be an integral part of the overall cooperative effort.

Question. Last year, this Committee instructed the agency to implement interdisciplinary partnerships, including farmers and nongovernmental organizations, in carrying out all its IFS projects. Can you give me a progress report on this?

Answer. Currently, 13 ARS locations doing IFS work have farmer and/or nongovernmental partners. During the past year, ARS organized its 1100 projects into 25 national programs. One of the national programs is titled 'Integrated Farming Systems' (IFS). An executive summary for this national program may be found on the Internet at http://www.ars.usda.gov/nps/programs/207s2.htm. An important aspect of program and project development will be obtaining inputs from farmers, nongovernmental organizations, and others as to the priority issues that need to be addressed and the manner in which partnerships may be developed.

Question. How many IFS projects are there currently?

Answer. The IFS national program is in the process of being formed. Forty-seven locations have tentatively been identified as participants. IFS covers traditional farming, sustainable agriculture, and precision agriculture.

Question. How many are implemented as partnerships?

Answer. Twelve multi-disciplinary research projects, which include partners representing the private sector and other governmental agencies, have been implemented.

Question. How many farmers participate in IFS projects?

Answer. Twelve of the above projects, including the Wisconsin Integrated Cropping Systems project, have direct participation of farmers. Ten of them are carried out as on-farm research projects in which farmers participate.

Question. What is your plan to transition more IFS projects to partnership arrangements?

Answer. ARS is encouraging all locations to identify and involve customer and stakeholder groups. The goals are to have these groups and interested individuals provide input during the periodic review and evaluations that all ARS units undergo, and to maintain continuous relationships that will lead to increased on-farm research, CRADAs, and other partnerships. For example, some ARS program managers and researchers recently met with farmers and ranchers associated with the Campaign for Sustainable Agriculture, which includes the Michael Fields Institute. As a result of that meeting, farmers will be matched with appropriate ARS scientists throughout the country to initiate partnerships.

QUESTIONS SUBMITTED BY SENATOR BYRD

Question. Please provide me with a status report on the construction of the National Center for Cool and Cold Water Aquaculture (NCCCWA), detailing pertinent dates and milestones.

Answer. ARS received $1,921,000 in fiscal year 1995 for land purchase and laboratory planning and design. Total construction costs are estimated at $12 million. ARS received $6 million in fiscal year 1997 and an additional $6 million in fiscal year 1998 for construction of the NCCCWA.

The architect-engineer has developed the site plan for the NCCCWA. Conceptual designs have also been prepared for the laboratory/office building and the tank/aquaria building. Final drafts of the Program of Requirements and the Investigative Report have been completed. However, there has been a delay in design progress as a result of the extreme drought conditions experienced in 1997 that resulted in an unprecedented reduction in spring water supplies and stream flow in the vicinity of the U.S. Department of Interior's Leetown Science Center (LSC), including very low flows in two nearby springs (Bell and Link). The NCCCWA will be co-located with the LSC. Original plans were to pipe the water from these springs to the NCCCWA and provide a return supply of water from the facility to prevent drawing down the natural water resource. The drought condition called into question whether natural water resources would always be sufficient to provide for the future needs of both the FHL and the NCCCWA without impacting local residents. After extensive investigation, the current plan is for the NCCCWA design to include the capability for water recirculation, with appropriate treatment, for up to 50 percent of the water supplied to the tank/aquaria building. This capability will also provide for greater control over water quality for research purposes and will obviate the need to develop Bell and Link Springs, as originally planned. Preliminary projections are that the capital costs of the recirculation capability will be essentially equivalent to the cost savings resulting from not developing the Bell and Link Springs.

The design is expected to be completed by January 1999; and a construction contract is scheduled for a May 1999 award. Construction is expected to take 18 months and be completed by November 2000.

Question. Is the current construction schedule the same as the Agricultural Research Service's (ARS) original projection?

Answer. The current schedule has fallen behind the original ARS projection by four months.

Question. If not, why?

Answer. The drought experienced in 1997 required extensive investigation of the adequacy of water resources which delayed the schedule beyond that originally envisioned.

In fiscal year 1998, $250,000 was provided to ARS to initiate the program of the National Center for Cool and Cold Water Aquaculture.

Question. What progress has been made on the Center's program?

Answer. The program increase for the Center is being used to hire a highly qualified scientist to serve as Research Leader for the Center, to begin carrying out a cooperative research program with the U.S. Geological Survey's Leetown Science Center (LSC), and to oversee final design and construction of the facility. The ARS National Program Staff is working closely with the LSC to identify areas of mutual research interest where collaboration in research could occur.

Question. What is the status of collaborative efforts between ARS and West Virginia University on cool and cold water aquaculture activities in Appalachia?

Answer. The ARS, National Program Staff (NPS) has been discussing with scientists and administrators at West Virginia University (WVU) opportunities for collaboration in research between the National Center for Cool and Cold Water Aquaculture and WVU. There is particular interest in a collaborative research program on genetics of rainbow trout. ARS has indicated that, if WVU is successful in developing and obtaining funding for a proposal on the genetics of rainbow trout, ARS could provide additional support for graduate students and/or a post-doctoral researcher to work with WVU on the research program.

Question. What is the status of collaborative efforts between ARS and the West Virginia Department of Agriculture on cool and cold water aquaculture activities in Appalachia?

Answer. At the invitation of the Commissioner of the West Virginia Department of Agriculture, the ARS National Program Leader for Aquaculture is participating in the West Virginia Aquaculture Task Force, a partnership formed to support the development of aquaculture in West Virginia. The primary mission of the Task Force is to establish a State Aquaculture Plan that will set realistic goals and a system to achieve them and promote effective cooperation and government coordination for aquaculture in the State. The first meeting of the Task Force took place on February 25, 1998.

In fiscal year 1998, $250,000 was provided for an agroforestry systems program at the Appalachian Soil and Water Conservation Research Laboratory.

Question. What progress has been made on this new research initiative?

Answer. A plant physiologist with root/soil interactions expertise was added to the agroforestry program. This addition filled a critical gap in the program. A research plan was developed to address conversion of farm woodlots to agroforestry production systems.

Question. What is the projected timetable to carry out the objectives of the research?

Answer. The envisioned system involves clearing selected areas in a woodlot, followed by establishment of a multi-species planting that includes high-value hardwood timber species and shade-tolerant horticultural (crop producing) tree, shrub, and herbaceous species. The resulting system would begin providing income to a landowner within 3–5 years.

Implementation of the research plan, experimental site selection and preparation has been initiated. This site represents a first-generation system for which no temperate-climate prototype exists. Within two years the research site will be fully developed, and will include establishment of short-term, immediate-return plant species; extensive data on the microclimate and rhizosphere characteristics of the research site will also be collected. Within 3–5 years, based on knowledge gained from the microclimate and rhizosphere characterizations, there should be: (1) complete establishment of long-lived woody species; (2) a procedure available to farmers on the methods needed to establish mid-and long-lived crop species; (3) results from the short-term production systems experiments; and 4) information on ecological/interspecies interactions in agroforestry woodlot systems.

Within 5–10 years the full production data from short and mid-term species will be available for reliable economic analyses of land use alternatives and the design of second-generation agroforestry woodlot production systems.

Question. What is the estimated cost of conducting this research?

Answer. The fiscal year 1999 funding for agroforestry research of $438,400 will support the new scientist's research for the next 2 years. However, resources to purchase and install equipment for the research project are severely constrained. An additional $300,000–$500,000 (plus the reinstatement of the $250,000 add on to the fiscal year 1998 budget, proposed for termination in fiscal year 1999), would allow full development of collaborations with university cooperators (e.g., West Virginia University), and would also support the addition of a new scientist, a soil mycologist, and the technical support to manage the research site and collect data. The collaboration of and support for University experts are needed to fully analyze and interpret the data.

Question. With the completion of the five-year mission plan for the Appalachian Soil and Water Conservation Research Laboratory, please provide me with a list of research programs that will be undertaken in the future.

Answer. Four major research programs areas have been identified: (1) Management of hilly grasslands in Appalachia for sustainable production; (2) Renovation and improvement of underutilized, abandoned or disturbed hill lands with browsing livestock; (3) Agroforestry systems for the Appalachian regions; and (4) Improving soil quality and forage legumes for Appalachia. Each program will have multiple objectives directed towards solving problems of the Appalachian small farmer.

Question. Please provide the funding level required for each program.

Answer. The current funding level at the Appalachian Soil and Water Conservation Research Laboratory is $4,423,400. Because the programs are under development, final decisions have not been made on redistribution to the four programs, but approximately an equal split is anticipated. A $1.2 to 1.5 million increase (4 to 5 scientists) is required for the location, distributed equally to the four programs.

Question. List any projects that have been terminated or are planned for termination at the Appalachian Soil and Water Conservation Research Laboratory in fiscal year 1998 or in fiscal year 1999.

Answer. The current projects to be redirected to the new programs are: Livestock grazing systems and water quality in Appalachia; management and ecology of pastures in the Appalachian region; forage legume breeding for the Appalachian region; alleviation of acid soil constraints to plant growth; and selection and improvement of plants for infertile acid soils. Agroforestry systems for the Appalachian region, will be continued. These projects will be implemented even though the fiscal year 1999 budget proposal does not include the fiscal year 1998 congressional add on. Many current project activities, especially related to the development of useful products for customers, will be incorporated into the new programs.

Question. What are the research results related to those programs?

Answer. The research results related to those programs are:

(1) *Potentials for Agroforestry*.—The research found that the use of black locust, honey locust and black walnut within forage pastures appears to be beneficial. The trees provide shade for the livestock and their seed pods are a good source of nutrients for the livestock. The growth of shade tolerant forage species among the trees also may allow the pastures to be grazed for a longer time during the summer.

(2) *Alleviation of Acid Soil Constraints to Plant Growth*.—The application of a coal combustion power plant residue, a flue gas desulfurization (FGD) by-product, to an Appalachian acid soil resulted in increased crop yields. This gypsum quality by-product was effective in raising calcium levels and reducing phytotoxic soil aluminum concentrations. When this by-product was combined with phosphate rock and dolomitic lime, improved soil phosphorus and magnesium levels and higher soil pH also resulted. The development of this combined product is being pursued through a Cooperative Agreement and Development Act (CRADA) activity. The FGD by-product combined with polyacrylamide was also shown to reduce soil erosion from tilled hillsides.

(3) *Selection and Improvement of Plants for Infertile Acids Soils*.—Poor plant growth in acid soils is most often caused by excessive aluminum adsorption by plant roots. This toxic effect of aluminum on plants is dependent upon the form or species of aluminum in soil, which in turn is dependent upon the other minerals present in a soil. The form or species of aluminum in acid soils toxic to plants has been re-evaluated based on new information. These data were used to develop a mathematical model that describes the interaction between aluminum and other soil minerals that can relieve the aluminum toxicity. This model also describes the adsorption of aluminum and other minerals by plant root membranes. It can be used to predict the likely toxicity of various acid soils to plants. Not only do soils differ in their toxicity, but plants and varieties of plants differ in their tolerance to acid soil toxicity. The Alfagraze alfalfa variety was shown to be more tolerant and thus produce higher yields than the Vernal variety at a soil pH of 4.6.

(4) *Livestock Grazing Systems and Water Quality in Appalachia.*—Grazing studies in the Beckley area show that a balance of fiber, energy, and protein improves nitrogen (N) use efficiency in grazing livestock. If fiber energy and protein are in proper balance, less N will be excreted and the reduction in manure nitrogen will improve the quality of water leaving the watershed. A predictive energy model for grasses has been developed that will help managers decide how to stock or utilize a pasture to meet the energy demands of livestock. Water resource management practices, grazing techniques, and pasture management strategies were tested and shown to improve and preserve water quality in highly agriculturalized karst landscapes.

(5) *Management and Ecology of Pastures in the Appalachian Region.*—Different types of plants are being evaluated for use in Appalachia which will lead to increased commodity diversification. The composition of new and nontraditional plants is being examined as is the potential for production of bioactive compounds that may serve as herbivore deterrents. Some grasses infected with a beneficial mycorrhizal fungal symbiont were shown to have improved nutrient uptake ability and enhanced competitive ability, important features for low-input pasture systems in Appalachia.

(6) *Forage Legume Breeding for the Appalachian Region.*—The capability of legumes, such as clover and alfalfa, to fix atmospheric nitrogen in combination with a bacterial rhizobia symbiont and; thus, help the plant meet its requirement for this major nutrient as well as their digestibility makes legumes highly desirable forage plants. Unfortunately, most legumes are sensitive to acid soils. White clover cultivars currently used in Appalachia were found to be less acid soil resistant than those available from New Zealand and elsewhere. These more resistant cultivars are now being used to develop white clover varieties more suitable to Appalachian soils and conditions.

Question. Please provide the number of people on staff and full-time employees at the Appalachian Soil and Water Conservation Research Laboratory for fiscal year 1997 and budgeted for fiscal year 1998.

Answer. In fiscal year 1997 there are 58 full-time employees of which 15.0 are classified as research scientists. These numbers will remain the same for fiscal year 1998.

Question. With the completion of the five-year mission plan for the Appalachian Fruit Research Station, please provide me with a list of research programs that will be undertaken in the future.

Answer. The programs that will be undertaken in the future include the development of (1) knowledge of the critical molecular processes in fruit development and ripening; (2) genetic materials with improved pest resistance, cold hardiness and fruit quality; (3) integrated cultural and pest management systems that reduce pesticide/herbicide use, increase production cost efficiency and minimize environmental impact; (4) harvesting, handling and postharvest quality control technologies that increase shelf life and market value.

Question. Please provide the funding level required for each program.

Answer. To fully develop these programs and operate the laboratory at full capacity would require an additional four to five scientists for an estimated total of $1.2 to $1.5 million.

Question. List any projects that have been terminated or are planned for termination at the Appalachian Fruit Research Station in fiscal year 1998 or in fiscal year 1999.

Answer. No projects are planned for termination in fiscal year 1998 or in fiscal year 1999.

Question. What are the research results related to those programs?

Answer. Some of the research results from the current programs are provided below.

The peach gene for the chlorophyll a/b binding protein and the region controlling gene expression have been fully sequenced. This protein is essential for the light reaction of photosynthesis in peach and other plants.

A transgenic line of plum carrying a gene for resistance to plum pox virus was developed and shown to have good resistance in greenhouse and European field trials. This virus has caused severe economic loss in Europe and was recently detected in South America. The transgenic plums may provide the only basis for protecting U.S. orchards.

Transgenic Bartlett and Buerre Bosc pears carrying genes that affect growth habit and confer resistance to fire blight were developed and are being evaluated.

A unique, non-chemical approach to pest control in fruit crops using hydrophobic particles to coat tree leaves was developed, patents filed and successfully demonstrated in field trails in Chile and the U.S. Through a cooperative research and development agreement with a U.S. company, the technology has received EPA

clearance with a zero reentry time. This is a major step forward in meeting the regulatory limitations of the Food Security Act.

A mechanical harvester for citrus was developed and successfully tested in Florida. A cooperative research and development agreement has been signed with the Florida Department of citrus. A similar design for a blueberry and raspberry mechanical harvester that meets fresh fruit quality requirements was licensed. This could be important to small farm operations.

A 15-year study of herbicides used in orchard systems demonstrated no accumulation of herbicide residues in the soil or changes in soil microbial populations while effectively control-ling perennial weeds.

Question. Please provide the number of people on staff and full-time employees at the Appalachian Fruit Research Station for fiscal year 1997 and budgeted for fiscal year 1998.

Answer. In fiscal year 1997, there were 17 scientists and 55 other full-time-equivalents. For fiscal year 1998, there are 17 scientists and 50 other full-time-equivalents budgeted.

QUESTIONS SUBMITTED BY SENATOR CRAIG

Producers in my state, and their suppliers, have grown dependant upon the work being done by ARS scientists to develop new crop varieties and pest resistance. This work is conducted around the country, including four ARS stations in Idaho. I was pleased to learn that the President's budget request includes a $32 million increase for ARS—pleased until I saw where the money was to be spent.

The President's budget request cuts important funding for ARS research in a wide range of crops, including: soybeans, potatoes, rice, cotton, small fruits, and sugar, among others. In place of these important research activities, ARS dollars are being syphoned off to fund environmental projects such as the Presidential Environmental Initiative for Global Change, the Presidential Initiative on South Florida Ecosystem Restoration, and programs in watershed health and environmental quality.

Question. How does this effect the ability of ARS to fulfill its underlying mission of providing reliable research to American producers?

Answer. Environmental issues such as global change, watershed health, and environmental quality are directly relevant to crop production and are recognized by commodity groups as important concerns. Because ARS does not have enough funds to address all the necessary required research, the Administration has proposed for fiscal year 1999 that funds be redirected from projects which are less urgent. The projects proposed for closure are not limited to production agriculture, but also include certain environmental research projects that are less critical. ARS' strategic plan, gives a high priority to production agriculture. Part of the funds obtained through project closures would be redirected to environmental research that is directly relevant to crop production. Although many EPA programs do concern agriculture and involve ARS research to varying degrees, much of the high priority environmental research ARS needs to undertake is not now being pursued by other government research agencies, such as the EPA.

The President's request for ARS also includes $13.97 million in support of the Presidential Initiative for Food Safety.

Question. Will the money be spent on new ARS facilities dedicated to food safety?

Answer. The $13.97 million for ARS in support of the Presidential Initiative for Food Safety will not be spent on new ARS facilities dedicated to food safety.

Question. How does USDA propose to incorporate this new work with the ongoing efforts being conducted at research universities across the nation?

Answer. ARS food safety research is coordinated with and complements that of ongoing efforts being conducted at research universities across the Nation.

ARS works closely with CSREES to explore how the two agencies can effectively coordinate their research to plan food safety research, identify opportunities for collaborative Federal and State research to break down the barriers to communication between Federal agency scientists and university scientists, and to identify the unique research facilities and expertise of each party. The longer term nature of Federal funding complements that of the university research programs. The multi-year sustained programs of the Federal laboratories support research initiatives that establish the basis for the continued biological understanding of pathogens and the technological advances necessary to develop the means to assure food safety and meet the expectations of the American consumer. The combined efforts of both Federal Government and academia are necessary because food safety research must solve the problems resulting not only from the complexity of the food production and distribution system, e.g., the plethora of technological practices, an array of animal

and plant species and varieties, a range of climatic and regional differences, and a vast array of food products and consumer practices, but also recent changes in the system, e.g., changes in animal husbandry practices and processing technologies and the emergence of new pathogens.

Question. Has USDA considered the option of matching these ARS funds with CSREES monies to establish a series of national food safety research centers?

Answer. Because ARS already has facilities for conducting the necessary food safety research, and the critical mass of scientific expertise and structure to lead the necessary food safety research programs, ARS has not considered the option of matching these ARS funds with CSREES monies to establish a series of national food safety research centers.

Question. What impact would the proposed cuts at the ARS research station in Aberdeen, Idaho, have on the work being done in small grains? How does ARS plan to compensate for these cuts?

Answer. While the research conducted at Aberdeen is unique in its capacity for the molecular enhancement of oat and barley germplasm for feed and food efficiency and utility, ARS maintains a large, fully coordinated multi-disciplinary program for solving small grain production and postharvest issues. Although the work conducted at Aberdeen is important, ARS is required to make difficult decisions to support and finance other new research priorities. Some components of Aberdeen's molecular enhancement of oat and barley research would not be expanded and some components would be conducted elsewhere within the framework of the overall small grains program. The proposed cuts at Aberdeen would reduce the small grains research program by $359,800 and impact 1 scientist.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD SAFETY

Question. The fiscal year 1999 budget proposes an increase of $3 million for the second year of funding for the Food Safety Special Research Grants Program, from $2 million for fiscal year 1998 to $5 million for fiscal year 1999. What is the current status of this new program? For what types of research will funds be awarded?

Answer. We have developed the Request for Proposals for the fiscal year 1998 program after substantive internal discussion by our CSREES Food Safety Team and consultation with other Federal agencies, including FSIS, FDA, ARS, and EPA. It is currently awaiting final approval by USDA legal staff. The Request for Proposals will focus on issues in the fresh fruit and vegetable industry. Specifically, we are seeking proposals that will provide new information about contamination of these products with food-borne pathogens during the harvesting and transport segments, development of sampling and testing procedures to enable more accurate monitoring of the microbial status of fresh produce and, finally, development of new techniques or methods for preserving the quality and safety of these fresh products from harvesting to the consumer. While the explanatory notes implied a broader approach to food safety research, the CSREES Food Safety team strongly recommended, and the other agencies listed above agreed, that it was important to give more focus to the program in this first year. Given the high priority on improving the safety of fruits and vegetables by the President which occurred after the Explanatory Notes were written, and the increasingly obvious gaps in our knowledge for preventing contamination of these food products, this seemed to be the most effective use of these funds in fiscal year 1998.

Question. Why is such a significant increase in funding for this new program being requested when the results of the first fiscal year of the program are not yet known?

Answer. In preparing the Request for Proposals for this current fiscal year, it was clear that there were more high priority issues than could be addressed with funds made available in fiscal year 1998. In addition, as we are developing the educational materials to assist growers in complying with the new proposed guidance document for producers of fresh fruits and vegetables which is being issued soon by the Food and Drug Administration, it is already evident that there are several critical gaps in our knowledge base which will severely hamper our ability to provide the growers with the information they need to meet these new guidelines and improve the safety of our domestic produce. Similarly, the newly implemented regulations for Hazard Analysis Critical Control Points programs in slaughter plants has already begun to create a further impact on food animal producers to implement a series of good pro-

duction practices in order to meet the criteria being set by the packing industry. In several instances, our knowledge of the ecology of food borne pathogens in the animal production setting is too limited to be of greatest help to the producers. Thus, we will need to accelerate some of our research efforts on these topics if we are to be of greatest help to the production agriculture community. The production segment of our food product chain has received lesser attention within the food safety research agenda and is now in need of significant resources if we are to meet the needs of the producers as they attempt to meet the guidance and regulatory demands that they now face. It is out intention to broaden the Request for Proposals for fiscal year 1999 and include work related to safety of meat and poultry products in a more balanced portfolio of research. The exact split of funding between fruits and vegetables vs meat and poultry will be determined each year based on input from a number of sources including other federal agencies (ARS, FSIS, FDA, CDC, EPA), commodity groups, consumer groups, and industry.

Question. The fiscal year budget proposes a $5 million increase in funding for Food Safety Education under the Smith-Lever 3(d) program (from $2,365,000 to $7,365,000). What is the justification for this increase?

Answer. In recent years, USDA has announced adoption of a new Hazard Analysis and Critical Control Points or HACCP-based method for inspecting meat and poultry products. But some industry representatives fear that HACCP places the onus for food safety on producers and processors. They believe that consumers also must share in the responsibility for food safety. The responsibility for ensuring the safety and wholesomeness of our nation's food supply is a shared one, and both industry and consumers have a critical role to play in food safety. But in order for consumers to understand and adopt recommended safe food handling practices, a massive public education and outreach effort is required. A funding increase for the Food Safety and Quality Smith-Lever 3(d) Program will be used to develop a broad, comprehensive public education program focusing on the entire spectrum of the food chain from farm to table, including the role of the consumer, as we work to ensure and improve the safety of the nation's food supply. We are having regular discussions with other agencies, including FSIS, FDA-CFSAN, and FDA-CVM, and are coordinating our programs with their efforts. The educational programs for growers of fruits and vegetables, which are designed to assist in reaching compliance with the new Guidance Document being promulgated by FDA-CFSAN, are being developed by a joint working group which includes USDA, FDA, and industry representatives.

As part of the President's Food Safety Initiative, both domestic and imported fruits and vegetables have been identified as an area of growing concern. In order to ensure that fruits and vegetables meet the highest health and safety standards, it is critical that an education and outreach effort be targeted toward producers of domestic and imported produce. A funding increase for the Food Safety and Quality Smith-Lever 3(d) Program will be used to significantly expand an education and outreach program focusing on preventing microbial contamination during growing, harvesting, processing, and transportation of produce. Expanded education efforts targeting consumers will also be required to prevent contamination of fruits and vegetables during food preparation, storage and service in homes, restaurants, schools, congregate meal sites, food banks, and other settings where food is prepared and served.

Question. How are the current program funds being allocated and what have been the achievements of this program to date to increase consumer awareness, understanding, and information regarding food safety?

Answer. Current funds are awarded either by formula or competitively to faculty at Land-grant colleges and universities throughout the U.S. and its territories. The formula funds are allocated as $25,000 per institution with a total of $1.4 million assigned to this part of the program. Each institution is required to submit a plan of work for these funds describing how they will be used. The remaining funds in the amount of $775,800 are available for competitive awards. The focus of the program for the competitive funds is determined each year in consultation with stakeholders. The submitted proposals are reviewed by a committee of peer reviewers and the ranked proposals are then considered for funding. In fiscal year 1998, $195,000 of the $775,800 total has been allocated for support of the Food Animal Residue Avoidance Data Base (FARAD) program.

Funds have been used to support the development of educational programs and resources that improve peoples' ability to make informed, responsible decisions about food safety and quality issues. Educational programs developed with these food safety education funds have targeted farmers, producers, processors, distributors, educators, researchers, and consumers. Programs are developed primarily to help food handlers all across the food chain translate research-based food safety information into sound, practical behaviors that reduce the risk of food-borne illness.

Federal food safety education funds, and state matching funds have enabled Land-grant partners and stakeholders to develop programs and resources in food safety that can be sustained beyond the funding year. Since the inception of the program in 1991, 49 states and 5 territories have established on-going food safety education programs. More than half of those states have developed programs targeting youth; more than half have developed programs targeting industry; and about one quarter of those states have developed programs targeting under-served populations or those at increased risk for food-borne illness such as pregnant or nursing mothers, young children, the chronically ill, the immuno-compromised, and older Americans. Last year 42 percent of education program participants reported adoption of recommended food handling practices, while 70 percent of program participants reported increased adoption of practices that protect the food supply.

PEST MANAGEMENT

Question. Increased funding is requested for Minor Crop Pest Management to allow for expansion of the registration process for minor use pesticides and the initial registration of safer and more environmentally compatible pesticides. Please give us a report on the status of these efforts to date and what will be achieved with the additional $1,721,000 proposed. Will this speed up the process so that farmers can have these pesticides available?

Answer. In response to the minor crop re-registrations needs created by FIFRA 88, the IR–4 Project conducted an average of 215 studies per year between 1988–97 and obtained an average of 94 clearances per year over the same time period. The increase of $1,721,000 will allow an additional 20 percent more pesticide clearance—about 20—than in 1997. More recently, in response to the Food Quality Protection Act, IR–4 adopted a strategy to replace all "at risk" pesticide registrations on minor crops with "safer" pest control products, which include reduced risk pesticides, bio-pesticides, and IPM-compatible products.

This initiative began in 1997 with the addition of 45 reduced risk pesticide studies and 8 bio-pesticide studies to the on-going minor crop research program. In 1998, 165 registration studies involving safer pest control products are being conducted by IR–4 and its cooperators. This research will lead to the submission to EPA of 218 registrations, involving 96 minor crops over a two-year time period.

With an increased level of funding, goals for the IR–4 reduced risk strategy are: 195 registration petitions on minor crops in fiscal year 1999, 215 in fiscal year 2000, 235 in fiscal year 2001, and 250 in fiscal year 2002. This research will result in over 1,100 new registrations for safer pest control products over the next six years. These uses will serve as replacements for pesticide uses that may be canceled as a result of FQPA.

IR–4 also has adopted a policy of close cooperation with commodity interests and registrants. The purpose of this policy is to initiate early discovery research on pest control products for minor crops where expedited registration of these products will benefit producers of minor food and ornamental commodities. This policy will provide a much earlier start to the registration process than before and will assure that minor crop producers have rapid access to products that represent lower risk to the user, the consumer, and the environment.

Question. The budget indicates that the additional funding for the Pest Management Alternatives and Expert IPM Decision Support System program will permit the continued identification of a list of crop/pest/control combinations where only one or a limited number of control options are available. How many combinations have been identified under these programs to date and why are additional funds required to carry out this effort?

Answer. The Pest Management Alternatives Program provides funding to the Land-Grant System to develop alternative pest management tactics to replace those lost through EPA regulatory action or voluntary withdrawal as a result of FQPA implementation. The funding for this program supports two different activities. The first provides annual funding for a competitive grants program which solicits proposals from agricultural scientists to identify new environmentally sustainable pest management alternatives for pesticides which have been lost, or are in danger of being lost, due to FQPA regulatory action. The second supports the development of an on-line Pest Management Information and Decision Support System which accesses numerous specific databases and allows decision-makers to identify specific crop/pest pairs for which alternative pest management tactics are not available. The Decision Support System links informational databases together and provides decision-makers with ready access to pest management information needed to identify and prioritize the critical needs of American agriculture. Together, these two program activities provide a comprehensive response in addressing the needs resulting

from FQPA implementation by identifying pest management systems that are vulnerable to FQPA implementation, and conducting programs to develop solutions to pest management problems and assist growers in implementing them.

In the fiscal year 1998 Request for Proposals (RFP) for the Pest Management Alternatives Program the Information Decision Support System identified 58 crops which have no alternative pest management options available for one or more pest of the major pests with the implementation of FQPA. These crop/pest sites have been listed in the fiscal year 1998 RFP and research to identify pest management alternatives on these critical sites will be funded by this program in fiscal year 1998. Funding is needed to expand and refine the development of the expert decision support system by incorporating other existing or new databases into the Pest Management Information Decision Support System, and to make the decision support system accessible via the world wide web. Web access and data entry at the state and local level will identify additional critical pest management needs and additional options/alternatives for management. These critical needs will be incorporated into future RFP's allowing research to address key priority pest management needs of farmers and furthermore ensure that we have adequate pest management tools for production of both major and minor crops important to US agriculture.

PESTICIDE APPLICATOR TRAINING

Question. The fiscal year 1999 budget requests $1.5 million for Pesticide Applicator Training through the Extension Service. What is the demand from growers, commercial applicators, and homeowners for this training?

Answer. The Pesticide Applicator Training Program offers growers and commercial applicators a forum, through meetings held at the county level and with state agricultural associations and commodity groups, for dialogue on important pesticide issues. Each year, extension pesticide coordinators and county agents train over 500,000 growers and commercial applicators in the proper use of pesticides and keep them up to date on issues such as the Food Quality Protection Act, ground water concerns, food safety and basic instruction in Integrated Pest Management. Total numbers of growers and commercial applicators continue to increase each year in these training sessions.

Homeowner training in the proper selection and use of pesticides is critically needed. Recent mis-use practices, such as occurred in Mississippi with a highly toxic agricultural pesticide used in homes, point up the need for an intensive, coordinated training and educational effort. Homeowners will benefit, by being able to make intelligent decisions on proper and safe pest control. These educational programs will also serve to safeguard agricultural pesticides, which if mis-used, may be canceled or further restricted in their use.

Question. Last year, the budget indicated that the Pesticide Applicator Training Program was being redesigned. Has this been done?

Answer. USDA's fiscal year 1998 budget included $1.5 million to redesign the Pesticide Applicator Training Program to provide "seed money" for states to develop partnerships with other USDA supported programs such as EFNEP, 4-H, Master Gardener and with selected private organizations. The objective of the partnerships was to leverage funding to develop educational programs for the general public, especially homeowners and small or part-time farmers, that will reduce user and environmental exposure to toxic pesticides. The mis-use of pesticides in the home environment threatens human health, especially infants and children, and the continued availability of products essential to agriculture production, structural pest management, and public health.

In the last two years states and federal agencies spent nearly $90 million investigating and remediating homes deliberately contaminated with agricultural pesticides. Unfortunately, the $1.5 million requested for the Pesticide Applicator Training Program was not included in the fiscal year 1998 appropriation, thus precluding its redesign.

PEST MANAGEMENT

Question. How are extension activities supported with Integrated Pest Management (IPM) funds accelerating the transfer of proven pest management technologies from the researchers to farmers, ranchers, and other users? How fast are new research findings being transferred to the users?

Answer. Farmers have identified the lack of effective alternative pest management tactics as a primary reason for not implementing IPM on their farms. Where effective alternative tactics have been developed, they are widely and rapidly implemented through extension programs and adopted by farmers. These extension ef-

forts are a key element of USDA's goal of helping to implement IPM practices on 75 percent of U.S. crop acreage, and will help the Nation's farmers adjust to changes in pesticide availability resulting from implementation of the Food Quality Protection Act of 1996.

Additional funds requested in fiscal year 1999 will support regional and national projects that bring together the expertise of multiple organizations and disciplines. Funded projects will address research and extension education priorities identified by IPM planning teams consisting of farmers, crop consultants, agribusiness, land-grant university research and extension faculty, state and Federal agency personnel, public policy interest groups and other stakeholders. Examples of such projects are "Cotton IPM in Transition: Opportunities for Biologically-Intensive IPM" scheduled for Mississippi, North Carolina, Oklahoma, and Texas, "Area-wide Mating Disruption of Codling Moth on Tree Fruits" in the Pacific Northwest, and "Using an Adult Attracticide Against Corn Rootworm in the Midwestern United States". With extension faculty being part of the planning teams and participating as full members of funded projects, transfer of technology and information will occur as soon as it is available.

PROGRAM TERMINATIONS

Question. The fiscal year 1999 budget proposes to terminate Supplemental and Alternative Crops, Farm Safety, Agricultural Telecommunications, and Rural Health and Safety. Please provide a description of each of the programs proposed for termination, who will be impacted by the proposed reductions, and why you believe the cost of these programs can be borne by local governments when you are proposing to cut funding for the base Hatch Act and Smith-Lever formula programs.

Answer. The Supplemental and Alternative Crops program promotes the research and development of new crops and conventional crops grown for new uses. Traditional and new agricultural materials provide renewable raw materials for processing and manufacturing of a broad range of chemical, energy, construction, environmental, and fiber products, as well as food products. The authority under which this program is administered incorporates all phases of research and development including agronomics, harvesting and pilot processing operations for converting the raw materials into final product. This comprehensive approach results in new and expanded markets, reduced dependency on imports, and diversification of agriculture in areas affected by declining demand for crops grown locally. The proposed termination of Supplemental and Alternative Crops funding would affect the two research programs that are currently conducted under this authority. The first is the National Canola Research Program. Funding is provided to six land-grant universities, each representing a region with numerous institutions engaged in canola research and extension activities to provide a domestic source of the oil and to meet increasing market demands. The second program is conducted at the University of Arizona for research and development of hesperaloe, a plant with the potential to provide a domestic source of hard fibers that must currently be imported for use in specialty paper-making. Hesperaloe, as a new crop for the semi-arid Southwest, offers a potentially viable alternative to conventional crops grown in the region that have high water and chemical requirements.

The Farm Safety program provides seed money to all 50 states and Puerto Rico to support a National farm safety extension program developed by the State Extension Service Specialists to meet the State's most critical needs. These funds support development and implementation of extension education programs and methods targeted at reducing the injury, illness and mortality rates of farmers/ranchers, seasonal and migrant agricultural workers, timber harvesters, and their families. Competitive grants are also awarded under this program to support the AgrAbility Program that provides education and assistance on accommodating the agricultural workplace for the estimated 500,000 farmers, ranchers, and agricultural workers who have disabilities. The proposed reduction in the Farm Safety and AgrAbility programs will impact the land-grant universities that provide leadership and expertise in collaboration with State and non-governmental entities, such as Farm Safety Just 4 Kids, that have an interest in farm safety education and the development and implementation of programs that encourage citizens to adopt practices that will reduce agricultural injuries, illnesses and fatalities. This program can potentially be supported with Smith-Lever formula funds and other State and private funding sources.

The Agricultural Telecommunications Program was established to improve the competitive position of U.S. agriculture in international markets; to train students for careers in agriculture and food industries; to facilitate interaction among leading agricultural scientists; to enhance the ability of U.S. agriculture to respond to envi-

ronmental and food safety concerns and to identify new uses for farm commodities and increase domestic and foreign demand for U.S. agricultural products. The legislation provided funding for program production, program delivery and technical assistance to eligible institutions. The program enables land-grant and other universities to develop their capacity to design and deliver education at a distance using telecommunications. It also creates access to the information and education resources of the universities for citizens nationwide. Those impacted by the proposed reduction would include land-grant universities, such as 1994 Tribal Colleges, who are new to using distance learning and telecommunications to reach learners. Customers in rural areas who depend on telecommunications and distance learning to help them overcome distance and time barriers to education would ultimately be affected. The costs of these programs would be borne by universities who would shift existing resources to continue to fund these types of programs.

In support of the REE/CSREES Strategic Goal 3: Healthy, Well-Nourished Population, through the Mississippi Rural Health Corps project, the Rural Health and Safety Program is conducted by the Cooperative Extension Service and 15 community and junior colleges represented by the Mississippi Community College Foundation and the Mississippi State Board for Community and Junior Colleges. The purpose of this endeavor is to improve rural health service through education of Mississippians and to train health care professionals in rural practice. The Mississippi Rural Health Corps is attacking the rural health problem by building capacity to annually train and employ a minimum of 400 additional RNs, LPNs, and other allied health care professionals who contract to practice in a rural setting following their training. A pilot rural medical scholar program for high school students and an updated state health service industry needs assessment are also planned. Also supported under the Rural Health and Safety Program, the rural health and safety project in Louisiana, a joint effort of the Southern University Cooperative Extension and School of Nursing, has established a mobile clinic-based nurse education curriculum that gives students a client-based, culturally-sensitive understanding of health care needs and obstacles to accessing health care services for inner-city and rural medically underserved populations, while providing needed screening and referral services for these populations. Rural residents in Mississippi, and both rural and inner-city low income residents in selected Louisiana Parishes, would be impacted by these proposed reductions.

The State of Mississippi has been providing matching funds for the Mississippi Rural Health Corps program. We expect that the program will be maintained at a reduced funding level with the discontinuation of funding under the Rural Health and Safety Program. We also expect that State level funding in Louisiana can be provided to maintain the nurse-managed mobile health care clinic. States have the flexibility to support these programs with formula funds, State or local funding, or private funding.

Question. Please provide an update on achievements of the projects being carried out through the Rural Health and Safety Program.

Answer. After five years of operation, the Mississippi Rural Health Corps has led to major intermediate outcomes via educational and community-based changes in the rural health systems in the state. The project has stimulated the development of a network of collaborative rural health interests including economic, volunteer, community, health consumer, and health service organizations. The broad scope of this network positively impacts the Mississippi rural health system through: 247 Rural Health Association members; 165 Coalition members; 762 nursing graduates; 325 allied health graduates; 76,245 Cooperative Extension health education program participants; and 286 trained lay health advisors. To make the resources of the University of Mississippi Medical Center and other centralized health facilities available to the nursing and allied health departments of the community and junior colleges, to registered nurses, RNs, needing graduate level courses, and for statewide informal health education, the interactive video Community College Network has been established, with some 2,000 undergraduate rural health program participants and 37 RNs receiving graduate level courses. In addition, Mississippi Rural Health Corps lay health advisors in self-care, blood pressure, and breast cancer early detection reached 2,500 consumers with screening, skills training, and awareness education. Although difficult to measure specifically, it is clear that the many accomplishments will result in final outcomes that include improved delivery of rural health care services, enhanced health status for tens of thousands of rural residents, and enhanced education and employment opportunities for thousands of rural Mississippi youth.

The Louisiana nurse-managed mobile health care clinic, called the "Jag Mobile," has reached needy low-income rural and inner-city populations through sixteen community based "health partners," including senior citizen community centers, public

housing authorities, church-operated day care and pre-school centers, community feeding centers, drop-in environmental shelters, and a battered women's program. Project outputs have included over 600 persons fully screened for health conditions and over 300 more receiving blood pressure and blood sugar screening only. For those persons fully screened, self-reported health conditions have included diabetes, high blood pressure, heart problems, asthma, kidney disease, cancer, hepatitis, and substance abuse. All persons found to have medical problems are referred to local physicians for further treatment. Two major intermediate outcomes have been realized from this project: first, several dozen nursing students have been prepared to provide culturally sensitive health care services to needy populations; and secondly, the Jag Mobile has become a welcome addition in communities and has made many individuals aware of their health needs and what they can do to prevent escalation of minor health conditions into more costly major medical problems.

Question. Who is receiving the agricultural telecommunications funds in fiscal year 1998 and for what purpose?

Answer. The request for proposals for the 1998 Agricultural Telecommunications Program will be released in June, 1998. As stated in the legislation, the competition will be open to accredited institutions of higher education. Grants will be awarded for projects which use telecommunications and distance education to create access to the information and education resources of the universities, and for projects that seek to improve the capacity of Land-Grant and other universities to design and deliver education at a distance using telecommunications.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM (EFNEP)

Question. Please provide a description of the projects being funded through the Expanded Food and Nutrition Education Program (EFNEP) for fiscal year 1998.

Answer. EFNEP does not fund "projects" per se, but rather the funds are distributed to states based on a formula that takes into consideration the proportion of their population that is at or below 125 percent of poverty. EFNEP operates in all 50 states and the territories of American Samoa, Guam, Micronesia, Northern Marianas, Puerto Rico and the Virgin Islands. It is designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets and to contribute to their personal development and the improvement of the total family diet and nutritional well-being.

Within the constraints of the funds available, states select the communities with the greatest need, and conduct nutrition education programs for low-income youth and families with young children. Today EFNEP operates in less than 25 percent of all counties, and reaches only a fraction of the eligible population. The number of poor children under six years old grew from 3.4 million in 1972 when EFNEP was just beginning, to 6.0 million in 1992. This represents 26 percent of all U.S. children less than six years old. However, while the population that EFNEP focuses on nearly doubled, the funding only increased by 25 percent over this time period.

The delivery of EFNEP youth programs takes on various forms. EFNEP provides education at schools as an enrichment of the curriculum, in after school care programs, through 4-H EFNEP clubs, day camps, residential camps, community centers, neighborhood groups, and home and community gardening workshops. Youth are taught lessons on nutrition, food preparation and food safety, and physical fitness.

Through an experiential learning process, adult program participants learn how to make good choices to improve the nutritional quality of the meals they serve their families. They increase their ability to select and buy food that meets the nutritional needs of their family. They gain new skills in food production, preparation, storage, safety and sanitation, and they learn to better manage their food budgets and related resources such as Food Stamps. EFNEP is delivered as a series of 10–12 or more lessons, often over several months, by para-professionals and volunteers, many of whom are indigenous to the target population. The hands-on, learn-by-doing approach allows the participants to gain the practical skills necessary to make positive behavior changes. Through EFNEP, participants learn self-worth—that they have something to offer their families and society.

EFNEP is a program that works; in 1996, 84 percent of adult participants showed improvement in one or more food resource management practices, 91 percent showed improvement in one or more nutrition practices and 66 percent showed improvement in one or more food safety practices. Additionally, intakes levels for 6 key nutrients increased, and 2½ times as many participants consumed a minimally acceptable diet after completing EFNEP than at entry into the program.

Question. Why is a reduction in funding being proposed for fiscal year 1999? Who will be impacted by this proposed reduction?

Answer. Funding levels for many of the CSREES formula-funded line items, including EFNEP, were reduced to provide the funding necessary to support Departmental and Presidential initiatives, such as food safety, children, youth and families at risk and other initiatives. The 4 percent reduction in funding will result in approximately 8,600 fewer families and 16,000 fewer youth reached by this educational program.

SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION (SARE)

Question. Please provide a list of the SARE research projects funded for each of fiscal years 1997 and 1998, including a description of the project, who conducted the research, and the amount of the award.

Answer. Proposals submitted for SARE funding in fiscal year 1998 are currently undergoing review and final decisions on projects to be funded will be made later this year. Projects funded in fiscal year 1997 are as follows, excluding producer grants, which are discussed in response to the next question.

Projects funded in fiscal year 1997—		Conducted by—	
Description	Contact	Organization/State	Amount
No-till Forage Establishment to Improve Soil and Water Conservation and Reduce Associated Production Risks.	Panciera	University of Alaska, AK	$100,000
Blueprinting Traditional Sustainable Food Production Systems of Samoa in Development of a Research/Extension Model.	Frank	American Samoa Community College, AS.	91,850
Sustainable Culture of the Edible Red Seaweed Gracilaria parivspora Abbott in Traditional Hawaiian Fishponds.	Glenn	Environmental Research Laboratory, AZ.	95,201
Development and Implementation of Trap Cropping Strategies for Control of Hemipteran Pests in Pistachio Orchards.	Daane	University of California, CA	79,858
Decomposition and nutrient release dynamics of cover crop materials.	Mitchell	University of California, CA	41,604
Reducing Insecticide Use on Celery Through Low Input Pest Management Strategies.	Trumble	University of California, CA	100,000
Nitrogen Management for Pumpkins and Squash	Ashley	University of Connecticut, CT	40,000
Biological and Cultural Methods of Insect Management in Vegetables: Survey and Case Studies of Organic Farms and Evaluation of the Scientific Literature.	Stoner	Connecticut Agricultural Experiment Station, CT.	20,000
An Integrated Vegetable Production, Postharvest and Marketing System for Limited Resource Farmers in South Georgia.	Payton	The Pine Center—Bainbridge College, GA.	134,800
Producers assessment of sustainable land management practices to project water quality.	Steiner	USDA-ARS, GA	228,864
Management of Soilborne Plant Parasitic Nematodes for Sustainable Production of Field Grown Tomatoes and Cucumbers by Cover Cropping.	McHugh	Waikele Farms, HI	21,900
Combining Landscape and Augmentative Biological Control to Suppress European Corn Borer Populations in Sustainable Low-Input Systems.	Lewis	Iowa State University, IA	92,740
Management, Impact and Economics of Beef Cattle Grazing in Mountain Riparian Ecosystems.	Momont	University of Idaho, ID	105,400
Development of Market Infrastructure to Support Local and Regional Food Systems.	Bonney	Sustainable Earth, Inc., IN	86,200
Cluster Use of Whole-Farm Planning with Decision Cases and Evaluation.	Janke	Kansas State University, KS	106,400
Yesterday's Research for Tomorrow's Needs	Kok	Kansas State University, KS	63,500
Integration of Freshwater Prawn Nursery and Growout Systems Into Diversified Systems.	Tidwell	University of Kentucky, KY	155,197
Impacts on Agricultural System Sustainability from Structural Change in Peanut, Poultry, Swine, and Tobacco Production Systems.	Hamilton	Center for Sustainable Systems, KY.	174,858
Chinese Medicinal Herbs as Crops for the Northeast	Craker	Univ. Massachusetts, MA	60,718
Integrating High-Density Orchards and Biointensive Integrated Pest Management Methods in Northeastern Apple Production.	Cooley	Univ. Massachusetts, MA	121,535

Projects funded in fiscal year 1997—		Conducted by—	
Description	Contact	Organization/State	Amount
Design and Implementation of a Searchable Database on Compost Production and Use for Internet Users.	Millner	USDA-ARS, MD	20,000
Enhancing Adoption of Sustainable Agriculture Practices via Farmer-Driven Research.	Mutch	Michigan State University, MI	100,405
Farm Beginnings: An Educational Training and Support Program to Establish Young Dairy Farmers in Southeast Minnesota.	Schwartau	Minnesota Extension Service, MN	90,000
A Sustainable Approach to Controlling Mite Pests of Honey Bees.	Spivak	University of Minnesota, MN	78,750
Use of a Vegetative Filter as an Alternative Waste Management System for a Sustainable, Seasonal Management-Intensive Grazing Dairy..	Crawford, Jr	University of Missouri, MO	55,755
Comparison of Pest Management Interactions in Spring Wheat-Cover Crop and Spring Wheat-Fallow Cropping Systems.	Lenssen	Montana State University, MT	150,964
Equal Access to Agriculture Programs and Opportunities: Advocacy to End USDA Racial Discrimination and Reestablish Viable and Sustainable Minority Farm Agriculture.	Harris	Land Loss Project, NC	151,290
Maximizing Forage and Minimizing Grain Intake in Bison Fed for Meat.	Anderson	North Dakota State University, ND.	78,360
Improving Sustainability of Cow-Calf Operations with Natural Forage Systems.	Adams	Univ. Nebraska West Central Res & Ext Ctr, NE.	81,000
Farmer-Designed Research on the use of Legumes in Sustainable Dryland Cropping Systems.	Baltensperger	University of Nebraska, NE	91,000
Potential of Earthworms as Biocontrol Agents of Scab and Leafminers in New England Apple Orchards.	MacHardy	University of New Hampshire, NH	99,069
Sustainable Phosphorous Fertilizer Recommendations for Corn Production in the Northeast USA.	Heckman	Rutgers University, NJ	92,780
Flowering Plants to Enhance Biological Control in Landscapes.	Shrewsbury	Rutgers University, NJ	80,344
Integration of Behavioral, Biological, and Reduced-Risk Chemical Approaches into a Sustainable Insect Management Program for Cranberries.	Polavarapu	Rutgers University, NJ	133,179
CORE VALUES Northeast: A Northeast IPM—Apple Consumer Education and Market Development Project.	Gordon	Mothers & Others, NY	20,000
Farmer-Centered, Value-Added Processing and Marketing Opportunities for Northeast Dairy Farmers: A Participatory Research.	Frisch	Regional Farm/Food Project of Citizens, NY.	53,000
Demonstration of Narrow Row Corn Production in New York.	Cox	Cornell University, NY	70,346
Ethnic Markets and Sustainable Agriculture	Lawrence	Just Food, NY	99,961
Eastern Gamagrass Determining its Feasibility as a Forage Crop for the Northeast.	Salon	USDA-NRCS, NY	108,252
A Strawberry IPM Systems Comparison Demonstration.	Kovach	Cornell University, NY	116,586
Use of Cover Crop Practices to Control Weeds in Integrated Lower-Chemical Input Systems of Vegetable Production.	Dickinson	Stratford Ecological Center, OH	87,823
Advancing Sustainable Potato Production in the Northwest.	Murphy	The NW Coalition for Altern. to Pesticides, OR.	35,000
Sustainable Crop/Livestock Systems in the Texas High Plains.	Allen	Texas Tech University, TX	222,125
The Hometown Creamery Revival	Dunaway	Dairy Farm Cooperators, VA	145,474
Regionally Centered Sustainable Agriculture System	Flaccavent	CPSDI, VA	173,240
Managed Riparian Buffer Zones and Cover Crops to Minimize Phosphorus and Nitrogen Runoff Losses from Corn Fields.	Jokela	University of Vermont, VT	142,448

Projects funded in fiscal year 1997—		Conducted by—	
Description	Contact	Organization/State	Amount
Efficacy Evaluation of Homeopathic Nosodes for Mastitis and Calf Scours, and Documentation of Homeopathic Practices in Organic and Conventional Dairy Production.	McCrory	Northeast Organic Farming Association, VT.	161,026
Documentation of Organic and Transitional Dairy Production Practices.	Wonnacott	NOFA-Vermont, VT	43,986
Building Community Support for Agriculture on the Urban Edge.	Butler	Washington State University, WA	113,000
Enhancing No-Till and Conservation Farming Success Through The Use of Case Studies. Conferences, and Workshops to Facilitate Farmer to Farmer Learning in The Pacific Northwest.	Fiez	Washington State University, WA	125,842
Sustainable Crop Production Practices with Mixed Leguminous and Nonleguminous Cover Crops.	Kuo	Washington State University, WA	118,000
Development of Sustainable Practices for Integrated Management of Apple Diseases.	Andrews	University of Wisconsin-Madison, WI.	92,892
Training and Transitioning New Farmers: A Practical Experiment in Farmer Self-Development and Institutional Reinvention.	Klemme	University of Wisconsin-Madison, WI.	29,000
Using Small Grain Cover Crop Alternatives to Diversify Crop Rotations.	Posner	University of Wisconsin, WI	92,300
Evaluating Pasture-Based Poultry Systems: Potential Contribution to Farm Diversification, Human Nutrition, and Marketing Alternatives.	Stevenson	University of Wisconsin-Madison, WI.	89,348
Integrating Nematode-Resistant Crops into Sugarbeet Rotations.	Koch	Univ. of Wyoming, WY	113,184

Question. What portion of SARE funds have been awarded to producers in each of the past two fiscal years, please include a description of the project and the amount of the award.

Answer. In fiscal year 1997, 113 producer grants were awarded for a total of $513,423. These projects represent 68 percent of the total number of projects funded, and six percent of fiscal year 1997 funds. In fiscal year 1996, 114 producer grants were awarded for a total of $512,618, representing 67 percent of the total number of projects funded, and six percent of fiscal year 1996 funds.

Fiscal year 1997 Producer Grants

Description/producer/State	*Amount*
Growing American and Korean Ginseng in Alaska, Smith, AK	$5,000
Crop Production Systems for Nonchemical Control of Reniform Nematodes, Edgar, AL	8,892
Sustainable Pumpkin Production in the Southeast, James, AL	4,655
Evaluation of a Low-Cost Innovative Ensiling System for Small- to Medium-Sized Dairy Operations, Wright, AL	10,000
Continuation of a Sustainable Agroforestry System, Paleso'o, AS	2,315
Feasibility of Soil Solarization for Strawberry Production on the Central Coast of California, Galper, CA	5,000
Vermicomposting Demonstration Project, Renner, CA	5,000
Pheromone Foggers for Pesticide Replacement, Thompson, CA	5,000
Individual Confinement Rearing vs. Pasture-Based Group Rearing of Dairy Calves, Wackerman, CA	3,248
Pasture Fryer Chickens, Mattics, CO	2,500
Converting Pasture Land to Specialty Crop Production as an Alternative Farm Enterprise, Taylor, CO	2,500
Perennial Grass Establishment in Existing Alfalfa, Wiley, CO	1,825
Biological Insect Control of Herbaceous Perennials, Berecz, CT	600
Composting Tobacco Stalks Using PAW (Passive Aerated Windrow) System, Collins, CT	2,042
Effect of Limited Environmental Controls on Shiitake Mushroom Production in the Southern Coastal Plain, McRae, FL	9,990
Evaluation of an Alternative Low-Input Production System for Fresh Market Tomato, Murray, GA	5,109
Algae-Based Winter Feed for Small-Scale Goat Farm Operations, Szostak, GA	7,907

Description/producer/State	*Amount*
Use of Sunnhemp in Cucumber Production, Quan, GU	4,300
Sustainable Alternatives To Herbicide for Weed Control: Using Cover Crops To Combat Panicum repens and Panicum maximum In Lowland, Eastern Hawaii, Acciavatti, HI	3,500
Growing Ring-Spot Virus-Free Papayas Using Anti-transpirants and Other Sustainable Techniques, Biloon, HI	4,000
Trees for Food, Carter, IA	5,000
Converting Unproductive Woodlands Into a Profitable Shade-Plant Nursery, DeWitt, IA	2,925
Feasibility of Corn Stalk Ash as a Fertilizer Source, Reinig, IA	4,974
Systems Thinking in a Range Environment, Black, ID	5,000
Non-irrigated Alfalfa Performance Trial, Benewah County, Idaho, Crawford, ID	3,500
Paradise Time Controlled Grazing, Pratt, ID	5,000
Long-Term Benefits of Cover Crops and Crop Rotations, Upton Jr., IL	4,818
Ornamental Bittersweet Production for Small Woodland Farms, Klueh, IN	2,915
Great Circle Farm CSA/Permaculture Demonstration Site, Neff, IN	5,000
Biological Control of Small Soapweed (Yucca glauca Nutt.), Baldwin, KS	4,515
Comparing Controlled Microbial Systems (CMS) Composting to Conventional Composting to Piled Feedlot Manure, Boller, KS	5,000
Creating the Link: Cooperative Marketing of Organic (All-Natural) beef, Endicott, KS	9,854
Machinery Link Co., Govert, KS	5,000
Tree Filter & Wetland Livestock Waste Management Plan, Sextro, KS	4,808
Sustainability Starts at Home-Building Regional Self Reliance through Agritourism, Armstrong-Cummings, KY	9,580
Overwintering Survival of Kentucky Honeybees, Lee, KY	5,283
Managed Grazing System to Increase Sustainability, McCord, KY	2,630
Maximizing Corn Production through Tillage Methods, Cultivar and Fertilization in the Mountains of Southeast Kentucky, Teague, KY	4,956
Echinacea Field Trials, Baker, MA	1,730
High Tunnel Strawberries for New England, Coldwell, MA	2,720
Regulation of lateral branching in Genovese Basil (Ocimum basilicum) via application of bacterial spray, Kellett, MA	1,152
Using Dogs to Control Bird Depredation of Blueberries, Valonen, MA	2,900
Mixed Field Forage, Walker, MD	2,230
Establishing and Enlarging on Maine Ginseng Production, Drane, ME	6,000
Successful Marketing Through Product Identification/Packaging, Holmes, ME	3,500
Biological Management of Colorado Potato Beetle, Johanson, ME	1,701
Conservation of Wild Blueberry and Cranberry Pollinators, Kelley, Jr., ME	3,950
Field Trials of Ag Covers to Reduce Cranberry Fruitworm Damage, Macfarlane, ME	1,770
Improving Production Methods for Shiitake Mushrooms, Woodward, ME	2,225
Swine Finishing in a Hoop Structure with Deep Bedding, Blonde, MI	5,000
Transition from Traditional Grain/livestock agriculture to on-farm roadside marketing of produce, Bosserd, MI	5,000
Innovative Farmers Seeking Lowest Nitrogen Rates for Corn on Sandy Soils to protect Ground Water, Hiscock, MI	4,021
The Economics of Seed Saving on three Biological Farms in Western Michigan, Keiser, MI	4,676
Developing partnerships between Southern Michigan cash crop farmers and Northern Michigan livestock farmers, Miller, MI	5,000
The Custom Grazing of Replacement Dairy Heifers on Fuego Fescue and Barenbrug Ryegrass Pasture Under a Management-Intensive Grazing System, Paulik, MI	3,518
Processing and Marketing Milk Produced on Our Small Family Dairy, Shetler, MI	5,000
Marketing On-Farm Composted Manure, Slater, MI	9,700
Innovative Farmers Seeking Sustainable Solutions Through On-Farm Demonstrations, VandyBogurt, MI	4,750
Farmer Networking to Direct Precision Ag Technologies Toward Sustainability, Waller, MI	4,950

Description/producer/State	*Amount*
Integrated Row Tillage Project, Williams, MI	3,523
Diversifying a Small Crop Farm with Hogs and Poultry on Pasture, Apple Trees, and Plums, Aspelund, MN	1,536
Increased Pasture Profitability Through South African Dorper Sheep, Burke, MN	1,790
Feeding the Saints Pilot Project, King, MN	9,650
Development of Cultivation Equipment for Diversified Vegetable Production, Lancaster, MN	3,194
Cattle, Grass, and Streams: Can They Exist Together as a Sustainable Ecosystem, Lentz, MN	4,690
Native Minnesota Medicinal Production Feasibility Study, Soberg, MN	5,000
Community-Based Direct Marketing with the World Wide Web, Van Der Pol, MN	9,992
Conversion of a Marginal Row-Crop and CRP Farm to a Seasonal Grass-Based Dairy, Bright, MO	5,000
Evaluation of Mycorrhizal Inoculation on Growth and Quality of Three Eastern North Carolina Christmas Tree Species, Dorsey, NC	650
Effect of Different Application Rates of Swine Lagoon Effluent on Corn and Wheat, Hart, NC	2,317
Forest Site Preparation with Swine, Livingston, NC	5,088
Grazing Yearlings on Annual Forage Pastures, Klamm, ND	4,986
Promotion of Crop Diversification and Research of Specialty Crop Markets for Western North Dakota, Trulson, ND	9,680
Kentucky Blue Grass Management and Variety Evaluation for Sustainable Seed Production in Western Nebraska and Surrounding Area, Laursen, NE	4,250
No-Till vs Conventional Tillage for Butternut Squash Production and Phytophthora blight control, Grasso, Jr., NJ	1,680
Limiting Gopher Deprivation By Time-Control Livestock Grazing, Schneberger, NM	3,500
Value Added Wheat Production, Siebel, NM	3,500
Mechanical Cultivation and Fertility Workshops, de Graff, NY	3,450
Recycling composted poultry manure to grow various crops, Kreher, NY	5,782
Cover Crop Interseeding into Soybeans at Time of Last Cultivation: Adapting Experimental Results into Practical, Farm-scale Methods, Potenza, NY	5,550
Nutrient Retention and Humus Formation in Various Bedding Materials, Walker, NY	5,080
Linking Sustainable Agriculture Production with Low-Income and Minority Consumers, Stewart, OH	9,195
Economics of Seasonal Extension of Cut Flower Production, Stamback, OK	8,100
Sustainable Wheat Management Systems, Torrance, OK	9,344
Using Truffles to Enhance Douglas Fir Production On A Small Family Farm, Grant, OR	2,800
Biological Control of Pear Pests, Ing, OR	5,000
"Foxtail" Reduction in Permanent Pastures, Panner, OR	3,500
Constructed Wetland for Waste Water Treatment, Shull, OR	3,200
The Use of Goats to Control Juniper, Sage & Rabbit Brush, Snyder, OR	3,500
Comparison of Weed control and Soil Erosion Control in 15" row Corn vs 30" row Corn, Groff, PA	1,495
Rotational Grazing in South Dakota/Dairy Cattle, Maas, SD	3,448
Effects of Conservation Tillage on Water Quality in Southern Texas, Eubanks, TX	8,000
Cool Season and Warm Season Grasses to Stabilize Erodible Soils and Increase Profitability, Kearney, TX	10,000
Alternative Cropping For the Navajo Reservation, Maryboy, UT	4,300
Increased Forage Production during Alfalfa Crop Rotation Years in Johnson Canyon, Utah. Biological Control of Scotch and Bull Thistle on Disturbed Alfalfa Pastures, Noel, UT	2,900
Greenhouse Subsurface Pipe System to Convert Solar Energy to Soil Heat, Johnson, VT	4,475
Technical Assistance for New Sheep Dairy Farms, Major, VT	7,431
Northeast Livestock Export Program (Phase II), Ratcliff, VT	4,600

Description/producer/State	*Amount*
Development of NOFA Certified Pastured Poultry contractual Company to Diversify and Revitalize Vermont Agricultural Industry, Rich, VT	5,450
Education of Public in the Use of Native Woodland Plants and Wildflowers in the Home Garden, Schlegel, VT	1,145
Organic Meat/Poultry Processing, Marketing, and Distribution Effort, Sheehan, VT	3,345
Diversifying an Organic Grain System: Spring Wheat & Edible Bean Variety Trials, Van Hazinga, VT	6,000
Sorghum Syrup Production in Vermont, Williamson, VT	6,000
Dryland Corn Production in Columbia and Walla Walla Counties (WA), Carlton, WA	3,000
Release of the Predator Mite, Amblyseius fallacis to Control Spider Mites in Red Raspberries and Reduce Reliance on Pesticides, Cieslar, WA	1,850
Small Farm Harvest Labor Reduction Project, Critchley, WA	2,500
Bamboo Alternative Crop for Southwest Washington, Northcraft, WA	2,000
Vegetation Management on Small Acreages Using Short Duration, Intensive, Rotational Grazing, Swagerty, WA	2,043
Replacing Chemical Weed Control With Mulch in Commercial Blueberries, Cuddy, WI	4,980
Composting For Disease Suppression, DeWilde, WI	4,610
Cooperative Marketing of Sheep Milk, Foster, WI	10,000
Christmas Lights and Deer Scents, Bonhage-Hale, WV	937
Evaluating Forage Quality and Yield in Pastures in the Shenandoah Valley, Grantham, WV	2,753

Fiscal year 1996 Producer Grants

Description/producer/State	*Amount*
Establish More Efficient and Biological Practice for Bringing Forest Land into Agricultural Use through Sustainable Development Using Indigenous Species for Alaska, Talbot, AK	$3,000
Pig Manure Control and Utilization Project, Tuli, AS	5,000
Moving Succession Forward in a Lahmann Lovegrass Monoculture, Getzwiller, AZ	3,000
Goal-Driven Intensive Management of a Riparian/Sandy Bottom Site, Holtschlag, AZ	4,310
Managing Biological Processes for Maximum Diversity and Productivity, Mercer, AZ	2,500
Farming, Agriculture, and Resource Management for Sustainability (F.A.R.M.S.), McNamara, CA	5,000
Habitat Management as a Transitional Tool to an Insecticide: Free Pest Management Program in Apples, White, CO	1,500
Pedal-Powered Tillage for a Small Community-Supported Farm (CSA), Haney, CT	2,400
Certified Organic Associated Growers (COAG), Norris, CT	2,670
Growing Potatoes Organically 3 Different Ways, van Acterberg, CT	1,670
Kenaf/Vegetable Rotation in an Organic Farming System, Kemble, DE	1,200
Economical Analysis of Kenaf Grown with Different Nutrient Sources, Palmer, DE	3,140
Dry-Extrusion of Wet Garbage for Swine Feeding, Pangelinan, GU	4,350
Vegetable Soybean Cultivar Trials, Quan, GU	3,020
Sustainable Greenhouse Tomato Production: Evaluating Alternatives to Pesticide Use for Controlling Tomato Pinworm Larvae in Hawaii, Tresky, HI	3,520
Non-Chemical Suppression of Perennial Weeds, Frantzen, IA	9,875
Iowa Network for Community Agriculture: Forming a Network to Support Producer Initiatives for Local Food Systems (CSA and Similar Efforts) in Iowa., Hall, IA	9,850
Organic Farming Mentor Project, Thicke, IA	10,000
Rural Action Ag Center, Varley, IA	9,580
Comprehensive Integrated Agroforestry Project, Wahl, IA	4,838
Comparison of Finishing Pig Performance in Hoophouse Building vs. a Conventional Slatted, Curtain-Sided Building, Weis, IA	1,775
Economic Viability of Greenhouse Solarization, Higgins, ID	2,450
A Matted Mulch as an Alternative to Herbicide use in Strawberries, Melons and Tomatoes, Fouts, IN	4,393
Community Farm Project, Schabacker, IN	5,000

Description/producer/State	*Amount*
Livestock Re-Establishment Research Project at White Violet Farm, Sullivan, IN	5,000
Cover Crop Inter-Row Seeder For Row Crops, Ediger, KS	3,200
Erosion-Sensitive Farm is Converted to a Clean Water Farm that Includes a Management-Intensive Rotational Grazing System and Well-planned Calving Facility, Howell, KS	4,947
Prairie Hills Marketing Network: Marketing for Producers in Northwest Kansas, Rowh, KS	9,962
Group Strategic Alliances for Carroll County Feeder Calves, Hendrick, KY	10,000
Technical Assistance for Meat Goat Marketing, Hoffman, KY	8,900
Vegetative Filter Strips & Artificial Wetlands to Filter Silage & Manure Effluent, Burt, MA	3,000
High Density Planting for Weed, Disease and Pest Management in Commercial Strawberry Production, Hatch, MA	8,381
The Use of Ethylene as a Chemical Pinching Agent on Floricultural Crops, Konjoian, MA	5,000
Commercializing State-of-the-Art Thermal Aquatic Technology for Orchard Weed, Fungi, and Insect Control, Smith, MA	5,670
Improving Aquaculture Productivity & Safety with Dockside Elevator Systems, Pels, MD	3,869
Establishing An Integrated Rotational Grazing & Watering System, Vorac, MD	2,500
Maximizing the Benefit of Rotational Pasture by Using a Combination of Early Calving and Creep Feeding Heavy Calves Barley on Pasture, Boisvert, ME	1,000
Improving Potato Seed Performance, Crane, ME	2,400
Using Composted Paper Mill Wood Fiber Residual as a Mulch/Soil Amendment in Potato Production, Fitzpatrick, ME	2,974
The Development of Rhubarb Agriculture in Maine, Jacoby, ME	3,200
The Efficacy of Red Oak Sawdust as a Mulch to Control Grass and Weeds in Organic Wild Blueberries, Johnson, ME	2,827
Dairy Farm Diversification/Waldo County, Maine, Keene, ME	3,000
Sustainable Pollination of Wild Blueberry and Cranberry, Kelley, Jr., ME	4,880
Broad Based Organic Control of Cranberry Fruit Worm, Macfarlane, ME	2,950
Extending the Vegetable Production Season in Northern Michigan with Polyhouses, Chadwick, MI	2,696
Permaculture Greenhouse System: Integrating Greenhouse and Poultry Production, Meisterheim, MI	5,000
Using Forages and Grazing Systems as an Alternative to Crop Production on Michigan Muck Soils, Oswalt, MI	5,000
Sheep Offal Composting Project, Essame, MN	9,580
Pipestone Lamb Marketing Project, Fruechte, MN	10,000
Hog Production in an Existing Facility using Swedish Techniques, Haroldson, MN	5,000
Prairie Farmers Coop Producer-Owned Livestock Processing and Marketing, Timmerman, MN	10,000
Establishment of Rotational Grazing System Utilizing Warm and Cool Season Grasses, Bohmont, MO	5,000
Growing Day-Neutral Strawberries using the Sunbelt/Polyacrylamide Gel System, Compton, MO	3,126
Extending the Grazing Season in a Rotational Grazing System for Dairy, Hedges, MO	4,160
Management-Intensive Grazing, Stump, MO	5,000
The Production of Bromus Willdenowii Kunth Prairie Grass (Grasslands Matua) and Bromus Stamineus Desv. Grazing Brome (Grassland Gala) in the Tennessee Valley as an Alternative to Fescue and Ryegrass, McKee, Jr., MS	9,900
Legume Grazing in Rotation with Small Grains, Alger, MT	4,000
Green Manure/Covercrop Combination Experiment, Daniel, MT	1,923
Evaluation of Grass Species for Improved Pasture Management, Lee, MT	4,800
Vegetative Changes through Alternative Water Sources, Veseth, MT	2,500
Aquaculture Conversion Model Emphasizing Poultry and Hog Facilities Re-Use and Recycled On-farm Resources, Bunting, NC	6,000

Description/producer/State	*Amount*
Identification of Cover Crops to Enhance the Habitat of Specific Beneficial Insects in Sustainable Production Systems, Haines, NC	9,462
Multiple On-Farm Use of Aquatic Plants and Animals, Harman, NC	9,575
Alternatives to Chemicals in the Peanut Cotton Rotation, Morris, NC	9,366
Networking and Education of Sustainable Bison Producers in the Northern Plains, Lautt, ND	9,966
Corn Starch Amendment for Marginal Soils, Johnson,, NE	1,297
Plant Population Effect on Yields of Sweet Corn, Hardy, NH	632
Comparison of Drainage Methods for Phytophthora Root Rot Control, Lee, NJ	3,500
Increasing the Value of Irrigated Pastures, Baker, NM	4,200
Test Plot Demonstration for Organically Produced Small Grains, Phase II, Roybal, NM	5,000
Feasibility of No-till Frost Seeding, Bishop, NY	1,285
Permanent Bed Vegetable Production Systems, Blomgren, NY	3,190
Use of a Biological Filter in a Recirculating Aquaculture System, Brockway, NY	1,758
Answering Questions About Ditch Bank Stabilization, Cocot, NY	2,100
Rotational Grazing of Sheep to Control Weeds in Christmas Trees, Drexler, NY	1,325
An Evaluation of Chinese Medicinal Herbs as Field Crops in the Northeast, MacLean, NY	3,498
Development & Adoption of Computerized Crop Record Keeping Program, McChesney, NY	4,000
Full Capitalization of Water Resources, Rounsaville, NY	6,000
Multiple-Site Evaluation of Cover Crops Established in Wheat Stubble, Bennett, OH	9,613
The Study of Alternative Management Strategies for European Red Mite in North Central Ohio Apple Orchards, Eshelman, OH	9,722
Organic Mulch for Weed Control in Rhubarb, Boden, OR	2,500
Use of Aerated Compost Teas for Control of Foliar Diseases of Spinach, Lettuce and Broccoli and to Promote Plant Vigor and Quality, Booth, OR	2,620
Low Tillage Weed Control, Fullmer, OR	1,895
The Effect of Aerated Compost Teas on Disease Control in Blueberries and Tomatoes, Gray, OR	2,610
Grazing Sheep in New Forest Plantings, Lehman, OR	1,575
Use of Aerated Compost Teas as a Preventative Foliar Fungicide on Grape Vines Vitus vinifera, Michul, OR	2,930
School Cafeteria Compost System for Soil Amendment Production, Strong, OR	3,000
Minimizing Equipment Costs on a Grazing Farm, Bowlan, PA	2,683
4-H Sustainable Approach to Raising Beef, Curtis, PA	2,260
Economic Comparison & Weed Control Observation of 15" Row Corn vs. 30" Row Corn, Groff, PA	1,040
Crownvetch Living Mulch Grazing, Hubbard, PA	470
Alternative Rotation System for Vegetables, Matthews, PA	2,960
Finishing Beef Calves on Legume Pasture, Berry, SD	2,504
Low Input Sustainable Agriculture Short Course, McGregor, TN	9,650
Sustainable Cultivation of Medicinal Herbs as an Alternative to Tobacco as a Cash Crop, Miller, TN	5,004
Grazing Alternatives to Tall Fescue for Stocker Cattle, Pitts, TN	9,982
Can Organically Managed Native Warm Season Grasses Provide a Sustainable and More Cost Effective Hay Source for a Family Operated Goat Dairy than Input Intensive Annual Sorghum/Sudan Grass Crosses?, Dexter, TX	9,638
Agri-Tourism: Educating the Public and Generating On-Farm Income, Hayden, VT	1,450
Sustainable Yield Sugaring & Marketing, Hinsdale, VT	4,920
Northeast Livestock Export Program, Ratcliff, VT	4,400
Best Method for Establishing Globe Artichoke Seedlings, Rozendaal, VT	1,060
Sorghum Syrup Production in Vermont, Williamson, VT	5,875
Carrot Rust Fly Control, DeWreede, WA	1,150
Weed Control in Organic Apple Orchard, Holwegner, WA	2,550
Alternative Crop Production in a "Direct Seed Annual Crop Intense Rotation Program", Kupers, WA	4,400

Description/producer/State	*Amount*
Achieving Sustainability in San Juan County Hay Fields, Matthews, WA	2,750
Organic vs. Synthetic Fertilizer-Container Nursery Trials, Sundquist, WA	4,575
Improved Nitrogen Utilization and Herbicide Reduction Through Relay Intercropping, Tinkelberg, WA	4,230
Life after CRP: The Conservation and Economic Benefits of Improved Grassland Cover Using Managed-Intensive Grazing, Cates, WI	4,100
Exploring Low-input Alternative for Watering Ewes in Winter, Fyksen, WI	3,195
Northwood Farm Sustainable Raised Beef, Goodman, WI	5,000
Sustainable Mushroom Cultivation in the North for Disabled Growers, Huebner, WI	4,055
An Analysis of Producing and Niche Direct Marketing Pasture-Finished Beef, Wrehota, WI	5,912
Tall Stature Grasses for Winter Grazing and Spring Calving, Weber, WY	2,800

Question. Please summarize the achievements of the SARE program to date.

Answer. In its ten-year history, SARE has funded 1,122 projects. Five hundred of those projects are Research and Education projects—including projects in the USDA/EPA co-funded Agriculture in Concert with the Environment program—which are usually multi-disciplinary and often multi-institutional; 497 are producer grants to individual farmers or ranchers or small groups of producers to do on-farm research, demonstration, or education; and 125 are projects in the Professional Development Program funded with Smith-Lever 3(d) funds.

These 1,122 projects span a wide range of topics, farming systems, and geography, all related to improving the scientific base and practical knowledge about food and farming systems that are profitable, protect the environment, and contribute to quality of life for people and communities. Many if not most projects address multiple topics, however a breakdown of project numbers by primary topic is as follows: Approximately one-fourth of the projects address production of field or horticultural crops, for example soil-enhancing cover crops, crop rotation, ridge tillage, or crop diversification. Nearly one-fifth address animal production systems on topics such as management-intensive grazing, forage improvement, manure management, or less capital-intensive poultry and hog production for small farmers. Nearly one-fifth concern biologically-based IPM or other pest management topics. Ten percent of the projects are primarily educational, in addition to the requirement that each SARE research project include an education/outreach component; another 11 percent provide educational opportunities to field professionals—the 125 PDP projects. Eight percent address marketing, economics or community development, such as economic comparisons of different production systems, direct marketing, or on-farm processing and other value-added opportunities that provide jobs in local communities as well as improved profits for producers. Five percent of SARE projects are primarily concerned with protection of wildlife, riparian areas, and other natural resources. Another five percent explore the integration of crops and livestock in farms or ranches.

Many concrete impacts have resulted from these diverse projects. For example, a survey of participants in a Nebraska project that worked with more than 130 people on about 80,000 acres of farm and ranch land found that sixty percent of participants increased the diversity of commodities grown, thirty percent reported improved profitability, forty percent reported decreased soil erosion, and fifty percent reported improved wildlife habitat. A project re-introducing agriculture and value-added marketing to small producers in northern New Mexico is projected to bring them $100,000 per year in agricultural income. A Michigan producer participating in a SARE project looking at the ability of grass and legume filter strips to provide habitat for beneficial insects while controlling nutrient runoff, saved $6–10 per acre by reducing insecticide sprays. A New York grape producer saved $31–36 per acre in reduced fungicide applications after learning to monitor conditions with a weather station and computer model. These are but a few of the ways that SARE project findings are contributing to producer profits, resource stewardship, and vital communities.

Question. The fiscal year 1999 budget proposes that with the additional funding proposed for SARE, emphasis will be given to helping farmers and ranchers save money through grazing system improvements that also protect natural resources. Why?

Answer. Grazing systems are one of several opportunities for SARE in the coming years. Management-intensive grazing has been shown, through dozens of research

and demonstration projects funded by SARE and others, to be an excellent strategy for producers to improve profits, protect natural resources, and improve quality of life for ranching families and communities. Traditional grazing systems turn livestock loose on large pastures, where the animals often remain for weeks at a time. In management-intensive grazing systems, graziers place livestock in smaller paddocks and move the animals frequently with the help of affordable, portable fencing. These grazing systems reduce feed costs because farmers and ranchers do not have to grow or purchase forage or grain year-round. Pastures require few or no inputs of pesticides and allow natural recycling of manure. They also provide a continuous soil cover while protecting wildlife habitat and important ecosystems. Graziers can work fewer hours and spend more time with their animals instead of worrying about field equipment and hauling manure. Thus grazing systems offer a fine example of a win-win approach where producers profit along with the environment and communities. Other areas of great opportunity for SARE include soil health, livestock waste management, crop and enterprise diversification, and other marketing alternatives for family farms both small and large. In each case, SARE funds will be used to study and extend these types of win-win solutions.

BINATIONAL AGRICULTURAL RESEARCH AND DEVELOPMENT PROGRAM (BARD)

Question. The fiscal year 1999 budget proposes to increase funding for the Binational Agricultural Research and Development Program (BARD) from the fiscal year 1998 funding level of $500,000 to $1,500,000. Given the fact that the budget proposes reductions in base programs such as the Hatch Act, McIntire-Stennis Cooperative Forestry, the Smith-Lever Act, EFNEP and Aquaculture Centers, the termination of existing programs, and the elimination of special research and federal administration grants in support of domestic needs, why is increased funding for BARD a priority?

Answer. The $2 million requested for BARD would restore funding to the fiscal year 1997 level. Restoration of the $2 million funding level is requested because the Administration supports increasing the proportion of agricultural research funding that is awarded by merit review with peer evaluation, as the case with the BARD program. The Administration also believes that the dollar-for-dollar matching support provided by the Israeli government under BARD results in a high quality return on the U.S. investment in the program. Further, each project funded under the BARD program is a joint effort between U.S. and Israeli scientists, which exemplifies the integrated approach to problem solving preferred by the Administration in meeting the challenges facing U.S. and global agriculture. The challenges of today and the future are more complex than those we have solved in the past and require the multi-functional, multi-disciplinary, multi-institutional approaches found under the BARD program.

Question. What agricultural research is currently being supported with funding through BARD? Please give a description of the research being funded, the amount of funds provided for each project, and who is conducting the research.

Answer. The information follows.

Fiscal year 1997 projects

Regulation of Arabidopsis Glutamate Decarboxylase in Response to Heat Stress: Modulation of Enzyme Activity and Gene Expression. Auburn University. Locy, R.D., Cherry, J.H., Singh, N.K. $130,400

Farmer's Time Allocation Decisions in Different Institutional Environments: A Household Perspective. University of California at Davis. Chalfant, J.A., Sumner, D.A. $76,182

Control of Fertilization-Independent Development by the fie2 Gene. University of California at Berkeley. Fischer, R.L. $120,900

Etiology of the Rugose Wood Disease of Grapevine and Molecular Study of the Associated Trichoviruses. University of California at Riverside. Rao, A.L.N. $124,900

Interactions of Cloud Proteins, Pectins and Pectinesterases in Flocculation of Citrus Cloud. University of Georgia. Wicker, L., Kerr, W.L. $124,900

Streptococcus iniae Infections in Trout and Tilapia: Host-Pathogen Interactions, the Immune Response Towards the Pathogen and Vaccine Formulation. University of Georgia. Evans, D.L. $133,200

Lek Behavior of Mediterranean Fruit Flies: an Experimental Analysis. University of Hawaii. Shelly, T.E. $122,400

Molecular-Based Analysis of Cellulose Binding Proteins Involved with Adherence to Cellulose by Ruminococcus albus. University of Nebraska. Morrison, M.$142,660

Improving Methionine Content in Transgenic Forage Legumes. New Mexico State University. Sengupta-Gopalan, C. $142,600

On-line Fault Detection and Diagnosis for Greenhouse Environment Control. Cornell University. Albright, Louis D. $112,400

Use of Anti-Fungal Gene Synergisms for Improved Foliar and Fruit Disease Tolerance in Transgenic Grapes. Cornell University. Reisch, B.I., Kikkert, J.R. $133,820

Controlling Ethylene Responses in Horticultural Crops at the Receptor Level. North Carolina State University. Sisler, E.C. $124,320

Prediction of Nitrogen Stress Using Reflectance Techniques. Texas A&M University. Searcy, S.W. $127,400

Control of Bovine Anaplasmosis: Cytokine Enhancement of Vaccine Efficacy. Washington State University. Palmer, G.H., Brown, W.C. $143,230

Regulation of Avocado Resistance to Postharvest Pathogens by Modulation of the Biosynthesis of Antifungal Compounds. Washington State University. Browse, J. $109,900

Fiscal year 1996 projects

Functional Biogenesis of V-ATPase in the Vacuolar System of Plants and Fungi. University of California at Berkeley. Schekman, R.W. $81,000

Enhancement of Baculoviruses' Insecticidal Potency by Expression of Synergistic Anti-Insect Scorpion Toxins. University of California at Davis. Hammock, B.D. $125,000

Genetic Diversity of Resistance Gene Clusters in Wild Populations of Lactuca. University of California at Davis. Michelmore, R.W. $125,000

Resistance to Tomato Yellow Leaf Curl Virus by Combining Expression of a Natural Tolerance Gene and a Dysfunctional Movement Protein in a Single Cultivar. University of California at Davis. Gilbertson, R.L., Lucas, W.J. $121,250

Mapping and Tagging by DNA Markers of Wild Emmer Alleles that Improooove Quantitative Traits in Common Wheat. University of California at Davis. Qualset, C.O., McGuire, P.E. $137,000

Biosensors for On-line Measurement of Reproductive Hormones and Milk Proteins to Improve Dairy Herd Management. University of California at Davis. Delwiche, M.J., BonDurant, R. $145,870

Creating and Characterizing Genetic Variation in Tilapia Through the Creation of an Artificial Center of Origin. University of California at Davis. Gall, G.A.F., May, B. $145,500

Molecular Genetic Analysis of Citric Acid Accumulation in Citrus Fruit. University of California at Riverside. Roose, M. $125,000

Rhizosphere Ecology of Plant-Beneficial Microorganisms. University of California at Riverside. Crowley, D.E. $130,430

Osmotin and Osmotin-Like Proteins as a Novel Source for Phytopathogenic Fungal Resistance in Transgenic Carnation and Tomato Plants. Purdue University. Hasegawa,, P.M., Bressan, R.A. $125,000

Study of the Basis for Toxicity and Specificity of Bacillus thuringiensis Delta-endotoxins. Purdue University. Aronson, A. $113,630

Elicitor-Induced Response in Lycopersicon esculentum. Purdue University. Martin, G.B. $125,000

Regulated Expression of Yeast FLP Recombinase in Plant Cells. Purdue University. Lyznik, L.A., Hodges, T.K. $135,610

Ozone Altered Stomatal/Guard Cell Function: Whole Plant and Single Cell Analysis. Pennsylvania State University. Pell, E.J., Assmann, S. $135,400

Developing Nutritional-Management Protocols which Prevent Tibial Dyschondroplasia. Pennsylvania State University. Leach, Jr. R.M., Gay, C.A. $125,000

Identification of Staphylococcus aureaus Virulence Factors Associated with Bovine Mastitis. Pennsylvania State University. Sordillo, L.M., Wojchowski, D.M., Perdew, G.H. $142,000

Virus Synergy in Transgenic Plants. Cornell University. Palukaitis, P., Zaitlin, M. $124,480

Role of Placental Lactogen in Sheep. Texas A&M University. Bazer, F.W. $116,130

Creating and Characterizing Genetic Variation in Tilapia Through the Creation of an Artificial Center of Origin. Virginia Polytechnic and State University. Hallerman, E.M. $65,700

Question. What research will be supported with the $1.5 million in fiscal year 1999 funding proposed for this program? Where will the research be carried out?

Answer. There are eleven discipline areas within which awards will be made using fiscal year 1999 funding. The discipline categories are: (1) Agricultural Engineering; (2) Animal Production; (3) Animal Protection; (4) Aquaculture; (5) Fruit Tree Crops; (6) Field & Garden Crops; (7) Post Harvest; (8) Soil & Water; (9) Agri-

cultural Economics; (10) Cellular & Molecular Biology; and (11) Plant Protection. Research supported by funding administered through CSREES for BARD is carried out at land-grant institutions.

Question. How are BARD funds awarded?

Answer. Each BARD grant funded by CSREES is for the U.S. portion of a joint U.S./Israel project. The Israeli portion of the joint project is supported from either the BARD endowment fund or from supplemental funds provided by Israel. Israel matches the supplemental funds provided by CSREES. Therefore, a significant portion of each project is supported with non-federal funds. BARD is an ongoing program designed to support fundamental science of importance to agriculture. Each year new projects are supported through the competitive process, and new objectives are set forth each year through the support of new and innovative proposals. Each proposal is funded for two to three years. Each proposal submitted to the BARD program receives a peer review evaluation. Only those proposals which review favorably are recommended for funding. A binational Technical Advisory Committee (TAC) reviews the recommendations of the peer review panels and policy recommendations which the Executive Director, BARD Executive Staff, presents to the binational BARD Board of Directors. All final decisions regarding support of proposals are made by the Board of Directors.

Question. The prepared testimony indicates that low interest rates and an increase in the cost of research have impeded the ability of BARD to adequately meet the needs of each country's producers and consumers. Please explain what increases in the cost of research have been incurred and what needs are not being met.

Answer. Increases in the cost of research are due to various factors, including the cost of complying with regulations, the use of more sophisticated equipment, and the complexity of problems being addressed. The goal of the BARD program is to support fundamental research in plant and animal sciences, economics, and engineering that are important to both U.S. and Israeli agriculture. The generation of new knowledge is an ongoing process, and the original goal of the BARD program to produce new knowledge continues today. Much of the research supported concentrates on issues of animal and plant health (including studies of the pests and pathogens of both plants and animals), and responses of plants to environmental conditions (particularly crops grown in warm, dry climates). Fundamental research supported by BARD provides the knowledge base needed to develop solutions to pressing agricultural problems in the U.S. and in Israel.

Question. What level of interest was available off the BARD endowment to support joint research efforts in each of the past three fiscal years? Has this interest off the BARD endowment been used to support research projects? If not, why? If yes, which research projects were funded with the interest off the existing BARD endowment in each of these years?

Answer. The level of interest has been approximately 7 percent on the initial BARD endowment of $80 million and 6.9 percent on the subsequent $30 million increase to the endowment to support joint research efforts in the past three fiscal years. The cumulative funding provided by BARD for projects awarded in fiscal years 1995 through 1997 is approximately $32.9 million. This amount is derived from approximately $6.1 million from CSREES and $6.1 million in matching funding from the Israeli government for a total of $12.2 million, and approximately $20.7 million from the interest earned on the endowment. Copies of the BARD Annual Scientific Reports for 1995, 1996, and 1997 are being provided to the Committee. The Reports include scientific abstracts and other information about the BARD projects supported with combined CSREES, Israeli, and endowment interest funds in those three fiscal years.

NATIONAL RESEARCH INITIATIVE (NRI) COMPETITIVE GRANTS PROGRAM

Question. The prepared testimony indicates that NRI has expanded the science base for the Hazard and Critical Control Point (HACCP) approach to meat and poultry inspection. What HACCP requirements are based on NRI-funded research?

Answer. Incidence of disease-causing microorganisms in eggs, poultry, swine, cattle and shellfish, as well as the economic impact on food exports, lead to NRI-funded research on development of strategies to control, eliminate or prevent foodborne pathogens from entering the food supply. Research is ongoing to develop improved means for pathogen control and elimination, as well as determination through risk assessment, what critical control points from "farm to fork" are vulnerable. NRI has supported research to develop reduction strategies for Salmonella on commercial poultry and swine farms, as well as production systems; to understand the specific critical control points from harvest to consumption, in Vibrio vulnificus from shellfish; strategies are being developed to identify, then prevent or eliminate E. coli con-

tamination on the farm. Additionally, the NRI supported research on HACCP-based quality assurance programs on table eggs and the incidence of salmonellosis, and the potential impacts upon overall food quality and international trade.

Question. The fiscal year 1999 budget proposes to fund NRI at $130 million, an increase of $32.8 million from the fiscal year 1998 funding level. Please prioritize the specific increases requested for each component of NRI-funded research.

Answer. Priority will be given in each of the specific components to research topics that reflect national needs identified by stakeholders and reflected in the Administration's proposed initiatives. Further, a general priority of the NRI that applies to all of the components is that of making research grants that are both larger in awarded dollars and longer in duration while maintaining a reasonable funding success rate. By so doing, the use of Federal dollars is made more effective and the competitive process, for both the NRI and the recipient institutions, is made more efficient. The NRI also acknowledges an increase in sophistication of technological tools and instrumentation available to scientists conducting research relevant to agriculture. Such advances may allow for a broader scope to some types of proposals, while also requiring substantially higher levels of funding. In fiscal year 1999, NRI will be an important component of the National Food Genome Initiative and the President's Food Safety Initiative.

The requested increase in the Natural Resources and Environment component would ensure that the research programs contained therein were offered on a regular, annual basis, and that each program would be able to attain a better success rate, which has ranged from as low as 6 to 15 percent for some programs. The research areas currently supported are critical for sustainability of agriculture and forestry. They will contribute both fundamental and mission-linked information for improving understanding of: (1) plants as they respond to their environment, both normal and stressed by nature and man-made pollutants; (2) soils, the basic medium upon which all terrestrial organisms depend and where physical structure, chemistry, biology, and hydrology interact in ways that ultimately determine whether natural and managed soil and environmental quality are maintained and improved; (3) ecosystems, where an understanding of the flow of energy and the cycling of nutrients is requisite to the development of management strategies to ensure the sustainability and health of both natural and managed ecosystems; and (4) water quality and availability, as all agricultural and forestry practices ultimately influence the nation's water resource. A final priority is that of developing a new research area to enhance understanding weather and climate interactions with agricultural systems. Such a program would be complementary to the above areas, address current agricultural problems such as particulate pollution, and lead to improved management.

The increase requested for the Plant Division would be used for high priority research areas in Food Genomics; Energy Conversion by Plants; Synthesis of Plant Products; Plant/Microbe Interactions; Insect Community/Plant Habitat Interactions and; Assessment of Risks of Biological Control Agents. The increase will provide additional resources for plant genome research that will focus on mapping, identifying, and understanding the function and control of genes in agriculturally important plants, with emphasis on functional genomics, identification of expressed sequence tags and quantitative trait loci, development of comparative and physical genomic maps, technology, and bioinformatics. This knowledge is the key that will permit the United States to develop new genetic technologies for improvements in yield, pest resistance, composition, and quality of the domestic agricultural output. Increased funding will support research metabolic pathways in plants that will enable the genetic engineering for designing and altering agriculturally important plants for enhanced and new functions. Increased funding will answer questions about (1) how the composition and ecology of microbial communities surrounding a plant and the microbial flora inside a plant affect plant processes, such as disease resistance; beneficial plant/microbe interactions; response to environmental factors; water and nutrient uptake by the plant and; (2) the genetic and metabolic pathways and controls in both plants and microbes that govern these processes Increased funding will focus on understanding ecological interactions between insect and plant communities to enhance development of new pest control strategies for US agriculture. For example, insects developing in non-crop plants (e.g., weeds, ornamentals, and native vegetation) can significantly impact their importance in many agroecosystems. In addition, funding will be used to assess the possible effects of classical biological control on non-target species.

In the area of Nutrition, Food Safety and Health, priority will be given to research to develop strategies to prevent or eliminate disease-causing micro-organisms, naturally occurring toxicants, or drug residues from entering our food supply; to develop or improve current sampling procedures for detection of disease-causing microorga-

nisms, naturally occurring toxicants or drug residues, expected to lead to rapid, reliable and practical quantification methods for microbial agents, naturally occurring toxicants or drug residues; to develop approaches to and models for risk assessment in support of food safety; examine the role of livestock/poultry manures and their applications in the transmission of foodborne diseases; examine the mechanisms responsible for antibiotic resistance in livestock and poultry that could lead to foodborne illness; identify obstacles to adopting appropriate food safety habits, and develop recommendations for interventions to improve safe food consumption among consumers. All these research areas are complementary to the President's Food Safety Initiative.

In the Animals component, the proposed increase will provide additional resources for high priority animal genome research such as functional genomics, comparative and physical mapping, identification of expressed sequence tags and economic trait loci and bioinformatics. The research would also include whole genome sequencing of animal pathogens, previously unsupported in the NRI due to insufficient funds. These research areas would be complementary to that of the National Food Genome strategy. Additional high priority animal health research will also be supported that responds to disease challenges posed by new and re-emerging diseases that threaten US animal agriculture.

In the Markets, Trade and Rural Development component, the Markets and Trade program provides priority consideration for agricultural competitiveness, and technology and sustainability. To these, a fourth priority would be added dealing with natural resource economics. The program has purposely limited the priority areas initiatives because of the relatively small size of the program. Expanding the program in this way would invite proposals that examine many of the critical environmental issues that are resulting from changes in the structure of various agricultural sectors, one example being increased concentration in the food animal production sector. The Rural Development Program currently places priority on research goals that deal with understanding the forces affecting rural areas and on the design and evaluation of new approaches to rural development. Because of resource constraints, a lower priority has been placed on understanding the quality of life aspects that are important to and result from living and working in rural areas. Increased funding would permit an expansion to capture research goals that address in a more direct manner, quality of life characteristics of rural areas, and how those characteristics might be improved.

The proposed increase for the Processing for Adding Value or Developing New Product components would allow additional resources to be directed toward: metabolic engineering of plants and microorganisms to produce value-added products from agriculture; new crop development, focusing on genetic and agronomic issues in addition to the current emphasis of value-added product development; greater emphasis on research of foods and food systems with health promoting properties; and additional resources directed toward development of novel food manufacturing processes, including greater process automation and control, to strengthen competitiveness of the US food industry.

An increase in the NRI will also allow additional high priority Agricultural Systems research to be supported. With the current level of funding, the NRI's Agricultural Systems Program can only support ten percent of the proposal submissions.

Question. What are the returns on NRI-funded research? What is the documentation for these findings?

Answer. The cost-effectiveness of the NRI or individual research projects has not been specifically estimated. However, the benefits of public investment in agricultural research, through programs such as the NRI, have consistently been shown to outweigh the costs.

For example, work by the Economic Research Service (ERS) indicates a return on investment for agricultural research of 20–60 percent. The ERS further concludes that agricultural basic research tends to have twice the benefits to society, with returns on investment of 60–90 percent as compared to more applied agricultural research. Publicly funded research was found to have twice the return as compared to privately funded research. A report by the Council of Economic Advisors further supports the link between research and positive economic and social returns, citing consistent positive returns from research.

Agriculture productivity has increased at an average annual rate of 1.94 percent for the period of 1948–1994, one of the highest rates of productivity growth of all U.S. industries. For the period of 1990–1994, this rate of productivity increase was 2.77 percent. Publicly funded research has been a major contributor to this increase in productivity, not only by providing higher yielding crop varieties, better livestock breeding practices, more effective fertilizers and pesticides, and better farm management practices, but also through research that keeps productivity from falling, such

as by overcoming pesticide resistence. Agriculture research not only benefits the farmer through decreased costs and higher profits, but also the nation, and low-income people in particular, through lower food prices. In addition, publicly funded agricultural research has been broadened to impact environmental protection and food safety.

The sources for these findings are Economic Research Service, "Agricultural Productivity in the United States," Agriculture Information Bulletin Number 9510, January 1998, USDA, Economic Research Service, "The Value and Role of Public Investment in Agricultural Research," Staff Paper Number 9510, May 1995, and the Council of Economic Advisors "Supporting Research and Development to Promote Economic Growth: The Federal Government's Role," October 1995.

EXTENSION INDIAN RESERVATION PROGRAM

Question. An increase in funding is requested for fiscal year 1999 to expand the presence of extension agents on Indian Reservations. How many extension agents are currently funded and which reservations are being served? How many additional extension agents will be funded with the increased funding requested and where will they be located?

Answer. Currently we have 25 agents in 16 states. They serve the following reservations:

Alaska: Tanana Chiefs Council
Arizona: Colorado River; Hopi; San Carlos Apache
Arizona/New Mexico/Utah: Navajo (Window Rock); Navajo (Ship Rock)
Florida: Seminole
Idaho: Fort Hall
Mississippi: Choctaw
Montana: Flathead; No. Cheyenne; Blackfeet; Ft. Belknap
North Carolina: Cherokee
North Dakota: Ft. Berthold
New Mexico: Jicarilla Apache; Zuni
Nevada: Pyramid Lake & Walker River (one agent)
Oklahoma: Muscogee
Oregon: Warm Springs
South Dakota: Rosebud; Pine Ridge
Washington: Chehalis; Colville
Wyoming: Wind River

The requested increase will be used to provide 31 additional agents for some of the unmet needs, as follows:

State	*Agents Needed*
Alaska	3
Arizona	14
California	2
Colorado	2
Idaho	2
Maine	1
Minnesota	2
Montana	4
Nevada	3
New Mexico	9
Oklahoma	2
South Dakota	8
Utah	4
Washington	4
Wisconsin	2
Wyoming	1

We have a backlog of about 20 unfunded projects from Arizona, Colorado, Idaho, Minnesota, Montana, Oklahoma, South Dakota, Wisconsin, and Wyoming as a result of previous competitive applications. These will be accorded some priority in any subsequent competition. We will issue a request for (competitive) proposals when an increase in funding is received. The requested increase for EIRP in fiscal year 1999 supports the CRAT team recommendations to expand agricultural opportunities to small-scale and disadvantaged farmers.

1890 FACILITIES PROGRAM

Question. Additional funds are requested for fiscal year 1999 for the 1890 Facilities Program to allow facilities at these institutions to be more comparable to the facilities found on campuses of the 1862 land-grant universities. Have you done an inventory of the facilities' improvements required at each of the 1890 Institutions to achieve this goal? If so, please provide the committee with a list of facilities' needs by institution and the funding required to meet these needs.

Answer. The agency has not yet conducted an inventory of the facilities' needs required for the use of the proposed fiscal year 1999 funds. The agency has instructed the 1890 Universities to update its inventory of needs for the use of the proposed funds. The agency will issue, in April 1998, a request for a Five-Year Plan for the development of facilities. The Five-Year Plan details the proposed use of the funds over a five year period. Each construction or renovation project must have a statement of need which describes the factors or circumstances which led to the institution's need for the planning, construction, renovation or acquisition project proposed. Also, the plan must show the procedures to be used to accomplish the goals of the individual project. Tentative timetables are developed for—accomplishing each goal. A proposed construction budget is submitted, indicating the sources of funding—federal and/or non-federal—for the completion of the project. A review panel must approve each Five-Year Plan, before a grant is awarded to the institution. The increase is consistent with the CRAT team recommendations.

Question. Please provide how the 1890 facilities funds were allocated, by institution, in each of fiscal years 1997 and 1998, and how much each institution would receive if the program is funded at the fiscal year 1999 request level.

Answer. The 1890 facilities funds were allocated in fiscal year 1997 and fiscal year 1998 as shown on the following table. The allocation for fiscal year 1999 has not yet been determined. This will be determined when the fiscal year 1999 budget is approved.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE 1890 EXTENSION AND RESEARCH FACILITIES PROGRAM

Institutions	Allocated fiscal year—	
	1997	1998
Alabama:		
Alabama A&M University	$403,755	$403,755
Tuskegee University	403,755	403,755
Arkansas: University of Arkansas at Pine Bluff	387,818	387,818
Delaware: Delaware State University	310,482	310,482
Florida: Florida A&M University	408,640	408,640
Georgia: Fort Valley State University	448,874	448,874
Kentucky: Kentucky State University	497,465	497,465
Louisiana: Southern University	379,624	379,624
Maryland: University of Maryland Eastern Shore	356,775	356,775
Mississippi: Alcorn State University	392,395	392,395
Missouri: Lincoln University	495,381	495,381
North Carolina: North Carolina A&T State University	511,065	511,065
Oklahoma: Langston University	399,604	399,604
South Carolina: South Carolina State University	394,830	394,830
Tennessee: Tennessee State University	455,003	455,003
Texas: Prairie View A&M University	588,339	588,339
Virginia: Virginia State University	430,885	430,885
Subtotal	7,247,040	7,247,040
Federal Administration	301,960	301,960
Total	7,549,000	7,549,000

Question. Please provide a list of the facility improvements funded through the 1890 Facilities Program for each of the past two fiscal years and for fiscal year 1998 to date, indicating the amount of funds provided by institution and the facilities funded.

Answer. The U.S. Department of Agriculture 1890 Facilities Program is authorized to provide Federal support in the design and construction of research and education facilities that assist in the discovery of new knowledge and the delivery of relevant and timely information to solve production problems and other problems of importance to diverse audiences served by the eligible universities. In addition to traditional programs, these institutions provide an emphasis on small farmers and other limited resource families, an important focus for the Department in the implementation of the Civil Rights Implementation Team recommendations.

Research and education programs are focused on the five outcomes adopted by the Research, Education, and Economics (REE) Mission Area and goals of the Cooperative State Research, Education, and Extension Service (CSREES) Agency strategic plans (An agricultural system that is highly competitive in the global economy; A safe and secure food and fiber system; A healthy well-nourished population; An agricultural system which protects natural resources and the environment; and Enhanced economic opportunity and quality of life for Americans). This ensures that the 1890 facilities programs focus on issues of national importance.

Completed and planned facilities will focus research and education efforts on issues, such as: water quality; food safety; nutrition; community development, particularly the rural/urban interface; plant and animal biotechnology, including forestry; small ruminant management; the use of distance and mobile education technologies; youth programming; plant and animal genome research; aquatic entomology; etc. Finally, the facilities will also provide training opportunities for minority undergraduate and graduate students who will become future scientists and agricultural leaders, with the potential to take advantage of employment opportunities with the U.S. Department of Agriculture. The broad scope of these activities is documented in the Five year plans of work developed by each university for approval by CSREES before facility funds are allocated. Program/project monitoring is possible through review of annual facility plans and the program plans and reports submitted for agency review as part of the Government Performance and Results Act accountability process initiated by the agency and land-grant partners.

Facilities Improvements as follows.

1890 FACILITIES PROGRAM

Institutions	Fiscal years—				Status of approved 5-yr. plan[3]
	Total cost of approved 5-yr. plan[1] (1993–97)	1996 appropriated funds	1997 appropriated funds	1998 proposed projects[2]	
Alabama:					
Alabama A&M University	$2,093,113	$416,242 1. Animal Science Research and Demonstration Facility. 2. Food Science & Nutrition Demonstration Laboratories. 3. Downlinking & networking development. 4. Construct Agricultural Mechanical Research Laboratory. 5. Plant, food & animal laboratory equipment.	$403,755 1. Animal Science Research and Demonstration Facility. 2. Food Science & Nutrition Demonstration Laboratories. 3. Downlinking & networking development. 4. Construct Agricultural Mechanical Research Laboratory. 5. Plant, food & animal laboratory equipment.	.....	—Major purchases have been made for water quality equipment, computer hardware/fiber optics lines and wiring for networking improvements. —The Alternative Crops facility was completed. —Renovations in the Family and Consumer Sciences Management Laboratory, Animal Physiology Laboratory, and Research and demonstration facilities.
Tuskegee University	$2,093,113	$416,242 1. Construction/renovation Woodruff Lab.	$403,755 1. Asbestos Removal Replacement of Campbell Hall roof.	.....	—Caprine research facility completed. —Replacement of the Campbell Hall Research building's roof completed. —Renovation of the food processing laboratories & the construction of the Extension Activities Center in progress.
Arkansas: University of Arkansas Pine Bluff.	$2,010,493	$399,812 1. Construct facility for horticulture, aquaculture, human nutrition, child development, and small ruminant (sheep) research and improve infrastructure. 2. Construct mixing pad for agricultural chemicals. 3. Contract engineering design for fish processing/marketing building.	$387,818 1. Construct slaughter house for swine demonstration program. 2. Support construction of an aquaculture demonstration processing and marketing facility. 3. Repair station infrastructure including roads and ponds. 4. Purchase and install growth chamber for agronomy and horticulture research. 5. Purchase irrigation accessories for agronomy area and farm.	.....	—Laboratory equipment purchased for aquaculture and small ruminant research programs. —Aquaculture facilities renovated. —Extension complex completed. —Furnishings and equipment for new Extension complex purchased.

Delaware: Delaware State University	$1,607,900	$319,672 Expansion of Herbarium	$310,482 Expansion of Herbarium and Small Animal Laboratory	.....	—Accumulating funds. —Installed equipment in new extension building. —Installed feed storage handling system. —Mobile teaching unit operational. —Pond construction complete.
Florida: Florida A&M University	$2,118,441	$421,279 1. Research & Extension Complex. 2. Plant and soils research equipment.	$408,640 1. Research and Extension Complex. 2. Teleconference Center. 3. Pavilion. 4. Environmental Center installation. 5. Animal science research equipment.	.....	—Accumulating funds. —Completed research and extension complex. —Renovated entomology laboratory. —Installed irrigation system. —Renovated ponds.
Georgia: Fort Valley State University	$2,327,016	$462,757 1. Small Ruminant Research and Extension Center. 2. Research/Extension Education Support Center. 3. Research/Extension Human Development and Family Life Center.	$448,874 1. Small Ruminant Research and Extension Center. 2. Research/Extension Education Support Center. 3. Research/Extension Human Development and Family Life Center. 4. Communication Production Center. 5. Technology Development Transfer Center. 6. Multipurpose Agricultural Demonstration Pavilion.	.....	—Accumulating funds. —Under construction—Small Ruminant Research & Extension Center. —Completed the Communication Production Center.
Kentucky: Kentucky State University	$2,578,915	$512,850 1. Equipment for the Atwood Research Facility. 2. Renovate Water Quality lab. 3. Equipment for Extension building.	$497,465 1. Pond Site (new construction). 2. Research farm (multi-purpose building).	.....	—Horticulture and Entomology Laboratories in the Atwood Research Facility completed. —Telecommunications equipment was purchased and installed in four rooms in the Cooperative Extension Building.
Louisiana: Southern University	$1,968,017	$391,365 1. Renovation of livestock pavilion. 2. Multi-purpose Research & Demonstration Center 3. Extension Telecommunication Center. 4. Equipment purchases.	$379,624 1. Renovation of livestock pavilion. 2. Multipurpose Research & Demonstration Center 3. Extension Telecommunication Center.	.....	—Accumulating funds. —Contract awarded for renovation of livestock pavilion.

1890 FACILITIES PROGRAM—Continued

Institutions	Fiscal years—				Status of approved 5-yr. plan[3]
	Total cost of approved 5-yr. plan[1] (1993–97)	1996 appropriated funds	1997 appropriated funds	1998 proposed projects[2]	
Maryland: University of Maryland Eastern Shore.	$1,849,563	$367,809 1. Food Science Technology, Research & Extension Center. 2. The Lifespan Human Development Center. 3. Major equipment installation.	$356,775 1. Food Science Technology, Research & Extension Center. 2. The Lifespan Human Development Center.	.....	—Accumulating funds. —Major equipment purchased.
Mississippi: Alcorn State University	$2,034,222	$404,531 1. Planning the construction of Research and Extension building.	$392,395 1. Construction of Research & Extension building.	.....	—Accumulating funds. —Construction underway on Research & Extension building.
Missouri: Lincoln University	$2,568,115	$510,702 1. Construction of Phase II of Allen and Foster Halls.	$495,381 1. Construction of Phase II of Allen and Foster Halls.	.....	—Construction of Phase II of Allen and Foster Halls was completed.
North Carolina: North Carolina A&T State University.	$2,649,257	$526,830 1. Renovation of Coltrane Hall. 2. Construction of Extension/Research office building at the University Farm Complex. 3. Renovation of Ward Hall. 4. Renovation of Analytical and Food & Nutrition Labs. 5. Scientific equipment purchases. 6. Construct building for research into adaption of small machinery to small scale farming. 7. Telecommunications studio.	$511,065 1. Renovation of Coltrane Hall. 2. Construction of Extension/Research office building at the University Farm Complex. 3. Renovation of Ward Hall. 4. Renovation of Layer and Broiler Facilities. 5. Biotechnology purchase (growth chamber and accessories for plant stress studies). 6. Telecommunications studio.	.....	—Accumulating funds. —Constructed off-campus farm storage building. —Constructed second floor to Coltrane Hall for Extension office complex. —Established an Extension/Research Telecommunications studio.
Oklahoma: Langston University	$2,071,598	$411,963 Construction of Research and Extension building.	$399,604 1. Construction of Research & Extension building.	.....	—Accumulating funds.

South Carolina: South Carolina State University.	$2,046,844	$407,041 Renovate extension facility	$394,830 Renovate extension facility.	.....	—Construction underway on extension facility. —Purchase and installation of distance education equipment underway.
Tennessee: Tennessee State University	$2,358,790	$469,075 1. Construct Research & Extension Facility. 2. Purchase land for research farm.	$455,003 1. Construct Research & Extension Facility. 2. Purchase land for research farm.	.....	—Accumulating funds.
Texas: Prairie View A&M University	$2,958,522	$588,339 1. Install irrigation system in research plots. 2. Install security fencing around research plots. 3. Install animal waste disposal system. 4. Install environmental plant growth chambers. 5. Construction of multi-purpose pavilion. 6. Renovate facility and equipment in the Abattoir. 7. Renovate facility and equipment in creamery.	$570,689 1. Purchase research laboratory equipment. 2. Purchase equipment for Abattoir. 3. Purchase communications equipment. 4. Run satellite (teleconferencing) cabling. 5. Renovate and upgrade bio-safety/surgery and environmental chamber labs at International Dairy Goat Research Center (IDGRC) and other general repairs and replacements in the IDGRC.	.....	—Constructed office and training complex. —Purchased equipment for training complex.
Virginia: Virginia State University	$2,233,761	$444,211 1. Construct Extension building (office complex). 2. Renovate buildings on university farms. 3. Water quality and aquaculture equipment. 4. Further develop the multi-purpose pavilion at the university farm.	$430,885 1. Renovate buildings on university farm. 2. Purchase major equipment for distance education. 3. Purchase major research equipment. 4. Renovate research storage building.	.....	—Accumulate funds. —Major equipment purchased and installed. —Satellite downlinking equipment installed and in use. —Renovated research meat goat building. —Construction of Extension Office Complex has been completed. Building occupied. —Aquaculture equipment installed. —Multi-purpose pavilion completed.

[1] CSREES funding of the approved five-year plan is contingent upon the appropriation of funds for the 1890 Facilities Program.

[2] Fiscal year 1998 funds have not been allocated to the Universities to date. Waiting review of rules and guidelines by Office of General Counsel.

[3] In many cases, 1890 Institutions are required by State law to have all funding in-hand before construction may begin; for that reason, construction accomplishments do not correspond to funds provided through fiscal year 1998; i.e., Institutions must "accumulate" funds before starting projects.

Question. How are 1890 Facilities Program funds allocated?

Answer. The distribution is as follows for the 1890 Facilities Program: 4 percent for Federal administration; of the remainder 60 percent will be distributed equally and 40 percent will be distributed based on the Section 1444 formula of the 1977 Farm Bill, as amended. Sec. 1447 states the following:

A sum equal to 4 percent of the total amount appropriated each fiscal year under this section shall be allotted to the Cooperative State Research, Education, and Extension Service of the Department of Agriculture for administrative, technical, and other services, and for coordinating the extension work of the Department of Agriculture and the several States.

Of the remainder, 20 percent shall be allotted among the eligible institutions in equal proportions; 40 per centum shall be allotted among the eligible institutions in the proportion that the rural population of the State in which each eligible institution is located bears to the total rural population of all the States in which eligible institutions are located, as determined by the last preceding decennial census; and the balance shall be allotted among the eligible institutions in the proportion that the farm population of the State in which each eligible institution is located bears to the total farm population of all the States in which the eligible institutions are located, as determined by the last preceding decennial census.

HIGHER EDUCATION PROGRAMS

Question. Please provide the Committee with a report on each of the CSREES higher education programs, indicating the institution receiving grants under each program and an assessment of how each program is meeting its objectives.

Answer. The information follows.

Higher Education Challenge Grants Program

Institutions funded in fiscal year 1997:

University of Arizona
University of California—Davis (2) [1]
University of Connecticut
University of Georgia
University of Hawaii at Manoa (2)
University of Idaho (2)
Purdue University, Indiana (2)
Iowa State University (2)
Kansas State University (3)
University of Kentucky
Louisiana State University
University of Missouri—Columbia (3)
University of Nebraska
Rutgers—The State University of New Jersey
New Mexico State University
Cornell University, New York (2)
North Carolina State University
Ohio State University (2)
Cameron University, Oklahoma
Oklahoma State University
Oregon State University
Pennsylvania State University
Southwest Texas State University
Texas Tech University
University of Vermont
Virginia Polytechnic Institute & State University (3)
Washington State University (3)
University of Wisconsin—River Falls (2)

The Challenge Grants Program's objective is to enable colleges and universities to provide high quality education in the food and agricultural sciences required to strengthen the Nation's food and agricultural scientific and professional work force. The program is accomplishing this by funding model projects that address regional and national higher education issues, use creative approaches to teaching, and foster partnerships among universities and between universities and the private sector. The program doubles the Federal investment since it requires dollar-for-dollar matching. The program serves the entire four-year academic community, making it the centerpiece of all USDA teaching grants programs. However, in spite of exciting

[1] Number indicates grants awarded.

projects that demonstrate its worth, only approximately 45 projects can be funded each year at the current level of funding. During the eight years of the program only 23.8 percent of proposals could be funded, in spite of many more worthy and needed projects.

Hispanic-Serving Institutions Education Grants Program

Institutions funded in fiscal year 1997:

Central Arizona College
California State University, Los Angeles
California State University, Bakersfield
Porterville College, California
Rancho Santiago College, California
Trinidad State Junior College, Colorado
Miami-Dade Community College, Florida
Albuquerque Technical Vocational Institute, New Mexico
University of New Mexico
Eugenio Maria De Hostos Community College, New York
Interamerican University of Puerto Rico
Southwest Texas Junior College
Texas A&M University—Kingsville

The Hispanic-Serving Institutions Education Grants Program was initiated in fiscal year 1997. The program's objectives are to promote and strengthen the ability of Hispanic-Serving Institutions to carry out higher education teaching programs in the food and agricultural sciences. The program will accomplish these by awarding grants to Hispanic-Serving Institutions for projects that will address one or more targeted need areas: curricula design and materials development; faculty preparation and enhancement for teaching; instruction delivery systems and scientific instrumentation for teaching; student experiential learning; and, student recruitment and retention. The program is competitive among Hispanic-Serving Institutions.

1890 Institution Capacity Building Grants Program

Institutions funded for teaching projects in fiscal year 1997:

Alabama A&M University (2)
University of Arkansas-Pine Bluff (3)
Florida A&M University (4)
Southern University, Louisiana
University of Maryland-Eastern Shore (2)
Alcorn State University, Mississippi (2)
Lincoln University, Missouri
North Carolina A&T State University (2)
South Carolina State University (2)
Prairie View A&M University, Texas
Virginia State University (3)

Institutions funded for research projects in fiscal year 1997:

Alabama A&M University (2)
Tuskegee University, Alabama (2)
Delaware State University
Fort Valley State University, Georgia (3)
Kentucky State University
Lincoln University, Missouri
North Carolina A&T State University
Langston University, Oklahoma (3)
Prairie View A&M University, Texas (2)

The competitive 1890 Institution Capacity Building Grants Program serves as the crux of the Department's high-priority initiatives to advance the teaching and research capacity of the 1890 Land-Grant Institutions and Tuskegee University. It reflects USDA's commitment to encourage more minorities to prepare for careers as food and agricultural scientists and professionals. The program meets these objectives by providing support for teaching and research projects in high-priority areas targeted by the institutions and USDA. Matching support from non-Federal dollars is strongly encouraged. Another component of the program that assists the 1890 Institution to build teaching and research capacity is the required cooperation of the institutions with one or more USDA agencies in developing the proposal and carrying out the project.

Multicultural Scholars Program

Grants are awarded every two years. Thus, institutions funded in fiscal year 1997, with both 1996 and 1997 funds, are:

Alabama A&M University
University of Arkansas, Fayetteville
California Polytechnic State University—San Luis Obispo
California State University, Fresno
University of Florida
University of Hawaii at Manoa
University of Idaho
University of Illinois, Urbana
Purdue University, Indiana
Michigan State University
Rutgers University, New Jersey
New Mexico State University
Cornell University, New York
University of North Dakota
North Dakota State University
Oklahoma State University
Pennsylvania State University
Seton Hill College, Pennsylvania
South Dakota State University
Tennessee State University
University of Vermont
Virginia Polytechnic Institute & State University
University of Wisconsin-River Falls
University of Wisconsin-Stout

The Multicultural Scholars Program ultimately aims to increase the utilization of America's diverse talent in the food and agricultural work force and to advance the educational achievement of all Americans. The program strives to attract and educate more students from groups currently under-represented in the food and agricultural sciences for careers in agriscience and agribusiness. The program accomplishes these goals by providing grants to universities for undergraduate scholarships for outstanding students from such underrepresented groups. The program is open to all colleges and universities. Since the program began in 1994, participating colleges and universities have provided 206 scholarships.

USDA National Needs Graduate Fellowships Program

Grants are awarded every two years. Thus, institutions funded in fiscal year 1998, with both 1997 and 1998 funds, are:

University of Arkansas, Fayetteville
University of Arizona
University of California, Davis
University of Florida
University of Georgia
Indiana University
Iowa State University (4)
University of Illinois, Urbana (3)
Purdue University (5)
Kansas State University
University of Kentucky
Worcester Polytechnic Institute, Massachusetts
Michigan State University (3)
University of Minnesota, St. Paul (6)
University of Missouri—Columbia (3)
North Carolina State University (3)
North Dakota State University
University of Nebraska—Lincoln (2)
Cornell University, New York (5)
Ohio State University
Pennsylvania State University (2)
Texas A&M University
Virginia Polytechnic Institute & State University (3)
University of Wisconsin, Madison (3)

Begun in 1984, the USDA National Needs Graduate Fellowships Grants Program seeks to stimulate the development of food and agricultural scientific expertise in targeted national need areas. This program represents a key investment strategy,

as it is the only Federal program targeted specifically to the recruitment and training of pre-doctoral students for critical food and agricultural scientific positions. The program achieves its goal by providing funds competitively to universities for attracting and supporting outstanding graduate students to pursue advanced degrees in areas of the food and agricultural sciences experiencing shortages of expertise. Approximately 1,028 Fellows have been trained within these areas of expertise under the Fellowships Program.

The program also provides competitive, special international study or thesis/dissertation research travel allowances for a limited number of current USDA Graduate Fellows. In 1997, seven Fellows from the following institutions were awarded funds for such international study: Indiana University; Iowa State University; Michigan State University; Purdue University; Cornell University; Oregon State University; and, Pennsylvania State University.

Tribal Colleges Endowment Fund and Tribal Colleges Education Equity Grants Program

All 29 tribally controlled Land-Grant Institutions were funded in the Tribal Colleges Endowment Fund and the Tribal Colleges Education Equity Grants Program in fiscal year 1997. They are:

Bay Mills Community College, Michigan
Blackfeet Community College, Montana
Cankdeska Cikana Community College, North Dakota
Cheyenne River Community College, South Dakota
College of the Menominee Nation, Wisconsin
Crownpoint Institute of Technology, New Mexico
D-Q University, California
Dine Community College, Arizona
Dull Knife Memorial College, Montana
Fond du Lac Tribal and Community College, Minnesota
Fort Belknap College, Montana
Fort Berthold Community College, North Dakota
Fort Peck Community College, Montana
Haskell Indian Nations University, Kansas
Institute of American Indian Arts, New Mexico
Lac Courte Oreilles Ojibwa Community College, Wisconsin
Leech Lake Tribal College, Minnesota
Little Big Horn College, Montana
Nebraska Indian Community College, Nebraska
Northwest Indian College, Washington
Oglala Lakota College, South Dakota
Salish Kootenai College, Montana
Sinte Gleska University, South Dakota
Sisseton Wahpeton Community College, South Dakota
Southwest Indian Polytechnic Institute, New Mexico
Standing Rock College, North Dakota
Stone Child Community College, Montana
Turtle Mountain Community College, North Dakota
United Tribes Technical College, North Dakota

The Tribal College Endowment Fund distributes interest earned by an endowment established for the 1994 Land-Grant Institutions (29 Tribally controlled colleges) as authorized in the Equity in Education Land-Grant Status Act of 1994. The Endowment Fund enhances education in agricultural sciences and related areas for Native Americans by building educational capacity at these institutions in the areas of curricula design and materials development, faculty development and preparation for teaching, instruction delivery systems, experiential learning, equipment and instrumentation for teaching, and student recruitment and retention. Interest earned in fiscal year 1997 was $451,397. After a 4 percent set-aside for administration, the remaining funds are distributed by formula: 40 percent in equal shares and 60 percent based on student count.

The Tribal Colleges Education Equity Grants Program is designed to strengthen higher education instruction in the food and agricultural sciences at 1994 Land-Grant Institutions. Projects focus on undergraduate and/or graduate studies in the food and agricultural sciences in the same areas as the Endowment Fund. Each institution receives $50,000.

SMALL FARM INITIATIVE

Question. Describe in more detail the Small Farms Initiative proposed to be funded at a level of $4 million for fiscal year 1999.

Answer. The Initiative will support multi-functional, mutually reinforcing research and extension activities that address high priority needs of small farmers as identified by the National Small Farm Commission, USDA's National Plan for Small Farms, and participants in the 1996 National Small Farm Conference. These high priority needs include:

—Research that focuses on solutions to production, environmental protection, and processing problems that demand low capital inputs, but build on small farmers' management, labor, and entrepreneurial skills;

—Research and extension programs that help small farmers build alternative markets for their products and develop value added products;

—Education and extension programs that small farmers can use to enhance their entrepreneurial skills and business acumen;

—Extension programs that focus on developing farmer networks to enhance the flow of information and knowledge both to and from USDA and the Land Grant system and among farmers; and

—Educational and extension programs directed at the specific needs of new or beginning farmers.

CSREES will apply the lessons learned in previous research, education and extension programs to build a grass-roots-driven, participatory program that involves farmers, non-governmental organizations, USDA, other federal and state agencies, and all of the Land Grant partners in program development and delivery. These programs will:

—Involve farmers in every aspect of program development, delivery and evaluation, including serving on review teams, conducting on-farm research, and taking leadership of farmer networks;

—Include non-governmental organizations that represent or work closely with small farmers in program development to build a sustainable public-private sector partnership;

—Bring women farmers, minority farmers, farm youth, socially disadvantaged farmers, and physically challenged farmers into the mainstream of program activities; and

—Build on the research, education and extension strengths of the 1994, 1890 and 1962 Land Grant partners to ensure the program meets local needs.

The structure of the CSREES program will be frugal with taxpayers' money while ensuring representation from a broad sector of the government and non-government community and targeting local needs. CSREES will develop a structure for program delivery that:

—Keeps operating costs down by using existing structures where possible and relying to the maximum degree possible on new cost-saving technologies to administer the program;

—Encourages regional flexibility in organization and program content to meet local needs;

—Uses one or more virtual centers or consortia, including both Land Grant and non-governmental organizations, to administer program activities; and

—Relies heavily on competitive grants with 100 percent nonfederal match encouraged for commodity-or location-specific activities.

Question. Why is this new initiative needed?

Answer. Small farms are an important part of the total agricultural sector. About 1.4 million of the nation's 1.9 million farms are small farms. Small farmers hold about one-third of the nation's farm land.

Small farms complement and contribute to the productivity of mid- and large-sized farms and agribusinesses. For example, a medium-sized feedlot averages 10,000 head of cattle. The feedlot operator depends on thousands of cow/calf operations, each with an average of 49 head of cattle, to provide the feeder calves for his feedlot.

Small farms often lead the way in new product development. For example, the fastest growing sectors of the agricultural market in the United States today are the organic and natural food markets. Small farms led the way in both areas and contribute most of the production.

Small farms enhance the quality of life for millions more Americans and protect natural resources for the entire nation. Small farms play a dynamic and important role in maintaining and stabilizing rural communities. Small farmers are often major clients of the entire business community in rural areas. Their tax dollars are critical to the entire community.

Small farms also enhance the quality of life for urban communities. Small farms are often the only productive land use that can serve as a buffer between high density population centers and rural areas. They contribute significantly to the quality of the urban diet by providing fresh, high-quality, diverse produce through direct markets to urban residents.

Small farms protect resources that serve all Americans. They provide open space for wildlife habitat, water recharge and the human need for contact with nature.

Small farms have special and varied needs and new research, education and extension programs are required to address these needs. Small farms are not failed large farms. Small farmers are resourceful entrepreneurs who produce valuable agricultural products using more limited fiscal, human and land resources than their larger scale neighbors. Because they have fewer resources available to them, they have special research, education and extension needs.

Small farms differ widely from state to state and even within the same state. Small farmers include many different cultural and social groups. For example, language can be a barrier for some and these groups need information available to them in their own languages. Some small farmers have limited educational backgrounds. They also have special information needs. Education and extension programs must address these multiple groups of clients.

Small farms produce an enormous range of products and many of them are products for which the existing research base is not well developed. Organic production provides one example. Relatively little research-based information is available for organic producers.

This Initiative will help address the issues raised by the National Small Farm Commission and the USDA Civil Rights Action Team. All of the priority needs that this Initiative will address are prominent in the Report of the National Small Farm Commission. Many of the programs and activities that this Initiative will fund will address the USDA Civil Rights Action Team's "Recommendations for Strengthening USDA's Research and Educational Assistance to the Socially Disadvantaged."

This Initiative contributes significantly to achieving USDA's overall goals and objectives. It specifically addresses four of the CSREES goals outlined under the REE mission area.

Goal 1, to achieve an agricultural production system that is highly competitive in the global economy;

Goal 2, to provide a safe, secure food and fiber system;

Goal 4, to achieve greater harmony between agriculture and the environment; and

Goal 5, to enhance economic opportunities and quality of life for families and communities

Question. What legislative authority is required for this new initiative?

Answer. The Administration has proposed that a new authority for an Integrated Research, Extension, and Education Competitive Grants Program be included in the re-authorization of the research title of the 1996 Farm Bill.

FORESTRY RESEARCH

Question. Why is a reduction in the McIntire-Stennis research program being proposed for fiscal year 1999? What will be the impacts of this proposed funding reduction?

Answer. This change will reduce the amount of funding available for formula distribution. McIntire-Stennis funding provides the base for development of faculty and graduate students to respond to current issues through State, private, and other sources of funding at eligible State institutions. States have maximum flexibility to fund specific programs through formula funds, thus the proposed decrease would have the least impact in those areas States identify as high priority.

Question. What specific research is being carried out under the McIntire-Stennis research program?

Answer. Research under McIntire-Stennis includes investigations relating to:(1) Reforestation and management of land for the production of crops, timber, and other related commodities; (2) management of forested watershed lands to improve conditions of water flow and to protect resources against floods and erosion; (3) management of forest and rangeland for production of forage for domestic livestock and game and improvement of food and habitat for wildlife; (4) management of forest lands for outdoor recreation; (5) protection of forest land against fire, insects, diseases, or other destructive agents; (6) utilization of wood and other forest products; (7) development of sound policies for the management of lands and the harvesting and marketing of forest products; and (8) such other studies as may be necessary to obtain the fullest and most effective use of forest resources.

Question. Other than through the McIntire-Stennis program, what forestry research is being supported by the ARS and CSREES? Please provide a description of each project funded, the level of funding for each project and who is conducting the research.

Answer. ARS scientists conduct considerable research related to forestry problems and interests. Some ARS laboratories and Forest Service Research Laboratories are co-located to facilitate cooperative research. Additional cooperation is with scientists at Lant Grant Universities and other research institutions. Brief descriptions of ARS research projects most applicable to forestry issues, including the level of funding for forestry related research in the fiscal year 1998 budget, and the ARS Facility doing the research, are as follows:

—Systematics of Flies of Importance in Biological Control, Agricultural Crops, and Forests—Systematics Entomology Laboratory, Beltsville, MD. This project is directed toward developing identification tools and a classification system for flies of agricultural importance. About $72,000 of the total project funding of $602,600 directly supports forestry related research.

—Discovery of Pest Behavior-Modifying Chemicals with Enhanced Biological Potency—Insect Chemical Biology Laboratory, Beltsville, MD. The objectives of this project are to discover and develop new and efficacious behavior-modifying compounds that will assist in the control of a wide range of insect pests. About $34,000 of the total project funding of $339,400 directly supports research on forest insect pests.

—Development of Sustainable Urban Agro-Systems and Biocontrol Strategies for Gypsy Moth—Insect Biocontrol Laboratory, Beltsville, MD. The principal objective of this project is to develop integrated insect pest management programs for urban-forest areas, such as home sites and parks. While not directly focused on forest ecosystems, much of the total project funding of $548,000 supports research that could prove beneficial to insect control in forests.

—Development of Biological Control Technology for Exotic Insect Pests with Emphasis on the Asian Longhorn Beetle—Beneficial Insects Introduction Research, Newark, DE. This project is directed toward promoting cooperation with other state and federal scientists in identifying, importing, releasing, and evaluating biological control agents for major exotic insect pests, such as the Asian Longhorn beetle. About $240,000 of the total funding of $400,000 for this project, which was initiated in fiscal year 1998, supports forestry related research.

—Biological Control of Gypsy Moth & Quarantine Services for Introduced Beneficial Insects—Beneficial Insects Introduction Research, Newark, DE. This project is directed toward: the exploration for natural enemies of gypsy moth in Asia; the importation, quarantine handling, and rearing of promising species; assessment of the danger these introduced insects pose to non-target organisms; and evaluation of the effectiveness of released species on the target pest. About $280,000 of the total project funding of $403,700 supports research on forest insect control.

—Agroforestry Systems for the Small Farmer—Dale Bumpers Small Farms Research Center, Booneville, AR. The major goals of this project are to provide a scientific basis for managing small farm ecosystems and to develop technologies that enhance their sustainability and productivity. Agroforestry systems, that combine livestock, tree, forage, and crop production, provide opportunities for small farms to enhance their economic competitiveness and visibility. About $375,000 of the total project funding of $1,259,500 directly supports forestry related research.

—Agroforestry Systems for the Appalachian Region—Appalachian Soil and Water Conservation Laboratory, Beckley, WV. The major objective of this project is to evaluate the simultaneous production of trees and understory species to optimize the economic and environmental integrity of Appalachian farms. Specifically, the research will target the development of tree/forage/specialty crop systems that can fill high value niche markets and provide raw materials for associated value added enterprises. The competitive and synergistic mechanisms by which agroforestry systems partition sunlight, water and nutrients will be determined for use in developing improved land management strategies. About $70,000 of the total funding for the project of $688,400 directly supports forestry related research.

—The Development of Pest-Resistant Landscape Trees to Enhance the Environment and Reduce the Use of Pesticides—Arboretum, Washington, D.C. The objectives of this project are: to breed and select pest resistant individuals and progenies of important landscape trees with an emphasis on fungal, bacterial and insect pests, and tolerance to environmental stresses; to assess the range of variability in resistance among host plants; and to propagate, evaluate, and

release improved cultivars. None of the total funding for the project of $743,300 supports research that is focused on forest ecosystems, but should benefit forest management.

—Genetics and Germplasm Evaluation of Landscape Woody Plants—Arboretum, Washington, DC. The objectives of this project are to select, evaluate and develop new cultivars of important nursery crops with pest and disease resistance, improved flowering and fruiting characteristics, better climatic adaptability, and greater tolerance to environmental stresses. None of the total funding for the project of $745,300 directly supports research on forest ecosystems, but should benefit forest management.

Other forestry research funded by CSREES includes an array of forestry research in the same general areas as McIntire-Stennis—the range of physical sciences, biology, and the social sciences, in forest ecosystems, forest management and forest products. These areas of research are being conducted under the Special Grants, the National Research Initiative, Hatch, Small Business Innovation Research, and Evans-Allen programs, and multi-disciplinary projects through the Fund for Rural America.

The information on CSREES forestry research follows.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE FORESTRY RESEARCH (EXCLUDING McINTIRE-STENNIS)—FISCAL YEAR 1996

Station	Hatch	Grants	Other
Alabama	$167,543	$26,156	
Alaska	9,378		
Arkansas	36,095	126,459	
Arizona	15,987	18,468	
California	157,187	240,034	
Colorado	102,729	28,000	
Connecticut	73,190	87,174	
Delaware			$7,593
Florida	44,004		
Georgia	9,042	28,414	
Hawaii	31,475	3,011	
Illinois	245,115	19,195	
Indiana	79,168		
Iowa	19,376		
Kansas	16,978		
Kentucky	7,157		81,469
Louisiana	4,000		154,228
Massachusetts	22,127	355,996	
Maryland		76,363	
Maine	54,402	448,556	
Michigan	103,620	613,353	
Minnesota	200,513		3,263
Mississippi	72,308	713,392	
Missouri	85,089	34,903	3,570
Montana			
North Carolina	11,864		
Nebraska	46,451		
Nevada	77,548	9,218	
New Hampshire	25,041		
New Jersey	27,025	13,907	
New Mexico	19,469		
New York	22,619	330,257	
Ohio	19,054		
Oregon	84,609	1,335,001	
Pennsylvania	49,639	20,019	
South Carolina	5,394		106,922
Tennessee	12,612		
Texas	47,372	25,976	
Utah	14,343	447	

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE FORESTRY RESEARCH (EXCLUDING McINTIRE-STENNIS)—FISCAL YEAR 1996—Continued

Station	Hatch	Grants	Other
Virginia	53,856	90,646	.....
Wisconsin	95,839	89,373	.....
Washington	62,568	796,337	.....
West Virginia	229,202	.....	.....
Wyoming	.....	30,987	.....
Total	2,460,988	5,561,640	357,045

State	Hatch	Grants	Other
Alabama:			
Machinery systems for improved forest management	$60,140	.....	.....
Simulation and automation to improve quality, productivity and performance in agriculture	17,582	.....	.....
Effects of ecosystems on soil acidity and aluminum toxicity	6,629	.....	.....
Microbial interactions in agricultural and forestry ecosystems	1,124	.....	.....
Transgenic manipulation of higher fungi (homobasidiomycetes)	595	.....	.....
Pit membrane structure and development in hardwoods	2,750	.....	.....
Effect of environmental conditions on load duration behavior of structural composite lumber	.....	$26,156	.....
The National Atmospheric Deposition Program	.....	.....	.....
Urban tree evaluation and environmental factors affecting urban landscape plant use	75,714	.....	.....
Growth regulation of herbaceous and woody ornamental plants	2,849	.....	.....
Nutrition, growth and antler development of Alabama white-tailed deer	159	.....	.....
Biological reconnaissance of the Grady Pond depression wetlands of the Central Gulf Coastal Plain	.....	.....	.....
Evaluation of benthic invertebrates, water quality and watershed conditions in Southeastern streams	.....	.....	.....
Total	167,543	26,156	.....
Alaska: Classification and interpretation of permafrost soils in Alaska	9,378	.....	.....
Arkansas:			
Regional advantages in producing and marketing woody ornamentals	2368	.....	.....
National Atmospheric Deposition Program	12,601	.....	.....
Integrated forest management strategies	.....	126,459	.....
Ecology and impact of gypsy moth invasion	21,126	.....	.....
Arkansas Forest Resources Center: A continuing research program	.....	.....	.....
Arkansas Forest Resources Center	.....	.....	.....
Total	36,095	126,459	.....
Arizona:			
Criteria for defining site conservation thresholds for Arizona rangelands	1,103	.....	.....
Forage utilization patterns and plant response under short duration grazing	593	.....	.....
Nutritional content of forage used by Sonoran pronghorn in Arizona	451	.....	.....
Evaluating forest policies to determine their adequacy for ecosystem management	778	.....	.....
Advanced resource technology for natural resource management and environmental assessment	9,945	.....	.....
Social, economic and institutional influences on rangeland management	415	.....	.....
Hydrology of Southwestern wetlands and riparian areas	1,488	.....	.....
Can cattle use artificial and social visual cues to track forage locations	416	.....	.....
Alien grass invasion and ecosystem feedback in southern Arizona	798	.....	.....
Seed and seedling fate of warm-season grasses in relation to seedbed water availability	.....	1,853	.....
Shifts in lower treeline: Identifying causal factors	.....	16,615	.....

State	Hatch	Grants	Other
Water source controls tree ecophysiological processes in riparian ecosystems	.....	.....	.....
Total	15,987	18,468	.....
California:			
Pesticides and other toxic organics in soil and their potential for ground and surface water contamination	5,901	.....	.....
Reactions of chemical species in soils	5,765	.....	.....
Organic compounds in forest soil, and effects on microbial processes and nutrient availability	21,858	.....	.....
Environmental transformation, exposure, and effects of pesticide residues	1,507	.....	.....
Climate and land use controls on the soil carbon cycle of California	14,951	.....	.....
The role of biological control in urban pest management systems	15,852	.....	.....
Nest-box barriers for population and roosting protection	16,367	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	424	.....	.....
Interactions among bark beetles, pathogens and conifers in North American forests	13,225	.....	.....
Ecological investigations of mycorrhizal fungi in California forest ecosystems	18,399	.....	.....
Fungal evolution: Pathogen population genetics and identification	116	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	2,828	.....	.....
Poverty in rural forest communities: An historical and biographical assessment	.....	2,604	.....
Engineering factors in forest-resource production, utilization and management	11,581	.....	.....
Analysis of energy usage and development of energy conservation technology	3,640	.....	.....
Improve food safety through discovery and control of natural and induced toxicants and antitoxicants	898	.....	.....
Requirements for natural regeneration of red fir in disturbed and undisturbed sites	4,186	.....	.....
Herbivore-host interactions and interactions between herbivores mediated through their hosts	.....	.....	.....
Prediction of coast redwood and giant sequoia growth rates as a function of climate	1,560	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	4,682	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	.....	.....	.....
Chemical ecology and IPM programs for pest insects	809	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	8,548	.....	.....
Fire and dynamics of conifer forest ecosystems in southern California and northern Baja California	4,089	.....	.....
The edaphic role of weathered rock in a seasonally-dry coniferous forest ecosystem	.....	43,271	.....
Climate change and genetic diversity in Mexico's threatened spruce ecosystems	.....	179,161	.....
Influence of substrate heterogeneity on ecosystem productivity and resource use	.....	14,998	.....
Total	157,187	240,034	.....
Colorado:			
Cattle preference as a tool to modify riparian vegetation	.....	.....	.....
Benefits and costs transfer in natural resource planning	28,806	.....	.....
Grazing management for efficient water use and conservation in mountainous riparian ecosystems	153	.....	.....
Management of rangeland vegetation and animals for system sustainability	73,618	.....	.....
Economic analysis of rangeland use	152	.....	.....

State	Hatch	Grants	Other
Identifying the mechanism for reduced photosynthetic performance in old trees	.....	28,000	.....
Total	102,729	28,000	.....
Connecticut:			
Using supplemental food to increase effectiveness of ants as gypsy moth predators	.....	51,874	.....
Transgenic strains of the chestnut blight fungus for biocontrol in the forest	.....	35,300	.....
Ecology and impact of gypsy moth invasion	2,304	.....	.....
Government policies for regulating the use of water and land resources	765	.....	.....
Acquiring an ethic of stewardship among Connecticut woodland owners	39,812	.....	.....
The role of cytokinin metabolism and absorption in controlling in vitro plant development	936	.....	.....
Forest landscape ecosystem assessment through satellite remote sensing and neural processing	13,484	.....	.....
Determination of UVB solar radiation above forest canopies from meteorological measurement	312	.....	.....
Drift of pesticides from orchard spray operations: Model development and validation	15,577	.....	.....
Total	73,190	87,174	.....
Delaware: Some effects of agricultural drainage on natural systems	.....	.....	$7,593
Florida:			
The National Atmospheric Deposition Program	8,358	.....	.....
Biology and pest management of arthropod pests of ornamental alents of southern Florida	3,282	.....	.....
Comparison of two management programs on the growth & incidence of decline (blight) of citrus trees	.....	.....	.....
Comparison of two management programs on the growth and incidence of decline (blight) of citrus	32,364	.....	.....
Total	44,004	.....	.....
Georgia:			
Benefits and costs in natural resource planning	2,420	.....	.....
Semiochemical management of southern pine bark beetles	1,562	.....	.....
Pathology and management of diseases of forest and shade trees and woody ornamentals	279	.....	.....
Examination of the components of cold hardiness in woody landscape plants	4,782	.....	.....
Relationship of plant root traits to resource competition and stress tolerance	.....	28,414	.....
Total	9,042	28,414	.....
Hawaii:			
Evaluating alternative crops in Hawaii using crop growth models	216	.....	.....
The influence of sediment removal and deposition on soil and water quality in Hawaii	.....	3,011	.....
Antiquality factors affecting the utilization of leucaena as a livestock feed	.....	.....	.....
Molecular analysis of rhizobium-tree legume symbiosis	13,903	.....	.....
Biological control of exotic weeds of Hawaiian range and forest lands	15,557	.....	.....
Diseases of Niu, Olona, Noni, Milo and Kou	.....	.....	.....
Propagation of native Hawaiian plants for the ornamentals industry	43	.....	.....
Weed control in vegetable and ornamental crops growing in the tropics	1,545	.....	.....
Altitudinal variations in arthropods associated with decomposing remains in Hawaii	210	.....	.....
Total	31,475	3,011	.....

State	Hatch	Grants	Other
Illinois:			
Utilization of soybean meal/soy molasses in polymers: Plywood adhesives and polyurethane foams	104	.....	.....
Biomass and nitrogen cycling in sewage sludge amended fields	12,532	.....	.....
Inventory and analysis of the mesophytic forest and its western extensions	14,4863	.....	.....
Genetic manipulation of perennial plants	4,190	.....	.....
Forest community dynamics of east-central Illinois forests	36,753	.....	.....
Rate of biodegradation of treated hardwood	23,693	.....	.....
Agriculture and urbanization: Toward satisfying competing demands	3,582	.....	.....
Adaptations of black oak to fire	17,265	.....	.....
Biological control of verticillum wilt in woody nursery crops	2,134	.....	.....
Organic perspectives of C N S and P biogeochemistry in a low elevation spruce-fir ecosystem	.....	19,195	.....
Total	245,115	19,195	.....
Indiana:			
Separations of bioproducts	1,842	.....	.....
Quality control in wood product manufacturing	22,770	.....	.....
Soil spatial information systems for global modeling and ecosystem management	3,366	.....	.....
Influence of surface and canopy morphology on radiant energy transport	1,172	.....	.....
Managing insect and mite pests of ornamental plants	1,638	.....	.....
Productivity relationships in benthic communities	19,432	.....	.....
Genetics of reintroduced wildlife species in North America	7,532	.....	.....
Climate and structural control of canopy processes in mixed-hardwood forests	.....	.....	.....
Population processes of forest mammals in fragmented landscapes	21,060	.....	.....
Utilization of biomass	356	.....	.....
Total	79,168	.....	.....
Iowa:			
Production of wood adhesives from soy and corn proteins	2	.....	.....
Interactions among bark beetles, pathogens, and conifers in North American forests	10,391	.....	.....
Induction and optimization of biological nitrogen fixation in temperate woody legumes	8,790	.....	.....
Development of coconut coir products as horticultural substrates	193	.....	.....
Total	19,376	.....	.....
Kansas:			
Improved systems of management for pecan insect and mite pests	6,209	.....	.....
Range improvement investigations	3,616	.....	.....
Climate and agricultural landscape productivity analysis and assessment in the North Central region	1,073	.....	.....
Pecan experiment field	5,040	.....	.....
Rootstock and interstem effects on pome and stone fruits	1,040	.....	.....
Total	16,978	.....	.....
Kentucky:			
Biological improvement of chestnut and management of the chestnut blight fungus	7,157	.....	.....
Development of clonal mass propagation procedures for forest tree species	.....	.....	81,469
Total	7,157	.....	81,469
Louisiana:			
Impact, population dynamics, and control of insect defoliators in Louisiana forests	4,000	.....	.....

State	Hatch	Grants	Other
Effect of soil compaction and flooding on survival, growth and physiological responses			154,228
Total	4,000		154,228
Massachusetts:			
Navigation and habitat use by raccoons and opossums in suburban forests—implications for management	7,298		
The National Atmospheric Deposition Program	8,952		
Allocation of scarce recreation resources: Enhancing support and understanding for management decision	5,877		
The role of forest floor nitrogen leaching in ecosystem itrogen retention		39,996	
Influence of above- and below-ground litter on forest soil organic matter dynamics		316,000	
Total	22,127	355,996	
Maryland: Production of nitrogen gases in riparian forests receiving cropland discharges		76,363	
Maine:			
Northern New England Product Development and Marketing Center		30,392	
New England wood research		211,470	
New England wood research		200,511	
Modeling and analysis of value-added production systems	10,148		
Benefits and costs of resource policies affecting public and private land	21,110		
Evolutionary biology of amelanchier (shadbush), picea (spruce), and isotria (small whorled poronia)			
Policy analyses of maine's forestry sectorMaine			
Effects of climate and substrate quality on soil microbial populations			
The National Atmospheric Deposition Program (NADP)	23,144		
Wood properties and yield of northern conifers grown under short rotations		6,183	
Total	54,402	448,556	
Michigan:			
Plant germplasm and information management and utilization	4,029		
Physiology of carbon balance in fruit crops: Abiotic and biotic thresholds			
Biological improvement of chestnut and management of the chestnut blight fungus	7,222		
Fates and effects of trace contaminants in aquatic systems			
Microbial ecology of denitrification and biodegradation	2,453		
Biological control and integrated management of insects in nurseries, turf and the urban forest	1,815		
Physiological adaptation and cultural manipulation of plant systems			
Lignin degradation by basidiomycete fungi and applications			
Plant chem. defenses: Insect detox. & ecol. factors affecting gene flow and host sel./hybrid zone			
Wildlife responses to habitat management			
Avirulent fungal and bacterial plant pathogens: Their role and fate in plant disease epidemics	4,540		
Predicting recreation and tourism choices			
Impacts of recreation and tourism			
Biol. active nat. prod. & value added prod. from plants & microbes for agri. & pharmaceutical use	2,806		
Application of present value techniques for financing design and selection of durables	2,618		
Degradation of lignocellulose by termites and their microbial symbionts			
The National Atmospheric Deposition Program (NADP)	33,302		
Temporal and spatial dynamics of insects in diverse landscapes: A risk assessment perspective	19,917		
Development of arthropod resistance management systems			
Ecological impacts and management of forest insects in Michigan			

State	Hatch	Grants	Other
Environmental and genetic components of reproduction in bird populations	.....	.....	.....
Mechanisms of baculovirus pathogenesis in insects	.....	.....	.....
Diet choice and foraging in ants	14,171	.....	.....
Improving public involvement in agricultural and natural resource issues	.....	.....	.....
The Center for the Study of Insect Diversity	10,577	.....	.....
Relationship between habitat characteristics and fish population dynamics	.....	.....	.....
Influences of natural resource recreation on land management in Michigan	.....	.....	.....
Social science and communications in outdoor recreation resource management	.....	.....	.....
Physiological basis for integrated approach towards sustainable mgt. of plant-parasitic nematodes	170	.....	.....
Advanced technology applications to Eastern hardwood utilization	.....	103,416	.....
Advanced technology application to Eastern hardwood utilization	.....	34,2271	.....
Advanced technology applications to Eastern hardwood utilization	.....	44,977	.....
Infectious mitochondrial hypovirulence in cryphonectria parasitica	.....	105,041	.....
Isolation of symbiosis related genes essential to ectomycorrhizae formation	.....	17,648	.....
Total	103,620	613,353	.....
Minnesota:			
The impact of land and water management decisions on Minnesota's people and their environment	8,648	.....	.....
Biology, ecology and control of tree diseases	76,685	.....	.....
Atmospheric deposition: Long-range transported and local source emitted air pollutants	.....	.....	.....
Diagnosis, epidemiology and control of plant diseases caused by badna viruses	669	.....	.....
Quantification of nutrient cycles of Minnesota forests	12,362	.....	.....
Growth and succession in forested ecosystem simulations	9,741	.....	.....
Wild ungulates: Relationships with timber, vegetation, sodium, urban problems, and restoration	6,575	.....	.....
Forestry and forest products research in the United States: A review and assessment	.....	.....	3,263
Remote sensing inputs to inventory and analysis of natural resources	37,246	.....	.....
Methods and procedures for benefits-based management of recreation and nonrecreation resources	.....	.....	.....
Assessment and use of genetic diversity of Northern tree species	.....	.....	.....
Physiology of tree growth—mineral nutrition and vegetation management	.....	.....	.....
Wood-based composites: Investigations leading to new and improved products and raw materials	20,462	.....	.....
Assessment of raw material trends and life cycle environmental impacts of alternative raw materials	3,826	.....	.....
Dimensional instability of paper: Thermodynamic approach	.....	.....	.....
Lignin biosynthesis, biodegradation and derivative plastics	24,299	.....	.....
Biochemistry of fungi: The heat shock response	.....	.....	.....
Total	200,513	.....	3,263
Mississippi:			
Interaction among bark beetles pathogens and conifers in North American forests	72,308	.....	.....
Development and maintenance of microcomputer software for agriculture	.....	.....	.....
Tree mortality as a result of insect-fungal-host interactions: Elucidation of mechanisms	.....	.....	.....
Wood Utilization Research Program	.....	222,921	.....
Improvement in furniture design and manufacturing technology	.....	10,140	.....
Development of specialty wood composites	.....	8,270	.....
Compaction of soils on forested lands and assessing its effect on the growth of loblolly pine	.....	51,840	.....
Wood-derived chemicals	.....	5,132	.....

State	Hatch	Grants	Other
Business and production systems		1,736	
Wood Utilization Research Program		122,636	
Load-deformation relation of staple joints and factors affecting its behavior		7,383	
Development of new wood preservatives based on synergistic combinations			
Wood Utilization Research Program		122,280	
Wood Utilization Research Program		161,054	
Total	72,308	713,392	
Missouri:			
Drought tolerance mechanisms in black walnut (juglans nigra l.)		32,592	
The importance of root signaling in drought adaptation mechanisms		2,311	
Macropore-scale water and solute transport processes	2,427		
Dynamics of Missouri fish populations	3,225		
Nutrient cycling in agroecosystems	3,562		
Seasonal patterns in the trophic State of Missouri reservoirs	8,879		
Ecology and conservation of urban greenspace	10,510		
The ecology and behavior of Missouri fishes, with emphases on reproduction and non-game species	2,592		
Ecology and conservation of birds in grassland and wetland ecosystems in Missouri	5,181		
Deer ecology in rural and urban landscapes	12,804		
Temporal and spatial variability in soil landscapes	5,214		
The relationship of soil properties with landscape position in Missouri	2,161		
Ecology, conservation, and restoration of mammals	3,244		
Ecology and impact of gypsy moth invasion	10,755		
Horticultural utilization of organic residues	1,112		
Ecology and epidemiology of plant diseases in agricultural and native ecosystems	9,341		
Leadership for advanced materials from renewable resources			3,570
Economic and environmental implications of expiring conservation reserve contracts	4,077		
Compliance benefits of the Conservation Reserve Program	7		
Total	85,089	34,903	3,570
Montana:			
Agricultural policy			
Validation & use of multispectral radiometry to measure forage biomass in wildlife livestock			
Dwarf mistletoe and biomass allocation, gas-exchange, and water relations of Douglas fir			
Total			
North Carolina:			
Development and integration of entomopathogens into pest management systems	4,111		
Ecology of forest tree diseases	2,539		
Balancing soil arthropod management and soil health in agriculture	472		
The rosette bud mite and the balsam woolly adelgid on Fraser fir Christmas trees	3,109		
Relationships between soil fertility and plant communities in the Southern Appalachians	1,633		
Wood machining and tooling research			
Total	11,864		
Nebraska:			
Changes in soil properties associated with changes in land use over the past century	15,000		
Flow of water and particles in soils and porous media	7,500		
Regulation of photosynthetic processes	4,815		
Regulation of photosynthetic processes	3,180		

State	Hatch	Grants	Other
The design of an enzyme reactor for the conversion of hemicellulose to menosaccharides	3,080		
A national agricultural program to clear pest management agents for minor use			
Cultural practices to minimize environmental stress on vegetable crop production and physiology	280		
Introduce and develop high value crops from hardy woody plant germplasm for the north central region	75		
Wildlife damage management for sustainable systems	205		
Water quality and water quantity criteria for Nebraska fishes	260		
Avian species in diverted farmland	1,689		
Primary water quality determinents of attached algal communities in Nebraska	30		
Evaluation of environmental factors and fish species for aquaculture development in Nebraska	393		
Exchange of carbon dioxide and other atmospheric trace gases in vegetated ecosystems	530		
Remotely sensed estimates of productivity, energy exchange processes and water stress in vegetation	875		
Drought: Response and policy implications	3,258		
Relationships between remotely-sensed spectral properties of vegetated surf. & biophysical property	705		
Feedlot management and production considerations for the cattle feeder	1,750		
Selection and development of native herbaceous landscape plants	2,828		
Total	46,451		
Nevada:			
Improved characterization and quantification of flow and transport processes in soils	3,250		
Natural products chemistry as a resource for biorational methods of insect control	56,873		
Natural product chemistry as a resource for biorational methods of insect control	464		
Natural products chemistry as a resource for biorational methods of insect control	16,716		
Natural product chemistry as a resource for biorational methods of insect control	245		
Conceptual and predictive models of paleovegegation dynamics in the Great Basin		9,218	
Total	77,548	9,218	
New Hampshire:			
The National Atmospheric Deposition Program	15,620		
Molecular probes for nitrogen-fixing symbionts of pioneer plants			
Fitness indicators for forest tree populations in a changing climate	4,937		
Riparian denitrification as a control on nitrate export before forest harvesting	1,966		
Developmental potential of New Hampshire lakes and shorelines: Supply and demand issues	2,518		
Total	25,041		
New Jersey:			
Small mitochondrial dsrna that causes hypovirulance of cryphonactria darasitica		13,907	
Ecosystem causes and consequences of exotic plant invasions in hardwood forests			
Cellulase, the biologic key to renewable energy	3,221		
Technical and economical efficiencies of producing marketing and managing landscape plants	102		
Controlled environment and facilities engineering for greenhouses	7,197		
Biological improvement of chestnut and management of the chestnut blight	15,550		

State	Hatch	Grants	Other
Molecular characterization of intracellular membrane plant K+ channels	955		
The effects of ectomycorrhizae on decomposition in coniferous forest soil			
Total	27,025	13,907	
New Mexico:			
Plant genetic resource conservation and utilization	3,395		
Benefits and costs in natural resource planning	970		
Systematic and floristic studies of Southwestern plants	5,894		
Cellular and molecular genetics approaches for crop improvement in semiarid lands agriculture	9,210		
Total	19,469		
New York:			
The National Atmospheric Deposition Program	1,297		
Integrated pest management for diversified fresh market vegetable producers		5,268	
Intraspecific variation in host plant water relations in response to infection by ash yellows	14,199		
A new soil medium for urban tree survival	4,703		
Response of pin cherry-Northern hardwood stands to changes in resource availability			
Transmission of hypovirulence in populations of cryphonectria parasitica		12,025	
Diseases of ornamental trees and shrubs in New York State			
The taxonomy and uses of the cultivated oaks (quercus) of the United States	2,420		
1995 Cary Conference: Enhancing the ecological basis for conservation		6,840	
Effects of predation and abiotic factors on detritus food webb in forests		117,732	
Organic matter chemistry in clear-cut and unmanaged forest ecosystems		55,304	
Pathogen incidence & rate of spread: Impact of habitat & landscape attributes		38,472	
Aggregation pheromone in Ips Pini			
Biomass conversion to industrial polysaccharides			
Acid-catalyzed hydrolysis of lignin aryl-ether linkages in wood		38,358	
Genetics of pheromone based assortative mating in the bark beetle Ips Pini		56,258	
Total	22,619	330,257	
Ohio:			
A national agricultural program to clear pest control agents for minor uses			
Developing useful control tactics for arthropod pests of landscape plants	14,598		
The economics of solid waste management and recycling	2,504		
Economics of sustainable food, forest and mining systems	1,952		
The National Atmospheric Deposition Program			
Rural economic development: Alternatives in the new competitive environment			
Total	19,054		
Oregon:			
Biological control of weeds	3,358		
Ecology and management of foothill rangelands	2,289		
Interactions among bark beetles, pathogens and conifers in North American forests	33,598		
Ecology and management of forest insects	6,331		
Environmental transformation, exposure, and effects of pesticide residues	3,454		
Behavior and persistence of pesticides in crops and the environment	1,798		

State	Hatch	Grants	Other
Ecology and management of Western juniper (juniperus occidentalis) in Oregon	7,446		
Biotechnology in Oregon		528	
Characterization of stream/river fish assemblages in Oregon	1,312		
Ecosystem dynamics, anthropogenic impacts and restoration of wildlife and fish habitats	14,816		
Measuring N(2) fixation & N cycling in pure & mixed red alder strands using 15(N)		1,318	
Size and diversity of frankia populations that nodulate ceanothus SPP		47,188	
Ecological interactions in high elevation lakes: Impacts of human and natural disturbance	10,209		
Center of Wood Utilization Research		140,219	
Center for Wood Utilization Research		174,870	
Center for Wood Utilization		286,469	
Center for Wood Utilization Research		226,456	
Center for Wood Utilization Research		48,074	
Elucidation and optimization of bioprotectant mechanisms against wood staining fungi		30,391	
Dynamic characteristics of metal-plate-connected wood joints		31,197	
Vapor copper—a potential new wood preservative		37,886	
Mapping of genes related to adaptation in Douglas-fir hybrids		68,048	
Root decay in 3 coniferous forests: Substrate, temperature and moisture effects		50,593	
Identifying the mechanisms for reduced photosynthetic performance in old trees		25,974	
Controls on forest soil carbon dynamics: Does nitrogen management matter		73,206	
Predicting decomposition dynamics of woody detritus of forest ecosystems		92,584	
Total	84,609	1,335,001	
Pennsylvania:			
Ecological indicators & restoration strategies for wetland/riparian/stream components of watersheds	204		
National Atmospheric Deposition Program—monitoring of atmospheric chemical deposition effects			
Non-traditional land-based solutions for municipal waste disposal	10,499		
Economic impact of travel and tourism in Pennsylvania			
Biochemistry of biorational pesticides—bacillus thuringiensis and baculoviruses	26,675		
Improving the efficacy of biorational pesticides used in aerial application			
Enhancing international value-added opportunity for U.S. hardwoods (in Japan)		13,184	
Effect of forest irrigation on avian and mammalian communities			
Determining the efficacy and crop tolerance of herbicides used in ornamentals and right-of-ways	8,334		
Creep behavior of wood-foam composite structural insulated panels		6,835	
Artificial intelligence-based modeling of natural and managed systems	3,310		
Ecological indicators & restoration strategies for wetland/riparian/stream components of landscapes	616		
Total	49,639	20,019	
South Carolina:			
Impact of bark boiler ash recycling on heavy metal loads in wildlife in coastal plain forests	5,394		
The potential of forestry-based rural economic development in South Carolina			106,922
Total	5,394		106,922
Tennessee:			
Endophyte infected & endophyte free tall fescues & other forages in management systems for herbivore	8,236		

State	Hatch	Grants	Other
Reducing environmental impacts of production agriculture	4,376		
Total	12,612		
Texas:			
Benefits and costs transfer in natural resource planning	242		
Biological improvement of chestnut and management of the chestnut blight fungus	12,822		
Environmental soil chemistry, fertility, management, and plant nutrition for forage and other crops	4,863		
Development of PCR based probes for detection of fungal plant pathogens			
Information engineering and development of integrated resource management systems	166		
Sustainable farming systems and resource conservation	537		
Production and improvement of plants for urban environments	24,593		
Development of propagation technologies and assessment of drought tolerant ornamental species	4,150		
Amelioration of degraded rain forest soils by trees		23,366	
Conifer transformation with shoot apices and agrobacterium		2,610	
Total	47,372	25,976	
Utah:			
Interactions among bark beetles, pathogens, and conifers in North American forests	14,343		
Shrub selection and breeding for rangeland rehabilitation		447	
Total	14,343	447	
Virginia:			
Antioxidant metabolism in soybean and Eastern white pine: Enzyme purification and characterization	30,606		
Investigating the role of pales weevil in procerum root disease epidemiology			
Biological improvement of chestnut and management of the chestnut blight fungus	23,250		
The effect of continuous process technology on softwood lumber quality			
Measurement of drying stresses in red oak			
Solid-state NMR, dielectric and viscometric study of PF resin cure			
Mechanisms by which R. maximum influences forest canopy structure		90,646	
Total	53,856	90,646	
Wisconsin:			
Development of statistical methodologies for biology	3,197		
Biochemical ecology of interactions between aspen and forest insect pests	23,584		
Sphaeropsis blight of pines: Pathogen types and host resistance	23,296		
Interrelation of photosynthesis, respiration and biomass distribution as determinants of tree growth	30,339		
Advanced modeling of the North American pulp and paper sector		16,581	
Ecology and impact of gypsy moth invasion			
Ecological, sociological and economic aspects of white-tailed deer damage to agricultural crops	13,157		
Beyond tiger: The links between the human layer and natural resource layers in a GIS environment	2,266		
Analysis and forecasting of the impacts of GATT and NAFTA on the U.S. forest products industry		63,840	
Mechanisms of persistence of aspen seedlings following the 1988 Yellowstone fires		8,952	
Total	95,839	89,373	

State	Hatch	Grants	Other
Washington:			
Physical chemical state and plant availability of uranium in contaminated mine soil	58,411	.....	.....
Biological and systematic studies of xylaria and allied genera	4,157	.....	.....
Effect of enhanced UV-B radiation on carbon dynamics in selected tree species	.....	79,308	.....
Enhancing the competitiveness of ag and forest products	.....	13,500	.....
Benefits of post resistance to sustainability of hybrid poplar production systems	.....	31,196	.....
Defense reactions in conifers: Oleoresinosis	.....	71,521	.....
Forest ecosystem study, Fort Lewis, WA	.....	123,160	.....
A comparison of sporocarp and mycorrhiza dominance by ectomycorrhizal fungi	.....	85,274	.....
Carbon isotope discrimination and water use efficiency of poplars	.....	36,858	.....
Competitiveness in international forest products	.....	257,991	.....
The use of fiber wettability to assess sizing efficiency	.....	18,237	.....
Effects of plant competition in secondary succession: An experimental approach	.....	3,825	.....
Molecular genetics of populus: Collaborative network	.....	37,766	.....
Mapping quantitative trait loci in populus	.....	10,040	.....
Single fiber kappa analyzer	.....	27,661	.....
Total	62,568	796,337	.....
West Virginia:			
Inventory of Appalachian hardwood stands	63,000	.....	.....
Biological improvement of chestnut and management of the chestnut blight fungus	110,856	.....	.....
Bionomics of forest defoliating insects and insects secondarily attacking defoliation stressed trees	34,328	.....	.....
Benefits and costs transfer in natural resource planning	14,707	.....	.....
Investigation of the environmental impacts of kiln drying Appalachian hardwoods	6,311	.....	.....
Total	229,202	.....	.....
Wyoming: Spatial disturbance history in the Medicine Bow National Forest, Wyoming	.....	30,987	.....
Total	2,460,988	5,561,640	357,045

Question. Please distinguish the role of the Forest Service and that of ARS/CSREES in forestry research.

Answer. ARS conducts limited research related to forestry. Even though this research has relevance, and potential benefits for forest management, it is not directed toward the management of forest ecosystems. One of the principal targets for this ARS research is the urban environment. ARS research on agroforestry is primarily directed toward optimizing the economic and environmental benefits to both crop and livestock operations from interactions created when trees or shrubs are deliberately combined with farm crops and animals. Other ARS activities related to forestry research include research projects on the use of trees as windbreaks, in arboretums, and for horticultural applications. CSREES has a very different mission than the in-house research at USDA. The McIntire-Stennis funds are part of the land grant system, which has a tripartite mission of research, extension, and education. The Forest Service has no dedicated programs for the extension of their research results, nor for education.

The McIntire Stennis Act, states "it is further recognized that forestry schools are especially vital in the training of research workers in forestry." Thus, the capacity building aspect of this program was laid out in the original legislation. The forestry schools are also unique, in comparison to the Forest Service in that they have more forest scientists available, from a wider range of disciplines, and have a graduate student workforce available and therefore provide an organization capable of responding quickly to new trends and issues. Given their mandate, the Forest Service spends a higher proportion of its effort on research relating to public land management.

Finally, research direction and priorities are set nationally and regionally in Forest Service research, and state by state in CSREES cooperative research. The Dean or Department Head is usually in direct contact with stakeholders at the state level, so that in general, statewide and short-term research is the niche of the universities, and regional/national and long-term research is the niche of the Forest Service. The Forestry Research Advisory Council (FRAC) provides advice and reports on regional and national planning and coordination of forestry research within the Federal and State agencies concerned with developing and utilizing the Nation's forest resources, forestry schools, and the forest industries, as well as advising on the apportionment of funds for the McIntire-Stennis Program. Finally, some Forest Service research stations do not have all the relevant disciplines represented, and so for some areas in some disciplines, only universities are available to conduct research. This is particularly the case in social science research. The Forest Service, CSREES and the universities participate in ongoing coordination of research efforts.

SPECIAL AND ADMINISTRATIVE GRANTS

Question. For each of the special research and administrative (research and extension) grants funded for fiscal year 1998, please indicate the following: a detailed description of the project funded; who is carrying out the research; federal and non-federal funding made available for the project to date, by fiscal year; and the anticipated completion date for the original objectives of the project and whether those objectives have been met; and the anticipated completion date of additional or related objectives. For each project, please indicate when the last agency evaluation of the project was conducted. Provide a summary of the last evaluation conducted.

Answer. The information follows:

AFLATOXIN RESEARCH, ILLINOIS

The main focus of work on this problem has been identification of corn germplasm resistant to aflatoxin. Of continuing importance are the identification of Aspergillus flavus-inhibiting compounds and fungus-inhibiting enzymes, including developing effective transformation methods and plant regeneration techniques. There has been increased national concern over aflatoxins as carcinogens, possessing other toxic properties, as well as the potential for health risks wherever toxin-contaminated corn is found. Aflatoxin contamination continues to occur with some regularity in the southeastern United States, and more recently in the southwestern United States. Outbreaks also have occasionally occurred in the upper midwest region. The original goal of this research was the reduction of aflatoxin production in corn. During the past year, corn plants have been produced with the antifungal genes chitinase and B-glucanase. These antifungal genes have the potential of conferring resistance to many ear rots including that caused by Aspergillus flavus. Additional useful data have been collected on inheritance of resistance from the inbred line Tex6.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, $87,000; fiscal year 1991, $131,000; and fiscal years 1992–1993, $134,000 per year; fiscal year 1994, $126,000; and fiscal years 1995, 1996, 1997, and 1998, $113,000 per year. A total of $1,064,000 has been appropriated. The non-federal funds and sources for this grant are $22,349, derived from project investigator salaries and fringe benefits.

This research is being conducted at the University of Illinois. The anticipated completion date for the original objectives was 1995, but last year, the scientists updated the estimate to 2000–2002, because there is concern that they do not have one mechanism of resistance that will completely solve the problem. It now appears necessary to pyramid genes for resistance, including naturally-occurring genes and possibly those that can be placed into the plant using biotechnology. The scientists continue to anticipate solving these related problems by the above estimated dates. The last agency evaluation was December, 1996. That evaluation stated that the research techniques are consistent with a high likelihood that specific objectives will be satisfied. There is good balance between fundamental and applied research.

AGRICULTURAL DIVERSIFICATION AND SPECIALTY CROPS, HAWAII

With the resurgence of interest in Hawaiian culture and corresponding increased prevalence of Hawaiian dances, there is increased pressure on plant materials found in State and Federal forests in Hawaii. To this end, the University of Hawaii College of Tropical Agriculture and Human Resources have been working on the "lei project", involving about 20 members from the College and different organizations in the state working together to develop a handbook for the production and business of materials for Hawaiian lei (body adornment made of plant materials). The group

identified 85 candidate plants and assembled a source book of 90 nurseries in Hawaii that have these plants for sale as starter material. Efforts continue to find entrepreneurs to grow and process taro on a large scale for hypoallergenic products. The new taro production manual will help prospective entrepreneurs understand the requirements of this opportunity.

Work is continuing with Maui onion growers who are potentially interested in obtaining a Federal Marketing Order for their unique onions. Most of the effort in this area has been on researching information about market potential and giving informational talks. Work is continuing on kava, a root crop that might be used as a non-addictive natural relaxant, in the area of collecting production stock and researching and assembling production information. Some work on market potential has also been done. Work is continuing on Stevia, to explore its use as a natural food sweetener and an ornamental plant.

Although this special research grant is awarded noncompetitively, the proposal is reviewed for merit by the university before submission to CSREES and reviewed by CSREES for technical merit and allowable costs and procedures. The principal investigator believes this research to be of local and Pacific regional need, and, in some cases, national need. The small projects that are being undertaken under the umbrella of the Diversified Agriculture project are one attempt to provide to some current and would-be entrepreneurs the tools they need to make business decisions about agricultural opportunities.

Grants have been awarded from funds appropriated as follows: fiscal year 1988–1989, $156,000 per year; fiscal years 1990–1993, $154,000 per year; fiscal year 1994, $145,000; and fiscal years 1995–1998, $131,000 per year. A total of $1,597,000 has been appropriated. The University of Hawaii provides in-kind support in the form of laboratory and office facilities, equipment and equipment maintenance and administrative support services: $68,503 in fiscal year 1992; $75,165 in fiscal year 1993; and $74,663 in each fiscal year 1994–1998. In addition, nearly $50,000 of in-kind support has come from private sector and state partners, $8,000 from the Office of Hawaiian Affairs, and $30,000 from the private sector on the high pressure minimal processing project.

Research is being conducted at the University of Hawaii's College of Tropical Agriculture and Human Resources on the island of Oahu, and on the islands of Maui and Hawaii. The lei materials and Maui onion work will conclude by September 30, 1998. All taro related work is complete. Work on the marketing book is complete. Work continues on kava, high pressure processing, and other projects consistent with the original goal.

The CSREES's agency representative to this project has met with the University of Hawaii investigators to review progress and plan subsequent activities. This close interaction has led the project though a progression of steps from research discovery to near-term commercialization of various products, and, in the case of high pressure processing, back to testing and development of a new technology for possible commercial use.

AGRICULTURAL DIVERSITY/RED RIVER, MN AND ND

This multi-year, multi-phase project will have six specific components. They are: (1) vegetable growing research—especially field and glasshouse related research, (2) vegetable collection and storage research and/or related storage or distribution business development, (3) development of processing industries for the fresh market or research related to the fresh products for market, (4) development of marketing and/or supply associations among vegetable producers, (5) development of processing industries for the ready-to-eat salad market or research related to ready-to-eat products, and (6) development of processing industries for the frozen vegetable products market or research related to frozen products. This first phase of this multi-phase project will concentrate its industry development and research activities in three areas: vegetable growing research—especially field and glasshouse related research, development of marketing and/or supply associations among vegetable producers, and development of processing industries for the ready-to-eat salad market or research related to ready-to-eat products.

Initially the growing of vegetables in the region was driven by an opportunity to meet increasing consumer demand for fresh vegetables and concerns over both the cost of water and the environmental impacts of the use of chemicals in the traditional vegetable producing regions of the southern United States. This industry currently raises three crops of vegetables a year. This requires extensive irrigation in the hot summer months. Population growth and increased domestic and industrial demands for water have created significant pressures to shift water usage away from agriculture and toward other domestic and industrial needs. The shift in crop-

ping patterns can have a positive effect on farm income and lessen the need for outside or federal financial assistance. The project objectives include: (1) Conduct three replicated field trials on growing of carrots; (2) Continue study of vegetable growing techniques in Europe an continue negotiations with vegetable growing research facilities/laboratories in Europe to transfer growing knowledge to the region; (3) Review current and future market opportunities for further development of the industry and identify strategies and partners for pursuing these opportunities and take appropriate organizing steps; (4) Develop and maintain a WWW Webpage for this vegetable industry project; (5) Conduct market research for establishment of a ready-to-eat delicatessen salad processing facility in the region; (6) Conduct market research for establishment of a ready-to-eat fresh-bagged salad processing facility in the region; (7) Continue business development planning for establishment of a ready-to-eat delicatessen salad processing facility in the region; and, (8) Continue business development planning for establishment of a ready-to-eat fresh-bagged salad processing facility in the region.

This work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $250,000. Non-federal support will come from private growers, state agri-development project funds, the Ford Foundation and other local foundations. The work is being carried out in Minnesota, North Dakota and South Dakota. Since this is a new project and has not started yet, original objectives have not been met. It is expected that this will be a multi-year, multi-phase project.

AG-BASED INDUSTRIAL LUBRICANTS RESEARCH PROGRAM, IOWA

This project is a continuation of seven years of activity conducted to target specific applications, establish baseline performance data, develop formulations of additives and chemical modifications, administer laboratory and field tests, characterize, and build relationships for commercialization of industrial lubricants derived from U.S. grown vegetable base oils. Baseline performance data will be compiled to establish fatty acid compositions, guide genetic modifications, additive development, establish standards relative to toxicity and biodegradability, and characterize compatibility with specific metallic and non-metallic components. The grant has been peer reviewed internally at the University of Northern Iowa.

Primary local and regional need is related to expanding value-added applications of agricultural commodities in order to stimulate increased demand and raise crop prices paid to farmers. On a national level, the need is to provide renewable, safer, more environmentally sound alternatives to petroleum based industrial lubricants. The principal investigator believes this research to be of local, regional and national importance.

The original goal of the program was sponsored by non-federal funding to develop a soybean based hydraulic oil which was introduced to market in July of 1997, marketed by AGRI Industries of West Des Moines, Iowa as BioSOY hydraulic fluid. The original goal of the project sponsored by federal appropriation which has not yet officially started, is to replicate the success of the BioSOY introduction among several other currently targeted lubricant applications. Federal funding for this project began with an appropriation of $200,000 in fiscal year 1998. No prior federal funding has been appropriated to this research.

Since 1992 this research program has received cash grants from the Iowa Soybean Promotion Board, Carver Scientific Research Initiatives, in addition to several in-kind donations from industry to develop and coordinate commercializa-tion of what has since become BioSOY hydraulic oil. Beginning in 1995, the state of Iowa began to support the program through its Wallace Technology Transfer Foundation. Beginning in 1996, state funding was provided by legislative appropriation through the Iowa Department of Economic Development. Additional funding has been provided by the Iowa Department of Agriculture and Land Stewardship.

Laboratory and literature studies are being carried out primarily at the Ag-based Industrial Lubricants Research Program facility in Waverly, Iowa, with minor portions of activity being conducted on the campus of the University of Northern Iowa in Cedar Falls, Iowa and the laboratories of various industrial affiliates located throughout the state and country. Field tests are being conducted a Sandia National Laboratories, U.S. Department of Army test sites, some municipalities, and in industrial equipment located throughout the nation.

The original objectives of the project sponsored by federal appropriation have not yet begun, however these objectives are anticipated to be complete within the first year of the project. Additional lubricant applications are anticipated to be targeted during the first year for development in subsequent periods. Agency evaluation of this project has not been completed to date.

ALLIANCE FOR FOOD PROTECTION, NE, GA

The fiscal year 1998 appropriation supports the continuation of a collaborative alliance between the University of Georgia Center for Food Safety and Quality Enhancement and the University of Nebraska Department of Food Science and Technology. Fiscal year 1997 funds supported research at the University of Nebraska on the detection, identification and characterization of food allergens, the effects of processing on peanut allergens, and investigation of the efficacy of using various types of thermal processes to reduce or destroy the toxicity and mutagenicity of certain Fusarium metabolites in corn and corn products. Research at the University of Georgia was directed toward determining the foodborne significance of Helicobacter pylori, determining the fate of Arcobacter in foods and the effect of environmental factors on survival and growth, determining the efficacy and environmental factors on controlling Bacillus cereus, and developing a device to rapidly detect foodborne pathogens using immuno-magnetic separation technology. CSREES has requested, but has not yet received, proposals from the University of Georgia and the University of Nebraska in support of the fiscal year 1998 appropriation.

The principal researcher believes the proposed research addresses emerging issues in food safety which have national, regional and local significance. Specifically, research will address bacterial pathogens that can cause ulcers, cancer and diarrheal illness, toxic fungal metabolites in corn products, and allergens in foods that cause serious reactions, including death, in sensitive people. These emerging issues affect consumers, the food industry, and food producers at all levels, national, state, and local.

The original goal of this research was to: 1) facilitate the development and modification of food processing and preservation technologies to enhance the microbiological and chemical safety of products as they reach the consumer and 2) develop new rapid and sensitive techniques for detecting pathogens and their toxins as well as toxic chemicals and allergens in foods. The University of Nebraska developed assays for detection of almond and hazelnut residues in processed foods, produced high-quality antibodies for these assays, identified a soybean allergen, discovered that certain types of Fusarium fungi do not produce mutagenic substances, and developed a simple liquid chromatographic procedure for determination of moniliformin toxin. The University of Georgia developed a method to culture Helicobacter pylori, identified a treatment to prevent Bacillus cereus from producing toxin in refrigerated foods, determined survival and growth characteristics of Arcobacter and Helicobacter pylori, and determined the appropriate homogenization conditions to prepare food samples for rapid detection of pathogens by immunoseparation.

The work supported by this grant began in fiscal year 1996, and $300,000 was appropriated in fiscal years 1996, 1997, and 1998, for a total appropriation of $900,000. The non-federal funds and sources provided for this grant were $117,000 state funds and $250,000 industry and miscellaneous in fiscal year 1996 and were estimated to be a minimum of $75,000 state funds and $35,000 industry in fiscal year 1997.

Research is being conducted at the University of Georgia Center for Food Safety and Quality Enhancement in Griffin, Georgia and at the University of Nebraska Department of Food Science and Technology in Lincoln, Nebraska and the original objectives have not yet been met. The researchers anticipate that work will be completed on the original objectives in 1999.

An agency science specialist conducts a merit review of the proposals submitted in support of the appropriation on an annual basis. A review of the proposal from the University of Nebraska in support of the fiscal year 1997 appropriation was conducted on December 20, 1996, and good progress was demonstrated on the objectives undertaken in 1996. A progress report from the University of Georgia was evaluated by the agency on January 16, 1997, and demonstrated good progress on its 1996 objectives.

ALTERNATIVE CROPS, NORTH DAKOTA

The alternative crops project has two main thrusts, development and utilization of alternative or novel crops and utilization of traditional crops. The goals of the project are to diversify income at the farm gate, reduce reliance on monoculture to help alleviate pest problems, while providing new agricultural and industrial products to society. Some of the new areas under investigation include, production and use of dry field peas for the northern plains, production of levan from sugar beets, and development of a fresh-pack carrot industry in the northern plains. Previous work continues with oilseed crops such as crambe, rapeseed and safflower as a renewable supply of industrial oil, products from food crops for novel new uses in

paints, coatings, food ingredients, and the development of new biochemical and enzymatic processes to refine oils for industrial uses. The projects funded in this appropriation are evaluated by a peer-panel chosen by the Director of the North Dakota Agricultural Experiment Station.

The principal researcher believes that nationally, developing new crops and new markets for agricultural products is critical for both environmental and economic reasons. Enhanced biodiversity that comes from the successful commercialization of new crops aids farmers in dealing with pests and reducing the dependency upon pesticides. New markets are needed to provide more economic stability for agricultural products, especially as Federal price supports are gradually withdrawn. Regionally, the temperate areas of the Midwest have the potential to grow a number of different crops but are in need of publicly-sponsored research efforts to reveal the most practical, efficient, and economical crops and products to pursue. This effort has spawned several crops and products into profitable private sector businesses.

The original goal of this research was and still is to introduce, evaluate and test new crops which will broaden the economic diversity of crops grown in North Dakota. The primary emphasis is to find new crops with non-food uses and create value added products. It has helped sponsor research on crambe, lupin, canola, safflower, cool-season grain legumes, buckwheat, amaranth, field pea production and utilization, transgenic sugar beets to produce levan, utilization and processing lupin flower, confectionery sunflower production, and growing and marketing of carrots in North Dakota. It has helped develop a crop-derived red food dye and high quality pectin as food ingredients. It has sponsored research on innovative new biochemical means of splitting crop oils, and other new uses of oilseed crops. It has also helped develop markets for new crops as livestock and fish feeds.

Appropriations by fiscal year are as follows: 1990, $494,000; 1991, $497,000; 1992 and 1993, $700,000 per year; 1994, $658,000; 1995, $592,000; and in 1996, 1997 and 1998, $550,000 per year. A total of $5,291,000 has been appropriated. In fiscal year 1991, $10,170 was provided by state appropriations. In fiscal year 1992, $29,158, was also provided by state appropriations and self-generated funds. In fiscal year 1993, $30,084, was provided by state appropriations. In fiscal year 1994, $161,628 was provided by state funds, $3,189 provided by industry and $9,020 provided by other sources, totaling $173,837. In fiscal year 1995, $370,618 was provided by state appropriations, $1,496 provided by self-generated funds, $1,581 provided by industry and $5,970 was provided in other non-federal funds, totaling $379,665 for fiscal year 1995. In fiscal year 1996 $285,042 was provided by state appropriation, $4,742 provided by industry, $14,247 provided from other non-federal funds totaling $304,031 for 1996.

The work is conducted on the campus of North Dakota State University and at the Carrington Research and Extension Center, Carrington, North Dakota, and the Williston Research Center, which are both in North Dakota. Work is also done in eastern Montana. The principal researcher believes that the development of new crops and products should be an on-going effort in North Dakota and other states.

Fiscal year 1998 is the ninth year of activity under this grant. The primary emphasis has been to find new crops with non-food uses and create value added products. The original objectives have been met, and continue to expand. As U.S. agriculture enters a new policy era with less emphasis on commodity subsidies, great opportunity may exist to better establish more biodiversity in agriculture. Such a change, however will remain dependent upon research and development programs specifically targeted at such a goal. This project has been evaluated based on the annual progress report. The cognizant staff scientist has reviewed the project and determined that the research is conducted in accordance with the mission of this agency. An evaluation of this project will be conducted in 1998.

ALTERNATIVE MARINE AND FRESHWATER SPECIES, MISSISSIPPI

The research has focused on the culture of hybrid striped bass, prawns, and crawfish. Nutritional requirements and alternative management strategies for these species have been evaluated and field tested. Utilization of improved technologies will enhance production efficiency and accelerate the use of these alternative species and alternative management strategies in commercial aquaculture. The project undergoes merit review by the university and by the CSREES Program Leader on an annual basis.

The principal researcher indicates that as the aquaculture industry continues to grow, it is extremely important to consider alternative species and production strategies for culture in order to help the industry diversify. Diversification is of benefit to both the producer and consumer of aquaculture products. Research generated

from this grant should lead to alternative production systems that can have national, regional and local impact.

The original goal of this research was to develop and evaluate aquaculture production technologies that would lead to the use of alternative species and management strategies in commercial aquaculture production. Research evaluating stocking rates, nutritional requirements, and methods to reduce stress in hybrid striped bass production systems has led to the development of improved production efficiency in these systems. Recent research has led to improved feed formulation and feeding strategies for hybrid striped bass. Researchers have also developed management strategies to improve production efficiency and cost effectiveness in non-forage based crawfish production systems.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991–1993 has been $275,000 per year, $258,000 in 1994, and $308,000 in fiscal years 1995–1998 each year. A total of $2,315,000 has been appropriated. The university reports a total of $332,091 of non-federal funding to support research carried out under this program for fiscal years 1991–1994, $70,636 in fiscal year 1995, $79,935 in fiscal year 1996, and $124,893 in fiscal year 1997. The primary source of the non-federal funding was from state sources.

Research is being conducted at Mississippi State University. The original specific research objectives were to be completed in 1994. These specific research objectives have been met, however, the broader research objectives of the program are still being addressed. The specific research outlined in the current proposal will be completed in fiscal year 2000. The agency evaluates the progress of this project on an annual basis. The university is required to submit an accomplishment report when the new grant proposal is submitted to CSREES for funding. The 1997 review indicated that the research addresses an important opportunity in the aquaculture industry, research objectives were met, that progress on previous research was well documented, and that the proposed research builds on the previous work funded through this program. The research on hybrid striped bass funding through this program complements research conducted through other USDA programs.

ALTERNATIVE SALMON PRODUCTS, AK

This is a new grant in fiscal year 1998. Research will be aimed at developing a commercial pin-bone removal machine to reduce production costs of salmon fillets and thus open markets for salmon fillet shatter packs. CSREES has requested, but has not yet received a proposal in support of the fiscal year 1998 appropriation.

The Alaska salmon industry has lost considerable market share worldwide to farmed salmon production. In 1994, the farmed salmon market share surpassed Alaska's market share of the world's salmon supply and has continued to climb every year since. In 1997, Norwegian farmed salmon production exceeded Alaska wild stock harvests. Also in 1997, Chilean coho salmon exports to Japan exceeded North American sockeye salmon exports to Japan. Japan has traditionally been Alaska's strongest and most lucrative export market. The current situation is an example of foreign competition undermining a traditional American industry.

The Alaska salmon industry is a multi-state industry. Though the product is harvested in Alaska, the benefits are shared with fishermen residents in Washington state, Oregon, California and throughout the nation. The appropriation will be used to support development of market-desired salmon products using wild-caught salmon. Because this is a new grant, no progress has been reported. The work supported by this grant will begin in fiscal year 1998, with an appropriation of $400,000. Industry will contribute approximately $200,000, based on an estimated cost of $50,000 per plant, times four plants, for commercial testing of the beta prototypes during the summer 1998 salmon season in Alaska.

The work with be conducted at the University of Alaska Fairbanks: Fishery Industrial Technology Center in Kodiak Alaska and at the Geophysical Institute of the University in Fairbanks, Alaska. The anticipated completion of the full objectives of this research area, including original and related objectives, will require about five years. It is anticipated that the proposal received in support of the fiscal year 1998 appropriation will be reviewed for merit by a CSREES specialist shortly after it is received by the agency.

ANIMAL SCIENCE FOOD SAFETY CONSORTIUM

The research goal of the consortium has been to enhance the safety of red meat and poultry products for human consumption. Research has focused on accomplishing six objectives: (1) develop rapid detection techniques for pathogenic bacteria and toxic chemicals for use by the red meat and poultry production-marketing system; (2) devise a statistical framework from which to develop tolerance levels for these

hazardous substances; (3) identify effective interdiction points and develop methods to prevent or reduce substance presence; (4) develop monitoring techniques and methodologies to detect and estimate the human health risk of these contaminants; (5) develop technologies to reduce hazards and enhance quality of animal food products to complement the development of Hazard Analysis and Critical Control Point programs by USDA; and (6) estimate benefits and costs and risks associated with interdiction alternatives. The consortium's researchers have focused their efforts primarily on the first, third, fifth, and sixth objectives. CSREES has requested and received proposals from the consortium members in support of the fiscal year 1998 appropriation. Projects included for funding in the proposal submitted to CSREES have been reviewed for scientific merit by scientists at a non-recipient institution.

The principal researchers believe a safer national meat product food supply could reduce large economic losses—$5 to $6 billion a year—as a result of lost productivity and wages and medical treatment of victims, in addition to reducing the human suffering and loss of life that occur every year as a result of foodborne illnesses. The consortium's efforts for technology transfer with groups such as hospitality associations, health departments, and trade associations are helping educate the consumer and food service worker on safe handling procedures across the nation. Scientific based testing for safe food products will also find greater acceptance in international markets, which will continue to contribute to increased exports and sustainable rural economies at home. The goal is to develop detection, prevention, and monitoring techniques that will reduce or eliminate the presence of food borne pathogens and toxic substances from the Nation's red meat and poultry supplies.

The consortium is organized and operated along institutional lines with a coordinator and directors managing the research program. Advisory and technical committees consist of outside representation and provide advice on research planning and expertise on technical matters.

Major accomplishments this past year by the University of Arkansas included findings that for about 30 percent of households with children experiencing salmonellosis symptoms, Salmonella cells were recovered from multiple sources other than food. Researchers also found that some commercial "natural" antimicrobial compounds with claims of being able to control pathogens on poultry were either ineffective or not cost effective. A model poultry carcass spray unit using different chemical mixtures produced significant reductions in counts of total bacteria and of Salmonella. For raw deboned poultry items, an X-ray imaging system was coupled with laser system to aid in detection of small residual bone fragments in such products. Researchers have developed a rapid, non-destructive measurement model using near-infrared reflectance and transmittance spectroscopy to correlate heating patterns with destruction of pathogenic Salmonella and Listeria bacterial cells as poultry is thermally processed. The target pathogen Listeria monocytogenes was found to change its surface makeup with different selective growth media and thereby elude detection by monoclonal antibodies that can detect these pathogens when cells are grown in non-selective media. A 24-hour tissue culture procedure was developed that was able to detect the harmful cytotoxins of the pathogen E. coli O157:H7 in raw and cooked foods. Two new natural biopeptide bacteriocins active against Listeria were isolated and characterized and shown to be unlike previously reported bacteriocins. A novel simple adsorption method using rice hull ash was developed to harvest and concentrate bacteriocins from the production broth. A nested PCR assay was developed that is able to detect small numbers of Campylobacter in 14 different raw foods including selected raw fruits and vegetables. A DNA fingerprinting method recently reported to be very useful for separating strains and pinpointing sources of E.coli O157:H7 was shown to not be as helpful for separating ten different serotypes of Salmonella linked to human illnesses in Arkansas and Michigan, apparently because serotypes of this latter pathogen have a more highly similar DNA makeup.

At Iowa State University research was expanded in production animal food safety on farms. A triplex PCR technique for detection of Escherichia coli 0157:H7 in ground meat was found to be more rapid and more sensitive than culture techniques. In another study, a test developed for rapid enumeration of coliforms and generic E. coli in water was adapted to monitoring these organisms on pork carcasses. E. coli and Salmonella spp. were found most frequently in ground pork samples collected from packers and purveyors and least frequently at supermarkets. Listeria monocytogenes was found in up to a third of samples taken at food services and supermarkets but was not identified in samples collected at packing plants. Hot water rinses of hog carcasses contaminated with hog feces were effective in reducing the bacterial load on the carcasses; an additional organic acid rinse achieved further reductions. Some acceleration of lipid oxidation and production of more volatiles

were found in irradiated ground pork, but levels were low and oxygen availability either before or after cooking caused more changes than did irradiation.

Research at Kansas State University showed that low dose irradiation resulted in minimal or no changes in beef and pork color, flavor and texture. Studies demonstrated that standard commercial processes for Lebanon-style bologna achieved a 5-log reduction in E. coli O157:H7. The ongoing work with steam pasteurization of carcasses has proved that this process can consistently meet the pathogen reduction requirements for E. coli control which is to be used as an index for process control. Results with Salmonella control demonstrated that steam pasteurization can achieve the pathogen control standards also required by USDA. Researchers have carried these findings to the industry, consumer groups, and classrooms. For example, the research demonstrating that ground beef can "brown" prematurely and before it reaches the temperature to control E. coli O157:H7 has helped USDA and others to recommend measuring the temperature to assure safety.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,400,000; fiscal year 1990, $1,678,000; fiscal year 1991, $1,845,000; fiscal years 1992–1993, $1,942,000 per year; fiscal year 1994, $1,825,000; fiscal years 1995–1996, $1,743,000 each year; fiscal year 1997, $1,690,000; and fiscal year 1998, $1,521,000. A total of $17,329,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: $1,313,653 State appropriations, $2,959 product sales, $35,600 industry, and $259,735 miscellaneous for a total of $1,611,947 in 1991; $1,270,835 State appropriations, $10,129 product sales, $90,505 industry, and $267,590 miscellaneous for a total of $1,639,059 in 1992; $1,334,680 State appropriations, $1,365 product sales, $33,800 industry, and $356,308 miscellaneous for a total of $1,726,153 in 1993; $1,911,389 State appropriations, $192,834 industry, and $200,000 miscellaneous for a total of $2,304,223 in 1994; $1,761,290 State appropriations, $221,970 industry, and $91,885 miscellaneous for a total of $2,075,145 in 1995; $2,643,666 State appropriations and $152,431 industry, for a total of $2,796,097 in 1996; and $1,776,167 State appropriations and $824,378 industry, for a total of $2,600,545 in 1997. Thus, from 1991 through 1997 a total of $14,753,169 in non-federal funds was provided.

Research is being conducted at the University of Arkansas at Fayetteville, the University of Arkansas for Medical Sciences at Little Rock, Arkansas Children's Hospital, Iowa State University, and Kansas State University. The current program of research outlined under the Consortium's revised strategic research plan should be completed in 1999. Continuing and evolving issues related to the safety of beef, pork and poultry products will necessitate that research be ongoing to ensure the safety of these products.

An agency science specialist conducts a merit review of the proposals submitted in support of the appropriation on an annual basis. A review of the proposals was conducted during January 1998. In addition, the CSREES scientist conducting the merit reviews of the proposals participated in the Consortium's annual meeting in October 1997 where results of Consortium research projects were presented. Good progress continues to be demonstrated by Consortium researchers in meeting research objectives. Consortium researchers have helped develop and validate procedures that have been adopted by USDA' s Food Safety and Inspection Service to detect and reduce or destroy foodborne pathogens on beef carcasses.

APPLE FIRE BLIGHT, MICHIGAN AND NEW YORK

This project studies fire blight in apple trees, which is a bacterial disease that can kill spurs, branches, and whole trees. The management of this disease is difficult because only one antibiotic treatment is available. The objectives of this research are to develop fire blight resistance varieties, evaluate biological and chemical control methodologies for disease management, and develop an education and extension component for disease management. Fire blight is a destructive disease of apple trees that can kill the trees. This disease is caused by bacteria and effects apple trees in all apple growing areas of the nation. In the northeast, the disease is more prevalent because of humid weather conditions.

The goals of this research are to develop transgenic apple trees through various molecular technologies, to develop new approaches to antibiotic treatments of disease, to develop an early screening technique for tree sensitivity to the disease, to evaluate biological and cultural controls and to develop and improve education and extension components of disease management. The last objective involves using disease prediction models.

Fiscal year 1977 was the first year funds were appropriated for this grant at $325,000. For fiscal year 1998, $500,000 was appropriated. A total of $825,000 has been appropriated. The non-federal funds for 1997 were $40,127 for Michigan and

$104,166 for New York State. The funds for 1998 are state appropriated $25,071 and $15,000 in funds from the Michigan Apple Research Committee for a total of $40,071 from Michigan whereas New York is estimating state appropriated funds at $104,166 for 1998.

Research is being conducted at Michigan State University and Cornell University, New York Experiment Station and the anticipated date of completion for the original objectives was 1998. The objectives have not been met. It is estimated by the researchers that three to five years are needed to complete this project.

The last merit review of this project was in January, 1997. In summary, the evaluation indicated that progress was demonstrated in all the objectives. In New York, rootstock transformation was successful in two commercially important apple varieties and another transgenic line performed well in field trials. New biological and chemical control agents were evaluated for their use in integrated pest management of fire blight. Commercial orchards were mapped for tree loss due to fire blight rootstock infection and were used in an economic analysis to determine a potential economic loss. In Michigan, a fire blight control activity of a mixture of phage was conducted on apple trees under field conditions. There was significantly less fire blight in inoculated blossom clusters that had been treated. The use of antibiotics on the bacteria were also effective under field conditions. A new technique for detection of fire blight was developed that allows for the rapid detection of low levels of bacteria from large samples.

AQUACULTURE, ILLINOIS

Researchers are developing and evaluating closed system technology for application to commercial aquaculture. System design and cost of production analysis for these systems have been conducted in commercial trials and pilot studies. The project undergoes merit review by the university and by the CSREES Program Leader on an annual basis. The principal researcher believes the development of alternative aquaculture production systems, such as closed recirculating systems, would reduce demands for water and would provide for greater control over production in aquacultural systems. Closed systems could be established independent of climatic condition in any region of the country. These systems also offer greater opportunity to manage aquacultural waste and reduce environmental impact.

The goal of this program is to develop closed recirculating aquacultural systems in order to lower production cost, improve product quality, and reduce the potential environmental impact of aquacultural production systems. An analysis of production costs and risk factors has been conducted on a new system design and on commercial systems in cooperation with the private sector. Best management practices have been developed for these systems. Solid waste management techniques have also been evaluated. The research has led to improved production efficiency and cost effectiveness in closed recirculating systems.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992–1993 was $200,000 per year; fiscal year 1994, $188,000; and fiscal years 1995–1997, $169,000 each year, and in fiscal year 1998, $158,000. A total of $1,253,000 has been appropriated. The university estimates that non-federal funding for this program is as follows: in fiscal year 1992, $370,000; in fiscal year 1993, $126,389; in fiscal year 1994, $191,789; in fiscal year 1995, $152,682; in fiscal year 1996, $171,970; and in fiscal year 1997 $209,781. The primary source of funding is from the state with grants and industry funding accounting for the remainder. This estimate does not include substantial in-kind contributions from industry as this program conducts cooperative research with commercial producers.

Research is being conducted at Illinois State University at Normal, Illinois, through a subcontract with the University of Illinois and the original objectives were to be completed in fiscal year 1995. The original specific objectives have been met. The specific research outlined in the current proposal will be completed in fiscal year 2000.

The agency evaluates the progress of this project on an annual basis. The university is required to provide an accomplishment report each year when the new grant proposal is submitted to CSREES for funding. The 1997 review of the project indicated that the project has met stated objectives to develop best management practices, evaluate solid waste management techniques, and improve production efficiency and cost effectiveness in closed recirculating systems. The researchers have indicated that the proposal is consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

AQUACULTURE, LOUISIANA

Research has focused on catfish, crawfish, redfish, and hybrid striped bass in commercial aquaculture. Research has included basic and applied research in the areas of production systems, genetics, aquatic animal health, nutrition, and product quality. Grants are awarded to scientists within the university on a competitive peer review basis. The entire proposal is also reviewed by the CSREES Program Manager on an annual basis. The principal researcher indicates that there is a need to improve production efficiency for a number of important aquaculture species in order to enhance the profitability and sustainability of the aquaculture industry in the region. The research also addresses the issue of food safety and the quality of farm-raised products. The research funded through this program focuses on the production of a number of important aquaculture species such as catfish, crawfish, hybrid striped bass, and redfish.

The original goal of this research was to expand the technology base to enhance the development of aquaculture through a broad research program that addresses the needs of the industry. The university has completed studies in the area of fish nutrition, fish health, production management strategies, alternative species, seafood processing and broodstock development. Research has led to improved feed formulations, improved production strategies for crawfish, and improved processing technologies for aquaculture products. Research continues to be directed at important opportunities to enhance production efficiency and the commercial viability of sustainable aquaculture systems in the region.

Research to be conducted under this program will continue research initiated under the Aquaculture General program in fiscal years 1988 through 1991. The work supported by this new grant category began in fiscal year 1992 and the appropriation for fiscal years 1992–1993 was $390,000 per year, $367,000 in fiscal year 1994, and $330,000 in fiscal years 1995–1998 each year, for a total of $2,467,000. The university estimates that non-federal funding for this program is as follows: in fiscal year 1991, $310,051; in fiscal year 1992, $266,857; in fiscal year 1993, $249,320; in fiscal year 1994, $188,816; in fiscal year 1995, $159,810; in fiscal year 1996, $150,104; and in fiscal year 1997 $158,808. The primary source of this funding is from state sources with minor contributions from industry and other non-federal sources.

Research is being conducted at Louisiana State University and the original specific objectives were to be completed in 1990. These specific research objectives have been met, however, the broader objectives of the research program are still being addressed. The specific research outlined in the current proposal will be completed in fiscal year 2000.

The agency evaluates the progress of this project on an annual basis. The university is required to provide an accomplishment report each year when the new grant proposal is submitted to CSREES for funding. In addition, the CSREES program manager conducted site visits in 1996 and 1997 to meet with the scientists involved in the project and review the progress of the research. The 1997 review of the project indicated that the research is addressing the aquaculture industry, that the facilities are excellent, the principal investigators are well qualified, the experimental design is sound, the proposed research represented a logical progression of research previously funded through this program, and that the progress on previous research funded under this program is well documented. The researchers are asked to develop a research proposal consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

AQUACULTURE FOOD AND MARKETING DEVELOPMENT, WEST VIRGINIA

CSREES has requested the university to submit a grant proposal that has not yet been received. The proposal will be put through the university's peer review process and is reviewed by the CSREES Program Manager. Since this is the first year of this project, CSREES will send the proposal out for external peer review. The researchers indicate that there is a regional and national need to evaluate marketing and product development for small scale aquaculture systems in rural communities. In addition there is a need to improve the efficiency and sustainability of these systems. The researchers also indicate that the proposed research is consistent with the NSTC's Strategic Plan for Aquaculture Research and Development. This research could also potentially be funded through the Fund for Rural America.

The goal of this research program is to develop sustainable aquaculture production systems for small scale aquaculture producers in rural communities. Research is likely to focus on refining culture technologies, economics, marketing, value added processing and product quality. Researchers will utilize an integrated systems ap-

proach in addressing opportunities for these systems that may include biological and system design components.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $600,000. The university estimates that significant non-federal funding will be provided in fiscal year 1998 primarily from state sources to cover the salaries of the principal investigators. As the program develops, additional non-federal funding is expected.

The research would be conducted at the University of West Virginia in Morgantown and at off campus sites with a variety of potential cooperators and the anticipated completion date for the original objectives is fiscal year 2000.

The agency will evaluate the progress of this project on an annual basis. The university will be required to submit an accomplishment report each year when the new proposal is submitted to CSREES for funding. Since this is the first year of the program, CSREES will conduct an external peer review of the proposal.

AQUACULTURE RESEARCH, STONEVILLE, MISSISSIPPI

The primary objectives of this research have been to improve practical feeds and feeding strategies, and improve water quality in channel catfish ponds. Additionally, scientists are evaluating the application of acoustical instrumentation in commercial aquaculture. In fiscal year 1996 the water quality component of the program was not included in the proposal. The project undergoes merit review by the university and by the CSREES Program Leader on an annual basis. The principal researcher indicates that the research findings from this project have a direct impact on the profitability and sustainability of a significant segment of the domestic aquaculture industry. The farmed-raised catfish industry accounts for over 55 percent of the total U.S. aquaculture industry. Research funded in this program is directed towards improved feeds and feeding strategies. In addition, research is directed towards acoustical monitoring and inventory of catfish in pond production systems.

The original goal of this research was to address the research needs of the catfish industry in the areas of water quality and nutrition. The research has led to improved water quality management practices in commercial catfish ponds. Research in the area of catfish nutrition has led to improved diet formulation and feeding strategies that have been widely adopted by the industry. Scientists are currently evaluating ratios of protein to energy in catfish feed formulations using conditions that closely reflect commercial production ponds. Vitamin supplements are also being evaluated. Research findings from this program have had a direct impact on feed formulations utilized by the commercial feed mills resulting in reduced cost of commercial feeds without reducing performance and productivity. Studies evaluating acoustical instrumentation have demonstrated possible applications in commercial aquaculture. Researchers are determining the accuracy and effectiveness of upgraded and calibrated acoustical monitoring equipment.

Grants have been awarded from funds appropriated as follows: fiscal years 1980–81, $150,000 per year; fiscal year 1982, $240,000; fiscal year 1983–84, $270,000 per year; fiscal year 1985, $420,000; fiscal years 1986–87, $400,000 per year; fiscal year 1988, $500,000; fiscal year 1989, $588,000; fiscal year 1990, $581,000; fiscal year 1991, $600,000; and fiscal years 1992–1993, $700,000 per year; fiscal year 1994, $658,000; and fiscal years 1995–1997, $592,000 each year, and $642,000 in fiscal year 1998. A total of $9,045,000 has been appropriated. The university estimates a total of $2,101,508 in non-federal funding to support this research for fiscal years 1991–1994; $1,128,451 in fiscal year 1995; $601,473 in fiscal year 1996; and $463,990 in fiscal year 1997. The primary source of non-federal funding is from the state. Additional funding is provided from product sales, industry contributions, and other miscellaneous sources.

The grants have been awarded to the Mississippi Agricultural Experiment Station. All research is conducted at the Delta Branch Experiment Station, Stoneville, Mississippi. The acoustical research in aquaculture is conducted in cooperation with the National Center for Physical Acoustics at the University of Mississippi.

The anticipated completion date for the specific original research objectives was 1984. These specific research objectives have been met, however, the broader research objectives of the program are still being addressed. The specific research outlined in the current proposal will be completed in 2000.

The agency evaluates the progress of this project on an annual basis. The university is required to provide an accomplishment report when the new proposal is submitted to CSREES for funding. The 1997 review indicated that the research addresses important opportunities in the farm-raised catfish industry, significant progress has been reported on specific research objectives, experimental design and scientific design are sound, there are excellent linkages between the researchers and

the catfish industry leading to accelerated adoption of research findings, and the scientists involved in the project are leading authorities in this area of research. This program has had a tremendous impact on improving production efficiency in commercial catfish ponds through improved feeds and feeding strategies.

The 1998 CSREES review will be completed within three weeks of submission of the proposal. The researchers are asked to develop a research proposal consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

BABCOCK INSTITUTE FOR INTERNATIONAL DAIRY RESEARCH AND DEVELOPMENT

The Babcock Institute for International Dairy Research and Development was established with participation of the University of Wisconsin-Madison College of Agriculture and Life Sciences, School of Veterinary Medicine and the Cooperative Extension Division. The objective of the Babcock Institute is to link the U.S. dairy industry with the rest of the world through degree training, continuing education, technology transfer, adaptive research, scientific collaboration and market analysis.

The principal researcher believes the need is to strengthen dairy industries around the world, to enhance international commercial and scientific collaborative opportunities for the U.S. dairy industry, and to draw upon global perspectives to build insight into the strategic planning of the U.S. dairy industry. Initial efforts were focused on planning and staffing. An initial activity was, and continues to be, the development of multi-language extension materials about basic management techniques essential to optimize performance of U.S. dairy cattle overseas. This activity has grown to include manuals on Breeding and Genetics, Lactation and Milking, and Basic Dairy Farm Financial Management published in English, Spanish, French, Russian, and Chinese. Research on potential implications of NAFTA and GATT on the U.S. dairy industry was completed. A technical workshop on dairy grazing in New Zealand and the mid-west was organized and held in Madison during the fall of 1993. A technical workshop on Nutrient Management, Manure and the Dairy Industry: European Perspectives and Wisconsin's Challenges was held in Madison, Wisconsin during September, 1994. A round table was held in January, 1995 addressing "World Dairy Markets in the Post-GATT Era". The Great Lakes Dairy Sheep Symposium was sponsored in 1995 and 1996. A World Wide Web site was created in 1996 for distribution of Babcock Institute technical dairy fact sheets in four languages. The first International Dairy Short Course for a group of producers and technicians from Argentina has been organized on the University of Wisconsin Campus. Scientist's are being supported in collaborative research with New Zealand primarily to gain a better understanding of grazing systems as related to dairy management. An analysis of the impact of changes in European dairy policies has been completed. The Institute sponsored a Minnesota-Wisconsin Dairy Policy Conference to provide insights into current agricultural programs and policy issues in the dairy sector of the U.S. economy.

Grants have been awarded from funds appropriated as follows: fiscal years 1992 and 1993, $75,000 per year; fiscal year 1994, $250,000; and fiscal years 1995–1998, $312,000 per year. A total of $1,648,000 has been appropriated. During fiscal year 1992, $13,145 of State funds were used to support this program and $19,745 of State funds in fiscal year 1993 for a total of $32,890 during the first two years of this research. Information is not available for fiscal year 1994–1997.

Research is being conducted at the University of Wisconsin-Madison College of Agriculture and Life Sciences. The Babcock Institute's overarching mission has been to link the US dairy industry and its trade potential with overseas dairy industries and markets. The original objectives of this project have remained consistent over the years. However, each year specific objectives were proposed to further the mission of the Institute and to build on previous accomplishments. The Institute has accomplished specific objectives each year in a timely manner. The Babcock Institute has remained true to its original objective of linking Wisconsin and the US to dairy industries around the world. This objective remains of increasing importance with continued development of international markets for dairy products and technologies. The University researchers anticipate that work currently in progress will be completed by September, 1999.

The Babcock Institute undergoes two independent review processes each year. The first is done by a committee of university and industry representatives who review the annual research proposal and amend it prior to submission to the agency. The annual proposal is reviewed by agency technical staff prior to approval for fund release. In addition, the institute was included in a comprehensive review of the programs of the Department of Dairy Science at the University of Wisconsin in May, 1995. The agency project officer has conducted two on site reviews of the institute since it's formation in 1992. The most recent review has found that the approach

proposed by the researchers is appropriate and that the researchers are well qualified to perform the objectives as stated. The objectives of the proposal are within the mission of the United States Department of Agriculture and the Cooperative State Research, Education, and Extension Service.

BARLEY FEED FOR RANGELAND CATTLE, MONTANA

This project will support research on the nutritional value of barley cultivars as feed for beef cattle. This effort will assist with the breeding and selection of superior types that can be more competitive with other feed grains and improve farmer income from barley crops grown in rotational systems in the Northern Great Plains. The project was subjected to a merit review.

Barley as a feed grain is grown extensively in the United States. Based on chemical analyses and the experience of some cattle feeders the principal researcher believes it should have a feed value on par with corn and wheat. However, it is listed as inferior to both in feeds hand books and is therefore discounted in the market. Comprehensive feeding studies of various barley types will be conducted to document the value as a feed grain for beef cattle. The original goal of this research was to determine the true feed value of barley for feeder cattle, and thereby improve the economic return to barley production.

The work supported by this grant began fiscal year 1996 and the appropriation for fiscal year 1996 was $250,000, for fiscal year 1997, $500,000, and in fiscal year 1998, $600,000. The total appropriation is $1,350,000. Nonfederal funds for this project were $160,000 in 1996 and $174,500 in 1997.

Research is conducted at Montana State University and the project is proposed for completion following fiscal year 2001. Progress toward the objectives have been reported by the principal researcher. The project was peer reviewed annually through the project approval process. Progress has been made toward the goal of identifying feed quality parameters for barley and quantifying it's value as cattle feed. Additional work will address the development of cultivars with improved feed quality.

BINATIONAL AGRICULTURAL RESEARCH AND DEVELOPMENT PROGRAM (BARD)

The Binational Agricultural Research and Development Program, or BARD, is a competitive grants program that supports agricultural research of importance to both the United States and Israel. The areas of research supported by the BARD program include plant and animal sciences, water and soil science, aquaculture, economics and engineering. Research projects submitted for funding must involve collaboration between U.S. scientists and Israeli scientists. Proposals competing for the fiscal year 1998 funding were due by September 1, 1997. Those proposals are currently under review and funding decisions are expected by May of 1998. The funds available through the BARD Special Research Grants Program are used to support the U.S. portion of projects receiving BARD awards.

All proposals receiving awards through the BARD Program have national, regional and/or local significance to agriculture in both the United States and Israel. Thus, applicants must convince the review panel of the global significance of the proposed work in order to receive funding. The fundamental research supported by the BARD program provides the knowledge base needed to solve important agricultural problems in the U.S. and Israel as they arise.

The goal of the BARD program is to support fundamental research that is important to agriculture in both the U.S. and Israel. Many fundamental discoveries and accomplishments have been made in the research areas supported by BARD. These discoveries and accomplishments will lead to reduction of livestock diseases, increased livestock production, improved production of plants under harsh environmental conditions, and improved resistance of plants to disease. In the period between 1979–1997, a total of 796 grants were awarded, over 1,000 scientific articles were published, and 8 patents awarded. As an example, work supported by the BARD program at the University of Florida resulted in the DNA sequencing of the citrus tristeza virus. This virus has caused major economic losses to the citrus industry in both the U.S. and Israel. The sequencing information can now be used to develop effective methods to protect citrus trees by creating safe strains of the virus that protect the trees from disease-causing strains.

In 1977, an agreement was signed between the U.S. and Israeli governments which established BARD. An initial endowment fund of $80 million was established through equal contributions from each country. Subsequently, that endowment was increased by $30 million for a total of $110 million. Funds for BARD are available from the interest earned on that endowment. In the early part of this decade, a reduction in interest rates, combined with increased research costs, impeded the abil-

ity of the BARD program to adequately meet the agricultural research needs of each country's producers and consumers. In fiscal year 1994, the Department directed that $2.5 million of funding, which had been appropriated for CSREES's National Research Initiative Competitive Grants Program, be used for the BARD Program to supplement the interest earned from the endowment. The supplementary funds were matched by Israel. In fiscal year 1995, Congressional language directed that CSREES again use $2.5 million of the National Research Initiative's appropriation for BARD, and in fiscal year 1996, the Department directed that a third $2.5 million increment of the National Research Initiative's appropriation be used for BARD. CSREES received a direct appropriation in the amount of $2 million for BARD in fiscal year 1997, and $500,000 in fiscal year 1998.

The supplemental funds provided by CSREES are matched each year by the Israeli government. Each BARD grant funded by CSREES is for the U.S. portion of a collaborative project between U.S. and Israeli scientists. The Israeli portion of the project is supported by supplemental funds from Israel or from interest on the endowment. Therefore, a significant portion of each project is supported by non-federal funds.

The objective of BARD is to support fundamental science of importance to agriculture in the U.S. and Israel. The generation of knowledge is an ongoing process. Every year new research projects are awarded funding through the competitive review process. The trust fund was established to provide a long-term source of funding to conduct priority research for both the U.S. and Israel. The creators of the BARD Program determined that a ten-year review should be conducted to ensure its relevance and impact. The ten-year external review panel y endorsed the success of BARD and recommended its continuance and enhancement. Due to the ongoing nature of scientific research, the annual funding of grant awards is focused n development and application of state-of-the-art science. Each grant project is funded for two or three years and the results feed into the greater scientific body of knowledge generated by these and other scientists.

The USDA and the Israeli Ministry of Agriculture conducted a ten-year External Review of the BARD program and published the report in September of 1988. The objective of that external review was to evaluate the effectiveness of BARD and the suitability of its concept for bi-national collaborative research. The report concluded that the BARD program had achieved its objectives. The Report of the Review Committee concluded that "BARD" is working well, with efficiency. "The project evaluation and management infra-structure has been paramount in allowing BARD's programs to evolve. The Report made recommendations relative to operational procedures for managing the grant proposals and emphasized the need for increasing the corpus of the endowment. BARD is now commissioning a twenty-year external review of its oepration to evaluate its efficiency and economic impact.

BIODIESEL RESEARCH, MISSOURI

Research on biodiesel involves examining the feasibility of producing biodiesel and other higher value products from oilseed crops including soybeans, canola, sunflower and industrial rapeseed. It also involves identifying and evaluating potential markets for the fuel and other products. An important part of the market thrust is to identify how biodiesel and other environmentally-friendly products can help meet state and federal environmental mandates of reduced air and water pollution. The project is also evaluating local processing plants whereby farmers could produce crops, process the crops locally and use the fuel and high protein feed coproducts on their farms or locally. This project undergoes merit review at the University of Missouri College of Agriculture. The initial work is being conducted in Missouri. The results may provide the agricultural community with alternative crops and more diverse markets, additional marketable products and a locally grown source of fuel. This will result in increased investment in local communities, additional jobs, and increased value added in the farm and rural community sectors.

The goals were to examine the feasibility of producing biodiesel and other higher value products from oilseed crops, plus to increase the value of coproducts. Results indicate that biodiesel can be produced most economically from soybeans, primarily because of the high value of soybean meal. Research indicates that with a community based biodiesel processing plant, costs of production could be as low as $0.59 per gallon, although farmers might increase revenues by selling the soybean oil rather than using it to produce biodiesel. Since small quantities of biodiesel regularly sell for at least $4.00 per gallon, the structure of the production, marketing and transportation is currently under evaluation to identify more efficient and less costly ways to produce and market biodiesel. Also, a study of which markets might provide the best opportunity to use increased levels of biodiesel is underway. Such

markets might include underground mining and the marine industry in addition to urban mass transit systems and cities having problems meeting more stringent air quality mandates. Research results indicate that for each one million gallons of biodiesel used in a B20 blend (20 percent biodiesel and 80 percent petroleum-based diesel) by the Kansas City, Missouri transit fleet would have the following estimated impacts: almost 100 additional jobs; increased investment of $500,000; net increase in personal income of $3.2 million; and an increase of $9.6 million in total economic activity in the region. Research has also identified that rapeseed meal compares favorably to soybean meal and blood meal as an animal feed. It has a higher escape protein value than soybean meal. This research is carried out in close cooperation and coordination with other state and federal agencies, plus trade associations such as the National Biodiesel Board, the United Soybean Board, American Soybean Association, and others.

The work for this program began in fiscal 1993, and the appropriation for that year was $50,000. The appropriation for 1994 was $141,000; and for fiscal years 1995, 1996, 1997, and 1998 $152,000 annually. A total of $799,000 has been appropriated. The source of non-federal funds is state appropriated funds. The level in 1994 was $7,310. The funding level 1995 was $74,854. Cost sharing by the University of Missouri each year for fiscal year 1996 and fiscal year 1997 was $80,000 and $86,000 respectively. Total cost sharing for the project by the University of Missouri has been $242,224. Additionally, some work funded by this grant has been conducted in cooperation with the National Biodiesel Board, plus the Missouri Soybean Merchandising Council. The level of those matching funds for these two sources are not available.

The work is being carried out at the University of Missouri-Columbia and the principals estimate that the work with biodiesel will require an additional two years to complete. Additionally, the work on higher value products, such as solvents from biodiesel, is expected to be on-going. Successes with the higher value products will result in more value added opportunities for farmers and rural communities. Also, much of the work in commercializing biodiesel has been with the B20, twenty percent blend, with petroleum-based diesel. This biodiesel research is evaluating the use of biodiesel in much smaller blends, such as one percent or one-half percent. At this use level, biodiesel would be considered an additive rather than as a fuel extender. With this scenario, the primary benefit would be a cost competitive lubricant with superior performance characteristics, thereby making the product more valuable as a lubricant that as a fuel.

The evaluation of using biodiesel as a complete fuel and in a blend has been met. Also, the cost of biodiesel, when produced by a new generation cooperative and used by members, has been evaluated. However, the most promising commercial uses appear to be when it is used for non-fuel uses and in very low blend levels. This project is evaluated on an annual basis based on the annual progress report, discussions with the principal investigator as appropriate, and agency participation in collaborative activities related to this project. The review is conducted by the cognizant staff scientist and it has been determined that the research is performed in accordance with the mission of this agency.

BROOM SNAKEWEED

Current research addresses several areas for broom snakeweed control, including efforts to understand more fully the onset of invasion and persistence of broom snakeweed, evaluate the toxicology and physiological effects of broom snakeweed on livestock, and develop an integrated weed management approach for broom snakeweed. Grants are awarded competively based on a peer review panel administrated by an executive committee to researchers at the New Mexico State University. The project holds an annual update meeting whereby investigators present findings to outside scientists.

Broom snakeweed is a serious weed in the southwestern United States and adjacent Western States. About 22 percent of rangeland in Texas, and 60 percent in New Mexico is infested to some degree by the weed. Current cost for control of broom snakeweed in the southwestern United States is estimated at over $41 million. Dense broom snakeweed stands cause significant economic losses in the plains, prairie and desert areas of the central and southwestern United States. Snakeweed is a poisonous plant causing death and abortion in livestock and reduced productivity of associated vegetation.

Research is addressing three general areas which are ecology and management, biological control, and toxicology and animal health. One specific accomplishment is the biological control arena; several plant pathogens and insects are proving to be effective in broom snakeweed's control. Grazing management techniques and feeding

studies to minimize toxicological effects on livestock have shown that a 10 percent diet of broom snakeweed did not impair fertility or semen characteristics in test animals which were male rats.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $100,000; fiscal year 1990, $148,000; fiscal year 1991, $150,000; fiscal years 1992 and 1993, $200,000 per year; fiscal year 1994, $188,000; fiscal years 1995 and 1996, $169,000 each year; fiscal year 1997, $175,000; and fiscal year 1998, $185,000. A total of $1,684,00 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $249,251 state appropriations in 1991; $200,110 state appropriations in 1992; $334,779 state appropriations in 1993; $302,793 state appropriations in 1994; $294,451 state appropriation in 1995, and an estimated $300,000 in state appropriation in each fiscal year of 1996 and 1997.

Research is being conducted at New Mexico State University on the project since it was initiated in 1989. Currently additional and related objectives have evolved and anticipated completion date for these is 1999. Considerable progress has been made on many of the objectives. Anticipated completion date of the additional and related objectives that have resulted based on the current work, would indicate another five years.

Each year the grant is peer reviewed with oversight by an administrative executive committee within the College of Agriculture and Home Economics at New Mexico State University. Additionally CSREES's senior scientific staff review the progress of the grant. Those reviews indicated progress in achieving the objectives.

CENTER FOR ANIMAL HEALTH AND PRODUCTIVITY, PENNSYLVANIA

This research is designed to reduce nutrient transfer to the environment surrounding dairy farms in the Chesapeake Bay watershed. Progress to date includes the development of a individual dairy cow model which will predict absorbed amino acids and the loss of nitrogen in manure. This model has been developed into user friendly software so that trained farm advisors can evaluate herd nutrient management status while on a farm site. A whole farm model has been developed which integrates feeding and agronomic practices to predict utilization of nitrogen and farm surpluses. Using these tools, a survey of dairy farms in the region has been done to assess nitrogen status on dairy farms and potential management practices to reduce nitrogen excesses on dairy farms. Refinement of the model tools and research to refine estimates of the environmental fate of excess nitrogen from dairy farms is in progress. Two on-site reviews of the program have been conducted by the CSREES Project Officer and a third is planned during 1998. The animal and farm models have been published in peer reviewed scientific journals.

The principal researcher believes that reducing non-point pollution of ground and surface water by nitrogen from intensive livestock production units is of concern nationally, and especially in sensitive ecosystems like the Chesapeake Bay. This research is designed to find alternative feeding and cropping systems which will reduce net nutrient flux on Pennsylvania dairy farms to near zero.

The original goal of this research remains the development of whole farm management systems which will reduce nutrient losses to the external environment to near zero. To date the researchers have developed their own models to more accurately formulate rations for individual dairy cows which permit the comparison of alternative feeding programs based upon both maximal animal performance and minimal nutrient losses in animal waste. This model is being tested on select commercial dairy farms to evaluate the extent to which total nitrogen losses in manure can be reduced without impacting economic performance of the farm. At the same time, whole farm nutrient models have been developed to evaluate alternative cropping systems which will make maximum use of nutrients from animal waste and minimize nutrient flux from the total farm system. These tools are currently being used to survey the current status of nutrient balance on farms in the area and efforts to fine tune the tools are in progress.

Grants have been awarded from funds appropriated in fiscal year 1993 for $134,000 and in fiscal year 1994 for $126,000. In fiscal years 1995–1998, $113,000 was appropriated each year. A total of $712,000 has been appropriated.

Research is being conducted at the University of Pennsylvania, College of Veterinary Medicine and the University researchers anticipate that work currently underway will be completed by September, 1999. This will complete the original objectives of the research. The principal researcher indicates that consideration has been given to the broadening of objectives to include additional nutrients in the model system, but this has been dropped because technical expertise required is currently not readily available.

The Center for Animal Health and Productivity project was last reviewed in June, 1997. An on-site review by agency technical staff was conducted in June, 1995. It was concluded that project objectives are within the goals of the program, are within the mission of both the USDA and CSREES, and the institution is well equipped and qualified to carry out the research project. The institution has made excellent progress towards the completion of the original goals of the project, but still must evaluate the effectiveness of the use of the new tools developed in reducing nutrient runoff from commercial dairy farms in the watershed of the Chesapeake Bay.

CENTER FOR INNOVATIVE FOOD TECHNOLOGY, OHIO

Funds from the fiscal year 1997 grant are supporting research projects on using neural network/fuzzy logic tools to develop a model of a growing and processing cycle for canning tomatoes, using membrane filtration to remove organic material from fluid dairy wastewater, combining several non-thermal processing techniques to sterilize liquid foods, developing a system to eliminate the contamination of turkey carcasses during slaughter, developing a non-contact, real time system for evaluating grain hardness, and developing a dry process to apply calcium carbonate, a hardening agent, to diced vegetables. Fiscal year 1997 funds support research from February 1, 1997 through February 28, 1998. CSREES has requested, but not yet received, a proposal in support of the fiscal year 1998 appropriation. Projects included for funding in the proposal submitted to CSREES have been reviewed by industry representatives for relevance and by industry and university scientists for scientific merit.

The principal researcher believes the value-added food processing industry is the largest industry in Midwestern states, including Ohio where the industry contributes over $17 billion to the annual economy. From an economic development point of view, processing and adding value to crops grown within a region is the largest possible stimulus to that region's total economic product. This program aims to partner with and encourage small and medium sized companies to undertake innovative research that might otherwise not be undertaken due to risk aversion and limited financial resources for research and development in these companies. The principal researcher believes that, although the initial impact of this research will be regional, the recipient organization of this grant is part of a technology transfer network and proactively seeks opportunities to deploy technologies developed through this research to the food industry on a national basis.

The original goal of the research was to develop innovative processing techniques to increase food safety and quality or reduce processing costs. The neural network project has developed a model for predicting the harvesting time that will optimize product quality and economic return to the grower, processor, and consumer. The fecal contamination control project has led to the development of a system in current operation that allows a turkey processor to operate within the zero fecal material tolerance guidelines established by the Food Safety and Inspection Service. The filtration project will allow fluid milk processors to lower their costs and increase water quality at municipal treatment systems. The sterilization project will lower processing costs by increasing the shelf life of liquid products.

The work supported by this grant began in fiscal year 1995. The project received appropriations of $181,000 in fiscal years 1995 through 1997 and $281,000 in fiscal year 1998. A total of $824,000 has been appropriated. In fiscal year 1995, non-federal funds included $26,000 from state funds and $70,000 from industry memberships. In fiscal year 1996, non-federal funds included $26,000 in state funds and $80,000 in industry funds. In fiscal year 1997, non-federal funds included $35,000 in state funds and $95,000 in industry memberships.

Research is being conducted in the laboratories of the Ohio State University and at various participating companies in Ohio, Illinois, and Pennsylvania. The principal investigator anticipates that some projects supported by the fiscal year 1996 grant will have been completed by February 28, 1997, while other projects will not be completed until February 28, 1998. At the current funding level, it is anticipated that funding will be required through fiscal year 2000 to achieve the goal of self-sufficiency.

An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. Since the agency has not yet received the proposal in support of the fiscal year 1998 proposal, the last review of the proposal was conducted on March 4, 1997. At that time, the agency science specialist believed that the projects addressed issues relevant to food manufacturing, were scientifically sound, and that satisfactory progress was being demonstrated using previously awarded grant funds.

CENTER FOR RURAL STUDIES, VERMONT

The Center for Rural Studies Project involves applied research focused on developing and refining social and economic indicators used to evaluate the impact of economic development programming and activities. They are perfecting a delivery format for technical assistance for community and small business development. A major component of current research relates to utilization of the World Wide Web as a delivery vehicle. Project proposal undergoes a merit review within the agency.

The original goal was to create a database and analytical capability for rural development programming in Vermont. Examples of past accomplishments include maps presented to target child hunger programs, targeted areas for other types of rural development program intervention, analytical reports to guide the development of retail shopping areas, an "Economic Handbook for Vermont Counties", and strategies for using the World Wide Web to disseminate information.

The grant was initiated in fiscal year 1992. Appropriated amounts are: fiscal year 1992–93, $37,000; fiscal year 1994, $35,000; fiscal year 1995–98, $32,000 for total appropriations of $237,000. Fiscal year 1991 included $91,130 in state matching funds. Fiscal years 1993, $143,124; 1994–96, $3,547 state matching funds. Fiscal years 1997 state dollars were $2,931 plus researcher's salary. Fiscal year 1998 dollars are not known at this time.

Applied research and outreach is being carried out through the University of Vermont. and the original completion date was September 30, 1993. The original objectives of this research have been met, and additional objectives will be completed by August 31, 1998. A proposal for fiscal year 1998 has not been received to date.

The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit annual reports to the agency to document impact of the project. Agency evaluation of the project includes peer review of accomplishments and proposal objectives and targeted outcomes.

CHESAPEAKE BAY AQUACULTURE, MARYLAND

The objective of this research is to improve the culture of striped bass through genetics, reproductive biology, nutrition, health management, waste management and product quality. The research provides a good balance between basic and applied research. The university awards grants based on an internal competitive peer review and the CSREES Program Manager reviews the proposal each year. The principal researcher believes the Mid-Atlantic region of the country has significant opportunities to contribute to the overall development of the domestic aquaculture industry. Research supported through this program can have broad application and enhance production efficiency and the sustainability of aquaculture as a form of production agriculture.

The original research goal was to generate new knowledge that can be utilized by the aquaculture industry to address serious problems limiting the expansion of the industry in Maryland and the Mid-Atlantic region. The program focuses on closing the life cycle of the striped bass and its hybrids, enhancing production efficiency, and improving product quality under aquaculture conditions. Research is conducted in the areas of growth, reproduction and development, aquacultural systems, product quality, and aquatic animal health. Progress has been made in developing controlled artificial spawning techniques and refining the nutritional requirements of striped bass. Scientists continue studies to optimize water quality in closed systems. Researchers indicate that intermediate salinity levels may improve the feed conversion efficiency in juvenile striped bass.

The work supported under this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was $370,000. The fiscal years 1991–1993 was $437,000 per year; fiscal year 1994, $411,000; and fiscal years 1995–1998 $370,000, each year. A total of $3,572,000 has been appropriated. The university reports the amount of non-federal funding for this program is as follows: in fiscal years 1991 and 1992, $200,000; in fiscal years 1993 and 1994, $175,000; in fiscal year 1995, $400,000; in fiscal year 1996, $536,000; and in fiscal year 1997 approximately $400,000. The university reports that these funds are from direct state appropriations and other non-federal funding sources.

Research is being conducted at the University of Maryland and the original specific research objectives were to completed in 1993. These specific research objectives have been met, however, the broader research objectives of the program are still being addressed. The specific research outlined in the current proposal will be completed in fiscal year 2000.

The agency evaluates the progress of this project on an annual basis. The university is required to submit an accomplishment report when the new proposal is sub-

mitted to CSREES for funding. The 1997 review indicated the proposal was well written with objectives clearly stated; excellent progress is reported on previous work; scientific and technical expertise is excellent; and the proposal addresses high priority research needs. The researchers are asked to develop a research proposal consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

CITRUS DECAY FUNGUS, ARIZONA

The research being funded under this proposal is crucial to the development of effective management strategies for Coniophora eremophila, brown wood rot of citrus. Basic studies will include research on the life cycle of the fungus and its secondary hosts. Chemical control methodologies will be conducted to determine if any commonly available fungicides are effective and tree management for maintaining tree vigor will be determined. The decline appears in certain scion/rootstock combinations and therefore the incompatibilities of graft unions will be investigated. This project was not awarded competitively but will undergo peer review at the university level and merit review at CSREES. The principal researcher believes this research is of local need as of now but could potentially be a problem on lemon trees in other desert citrus production areas of the United States.

The objectives of this research to be conducted are to determine the extent of brown heartwood rot in mature lemon trees in Arizona; determine the relative susceptibility of various types of citrus to the fungus; evaluate the possible effects of different rootstocks on brown heart rot development; determine the fungus origin and secondary desert hosts; and explore the potential chemical control of the disease.

Fiscal year 1998 was the first year funds were appropriated for this grant. A total of $250,000 was appropriated. The non-federal funds and sources provided for this grant is $110,155 in state appropriations for 1998.

The research will be conducted at the University of Arizona, Tucson, and the field studies will be carried out by the extension facility at the Yuma Agricultural Center, Yuma, Arizona and the anticipated completion date for the original objectives is 1999. This is a new project and will be evaluated when received by the agency.

COASTAL CULTIVARS

This project will be undertaken to identify new ornamental, fruit, and vegetable crops for the lower coastal plain of Georgia and develop management systems for profitable production. This effort is designed to improve the rural economy and to help supply an expanding market for the products in that region and possibly beyond. Funds are awarded competitively among scientists working at this location. The proposed research under this project has regional significance for coastal zone land in the South Eastern US on potential new plants for the growing market for ornamentals and speciality fruits and vegetables for the area. The original goal of this research was to identify new plant cultivars to provide alternative crops with economic potential to the coastal area.

The work supported by this grant began in fiscal year 1997 and funds appropriated as follows: fiscal year 1997, $200,000 and fiscal year 1998, $250,000. A total of $450,000 has been appropriated. The non-federal supporting this project in 1997 was $50,150.

Research will be conducted at the University of Georgia coastal garden and this project was initiated in 1997 with the anticipation of meeting the major objectives in four years. A [eer panel has been established to set priorities and review subproposals from eligible scientists at the Georgia Agricultural Experiment Stations. Subprojects are selected competitively based on scientific merit from among proposals that address high priority issues associated with production of new cultivars for the region. The combined proposal is then reviewed by CSREES for scientific merit. This review process has been used for both fiscal years 1997 and 1998.

COMPETITIVENESS OF AGRICULTURE PRODUCTS, WASHINGTON

Competitiveness of forest products research is conducted at the University of Washington. Competitiveness of food products is conducted at Washington State University. Export opportunities for forest products continue to increase although they have been substantially impacted by environmental restrictions on harvest and the Asian economic crisis. Research has been focused on the more complete transfer of U.S. light frame construction building technology primarily to Japan in direct support of the efforts to deregulate the Japanese housing sector, thereby opening their markets. Research has also been focused on the causes of declining wood resource availability and forest management alternatives that can better satisfy envi-

ronmental goals with less negative impacts in serving global consumer needs for products. Research project priorities are first prioritized by an outside Executive Board. Faculty then review the technical merits of each project proposal.

Export of food improves the global competitiveness of the Pacific Northwest region's value-added agricultural products. Research results are disseminated through various activities such as trade shows, international conferences, and a variety of media. Research focuses on foreign market assessments, product development, and policy and trade barriers. Particular attention has been paid to technology that can add value to U.S. agricultural products and to meet the changes brought by international trade agreements. This grant is awarded competitively at the state level. The agency's last formal review was in 1992.

While there is a very large opportunity to increase the export of materials and building systems to Asian markets, the companies are generally small and are not able to provide their own research. International markets have a long history and cultural appreciation for different construction technologies that are both higher cost and lower in construction quality than U.S. technology. Research on these market opportunities has been critical to the deregulation of foreign markets, development of acceptable product and building standards, understanding the quality and service needs, and the understanding and training in the customization of U.S. construction technology to foreign consumer values.

Research on forest management alternatives for the Pacific Northwest has also demonstrated that more wood, higher quality wood, and substantial increases in critical forest habitats can be produced using more advanced technologies, thereby reducing the substantial economic and market share losses that have been caused by harvest constraints to protect certain species.

The goal of the research in both wood products and food is to provide the information on markets and product technologies that can open higher valued international markets to U.S. exporters. Critical information is needed to support the deregulation of foreign markets, the education of foreign purchasers on the advantages of U.S. products, the education of potential U.S. exporters on the substantially different quality and service requirements for serving foreign markets. The food production research has given Pacific Northwest producers high-value options never before available, such as Wagyu beef, which retails at twice the price of traditional U.S. beef; azuki beans, which sell for 50 percent above other dry beans; and wasabi radish, which sells for up to $60 per pound and is especially suited to small holdings. Burdock is arousing a lot of interest among Japanese buyers. In food processing, the Center has found beneficial uses of new technologies, such as hurdle techniques for shelf-stable foods, pulsed electric systems for pasteurization, microwave for drying, and high hydrostatic pressure for cheese and egg processing.

The work began in fiscal year 1992. The appropriation for fiscal years 1992–1993 was $800,000 each year; fiscal year 1994, $752,000; and fiscal years 1995–1998, $677,000 each year. A total of $5,060,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: $716,986 State appropriations, $209,622 product sales, $114,000 industry, and $661,119 miscellaneous, for a total of $1,701,727 in 1991; $727,345 State appropriations, $114,581 product sales, $299,000 industry, and $347,425 miscellaneous for a total of $1,488,351 in 1992; $1,259,437 State appropriations, $55,089 product sales, $131,000 industry, and $3,000 miscellaneous, for a total of $1,448,526 in 1993; $801,000 State appropriations, $1,055,000 product sales, $1,040,000 industry, and $244,000 miscellaneous, for a total of $3,140,000 in 1994; $810,000 State appropriations, $42,970 product sales, $785,000 industry, and $2,000,000 gift of a ranch due to the International Marketing Program for Agricultural Commodities and Trade Center's research on Wagyu cattle, for a total of $3,637,970 in 1995; $844,000 State appropriations, $45,000 product sales, $900,000 industry, and $45,000 miscellaneous, for a total of $1,834,000 in 1996; and $876,000 State appropriations, $1,606,000 industry, for a total of $2,482,000 in 1997.

The research program is being carried out by the International Marketing Program for Agricultural Commodities and Trade at Washington State University, Pullman, and the Center for International Trade in Forest Products at the University of Washington, Seattle. The project is projected for 3 years duration and, therefore, should be completed following fiscal year 2000. New opportunities arise continuously as international markets undergo change.

Two evaluations of the Washington State University component of the project were conducted in 1992 by the U.S. Department of Agriculture. The State of Washington Legislative Budget Committee gave the Washington State Center exemplary marks for meeting its objectives. We anticipate a follow-up evaluation in 1999. Onsite reviews are conducted annually of the University of Washington component of the project through annual meetings of the project's executive board, attended by

the agency's staff. Both components are reviewed annually by the agency. The project is meeting the key objective of trade expansion through innovative research. The University of Washington project was formally reviewed by the agency in 1991. State reviews were completed in 1992 and 1994. A formal review by the University was completed in 1997. A broad survey of constituents impacted by the research was completed, resulting in a very favorable review of the Center's activities and a recommendation to continue this research. Another state review is currently scheduled to start this coming year.

COOL SEASON LEGUME RESEARCH

The Cool Season Legume Research Program involves projects to improve efficiency and sustainability of pea, lentil, chickpea and fava bean cropping systems collaborative research. Scientists from seven states where these crops are grown have developed cooperative research projects directed toward crop improvement, crop protection, crop management and human nutrition/product development. This project is subjected to a merit review by peer scientists. The principal researcher indicates that the original goal of this project was to improve efficiency and sustainability of cool season food legumes through an integrated collaborative research program and genetic resistance to important virus diseases in peas and lentils. Evaluation studies of biocontrol agents for root disease organisms on peas are underway. Other studies are evaluating integration of genetic resistance and chemical control. Considerable progress has been made using biotechnology to facilitate gene identification and transfer. Management system studies have addressed tillage and weed control issues.

The work supported by this grant began in fiscal year 1991 with appropriations for fiscal year 1991 of $375,000; fiscal year 1992 and 1993 $387,000 per year; fiscal year 1994, $364,000; fiscal year 1995, $103,000; and fiscal years 1996 through 1998, $329,000 per year. A total of $2,603,000 has been appropriated. The nonfederal funds provided for this grant were as follows: 1991, $304,761 state appropriations, $14,000 industry, and $18,071 other nonfederal; 1992, $364,851 state appropriations, $15,000 industry, and $14,000 other nonfederal; 1993, $400,191 state appropriations, $19,725 industry, and $10,063, other nonfederal; and 1994, $147,607 nonfederal support. Nonfederal support for 1995 was $150,607, for 1996 it was $386,887, and for 1997 it was $384,628.

Research has been conducted at agricultural experiment stations in Idaho, Oregon, Washington, Wisconsin, Minnesota, New York and New Hampshire. The funds have been awarded competitively among participating states and not all states receive funds each year. The projected duration of the initial project was five years. This research has provided vital information which is already being used to improve production management. However, a number of critical issues related to insect and disease control as well as crop quality remain to be addressed. Breeding for insect and disease resistance is given the highest priority, while crop management alternatives to help reduce disease and insect pest problems will continue to be studied.

COTTON RESEARCH, TEXAS

CSREES has requested the university to submit a grant proposal that has not yet been received. The proposed project is expected to help support a broad based program to address priority research needs of cotton grown on the Texas high plain. The goal of this project is to improve cotton production in West Texas.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $200,000. Nonfederal funding for the project is not yet known.

The work will be conducted at the Texas A&M University Research and Extension Center, Lubbock and Texas Technical University Campus. The initial phase of this work is projected to require 3 years, this project is just starting this year, and results are not yet available. The proposal will be evaluated by the institution project approval process.

CRANBERRY-BLUEBERRY DISEASE AND BREEDING, NEW JERSEY

The work has focused on identification and monitoring of insect pests on blueberries and cranberries, the identification, breeding, and incorporation of superior germplasm into horticulturally-desirable genotypes, identification and determination of several fungal fruit-rotting species, and identification of root-rot resistant cranberry genotypes. Overall, research has focused on the attainment of cultural management methods that are environmentally compatible, while reducing blueberry and cranberry crop losses. This project involves diseases having major impacts on New Jersey's cranberry and blueberry industries, but the finding here are being shared with experts in Wisconsin, Michigan, and New England.

The original goal was the development of cranberry and blueberry cultivars compatible with new disease and production management strategies. Last year, over 75 blueberry selections with wild blueberry accessions resistant to secondary mummy berry infections were moved into advanced testing. The biology and seasonal life history of spotted fireworm on cranberries was determined. A pheromone trap-based monitoring system for cranberry fruitworm was developed and further refined for commercialization in 1997. Blueberry fruit volatiles attractive to blueberry maggots were identified and tested in the field. Seven major fungal fruit-rotting species were identified, and their incidence in 10 major cultivars of blueberry and cranberry were determined. It is likely that resistance to fruit rot is specific to fungal species. Researchers identified about 20 root rot-resistant cranberry genotypes in an artificially inoculated field trial.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, $100,000; fiscal year 1986–1987, $95,000 per year; fiscal year 1988–1989, $260,000 per year; fiscal year 1990, $275,000; fiscal years 1991–1993, $260,000 per year; fiscal year 1994, $244,000; and fiscal years 1995–1998, $220,000 each year. A total of $2,989,000 has been appropriated. State and non-federal sources are providing funds in the amount of $95,000 for this grant in fiscal year 1998.

This research is being conducted at the New Jersey Agricultural Experiment Station. The completion date for the original objectives was 1995. Those objectives have not been met. To complete the breeding, disease and insect management and provision of new management guidelines for extension and crop consultants, it estimated that an additional five to nine years will be required.

The last agency evaluation of this project occurred in December, 1996. In summary, the evaluation stated that the effort has continued to be highly productive, with various improved management strategies, plant materials and environmentally-balanced pesticides being areas of major impact. Some specific accomplishments included differentiating isolates of a fungus classified into different fungicide sensitivity groups using DNA-based probes, testing blueberry varieties with DNA for leafhopper resistance, and development of an infection assay for evaluating cranberry germplasm for Phytophthora root rot.

CRITICAL ISSUES

These funds support research on critical issues related to new or emerging pests and diseases of animals and plants. The program is expected to initiate research in a short time period until other resources can be secured to address the issue. The program began in fiscal year 1996 when potato late blight and vesicular stomatitis in animals were the two targeted emerging problems chosen for funding. Funding for vesicular stomatitis research was continued through fiscal year 1997 in an effort to identify either insect carriers of the virus that could transmit the disease among animals or the wildlife reservoirs of the virus which could contribute to initiation of future outbreaks. In fiscal year 1997, the critical issues funding continued to support research on potato late blight so that growers will be able to manage disease outbreaks more effectively with integrated pest management programs. Research is being conducted to identify molecular markers for specific strains of the fungus, develop epidemiological and prediction models, and educate growers about improved management approaches. Proposals for this research program are reviewed by scientific peer panels utilizing both USDA and non-USDA staff members. When appropriate, investigators may be asked to revise or improve certain components of the project to ensure that it meets the highest priority issues.

Vesicular stomatitis is of national impact due to its similarity to foot and mouth disease and the negative effect on movement of horses, cattle and swine during an outbreak. The last outbreak in 1995 had a very large impact on the economics of horse and cattle owners in the far western US. Since 1992 new, highly virulent strains of the potato late blight fungus Phytophthora infestans caused severe losses in potato and tomato production throughout the United States, resulting in what some experts term a national crisis. From 1993 to 1995, a series of meetings involving growers, consultants, industry, academia and government assessed the growing problem and participants concluded that extraordinary steps were needed to mobilize research efforts that would help address the problem in the near term.

In animals the goal was to discover natural reservoirs of the virus and insects which are capable of transmitting the disease among animals. At this time, we have been unable to find significant wildlife hosts which could serve as a reservoir for the virus during periods between outbreaks nor have the researchers been able to isolate the virus from insects in areas affected during the most recent outbreak. Research was initiated to provide growers with the knowledge and technologies they need to reduce economic losses resulting from potato late blight with less reliance

on pesticides. Research initiated with fiscal year 1996 funds is making progress in developing modeling tools and management approaches that are an important step towards reducing the devastating effects of late blight. The National Late Blight Fungicide Trial provided important information on the efficacy of an array of fungicide programs. A World Wide Web site was established to provide growers, researchers and industry with the latest information on management of potato late blight. Funds appropriated for fiscal years 1996–1998 were $200,000 for each year, for a total appropriation of $600,000 to date.

The vesicular stomatitis work is being conducted at the University of Arizona and Colorado State University. The potato late blight work has been conducted at Washington State University, Oregon State University, University of Idaho, University of Wisconsin, and Pennsylvania State University, and North Carolina State University.

The Critical Issues funds are intended to support the initiation of research on issues requiring immediate attention until other, longer-term resources are available. The objectives of the projects are short-term and are expected to be completed within a 1–2 year period. This has been true for the vesicular stomatitis and potato late blight work. These projects have been reviewed to ensure compliance with the original goals during fiscal year 1997. All projects were reviewed for scientific merit before funding decisions were made. Also, scientists being supported with these funds are in close contact with CSREES' National Program Leaders in these areas so that the agency is kept abreast of developments as they occur. In addition, site visits are arranged when convenient to include as part of other official travel to that state. Project locations have been visited and progress reports submitted to document expected progress. Results are also shared with APHIS scientists to ensure implementation of findings and verify that we are meeting their needs.

DAIRY AND MEAT GOAT RESEARCH, PRAIRIE VIEW A&M, TEXAS

The program has addressed a range of issues associated with goat production. Research by scientists at the International Dairy Goat Center, Prairie View A&M University focuses on problems affecting goat production in the United States. Issues included are the study of nutritional requirements of goats, disease problems, methods to improve reproductive efficiency in the doe, the use of gene transfer to improve caprine genetics and the evaluation of breeding schemes to improve meat and milk production. Currently, research is in progress to assess the economics of alternative breeding and rearing systems for goats in the southeastern region of the U.S., to study the incidence and impact of intestinal parasites, and to develop least-cost health management strategies for parasite control. The principal researcher believes that nationally, most of the farm enterprises that include goats are diverse and maintain a relatively small number of animals. Responding to disease, nutrition, breeding and management problems will improve efficiency of production and economic returns to the enterprise.

The original goal of this research was to conduct research that will lead to improvement in goat production among the many small producers in the United States. Research has been conducted to develop and improve nutritional standards, improve genetic lines for meat and milk production and to define mechanisms that impede reproductive efficiency in goats. Current efforts focus on the development of enterprise budget management tools for goat producers in the Texas gulf coast region.

Grants have been awarded through appropriated funds as follows: $100,000 per year for fiscal years 1983–85; $95,000 per year for fiscal years 1986–88; no funds were appropriated in fiscal year 1989; $74,000 for fiscal year 1990; $75,000 per year for fiscal years 1991—1993; $70,000 for fiscal year 1994; and $63,000 per year for fiscal years 1995–1998. A total of $1,206,000 has been appropriated. The University reports no non-federal funds expended on this program.

Research is being conducted at Prairie View A&M University in Texas. The overall objective of this research is to support the needs of small farms engaged in the production of meat and milk from goats along the Texas Gulf Coast. The university researchers continue to address those needs on an annual basis and anticipate that work currently in progress will be completed by the end of fiscal year 1999. The Dairy/Meat Goat Research grant was reviewed in June, 1997 and it was determined that the institution is well equipped and qualified to carry out the research project.

DELTA RURAL REVITALIZATION, MISSISSIPPI

The Delta Rural Revitalization, Mississippi Project involves applied research and outreach focused on creating new and expanded economic development opportunities for the Mississippi Delta region. The project has gone through several phases in the

delineation of a strategy for long range development within the region. Phase I was completed with the delivery of a baseline assessment of the economic, social, and political factors that enhance or impede the advancement of the region. Phase II of the project evaluated the potential for entrepreneurship and small business creation as mechanisms to improve economic conditions. Phase III is now focusing on technical assistance to Delta region manufacturing firms to strengthen their ability to provide employment and incomes and includes to development and refinement of data bases and development statistics. The proposals are submitted for internal review and evaluation within the agency. Recommendations are presented to enhance impact on regional and national agendas and provide greater impact on targeted region.

This is an on-going pilot to demonstrate the effective development and implementation of applied research, training, education, and technical assistance related to job and business development as a development strategy. The principal researcher believes that the databases, technical assistance, and analytical capability will increase the effectiveness of economic development and entrepreneurial activity in the region. The applied research and outreach project was designed to increase ability to strategically guide economic development through target industry attraction. They developed an analytical baseline for the Delta region to benchmark economic development progress and to profile potential arenas of opportunity. An entrepreneurial forum was established to help new business ventures with start-up advice and assistance. A venture capital association was formed to help both inventors and businessmen find capital resources to carry out development initiatives. The emphasis of the project is now shifted to technical assistance for existing industries.

Grants have been awarded from appropriated funds in the following amounts per year: fiscal year 1989, $175,000; fiscal year 1990, $173,000; fiscal year 1991–93, $175,000; fiscal year 1994, $164,000; and fiscal year 1995 to 1998, $148,000 per year. A total of $1,629,000 has been appropriated and awarded. Total non-federal funds directed to this project, as reported by Mississippi State University, are: fiscal year 1991, $117,866; fiscal year 1992, $84,402; fiscal year 1993, $68,961; fiscal year 1998, $57,404. Reports for other years are incomplete at this time.

Applied research and outreach is being carried out through Mississippi State University and sub-contractors. The original completion date was September 30, 1990. The original objectives of this research have been met. The additional objectives being presented for the current year should be completed by September 30, 1999.

The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit periodic reports to the agency to document impact of the project. Significant suggestions have been offered to improve the relevance and impact of this project. Time lines tend to lag on targeted accomplishments. An assessment of the project was conducted by the Social Science Research Center at Mississippi State University and a report compiled in November, 1996.

DROUGHT MITIGATION, NEBRASKA

This grant supports the National Drought Mitigation Center program in the School of Natural Resource Sciences at the University of Nebraska. The Center is developing a comprehensive program aimed at lessening societal vulnerability to drought by promoting and conducting research on drought mitigation and preparedness technologies, improving coordination of drought-related activities and actions within and between levels of government, and assisting in the development, dissemination, and implementation of appropriate mitigation and preparedness technologies in the public and private sectors. Emphasis is directed toward research and outreach projects and mitigation/management strategies and programs that stress risk minimization measures rather than reactive actions. This grant has not been awarded competitively, largely because of the national and international reputation of the University of Nebraska for research in the field of drought mitigation and management. The grant proposal is reviewed annually by the University of Nebraska for its scientific merit.

Studies conducted by the principal researcher show that drought is a normal feature of the climate of virtually all regions of the United States. The Federal Emergency Management Agency has recently estimated that annual losses attributable to drought in the United States are between $6–8 billion. Losses resulting from drought have increased from an estimated annual loss of $7 million to $1.2 billion in the mid-1970's. Drought impacts are escalating in response to increasing demands for water and other natural resources, increasing and shifting population, new technologies, and social behavior. These impacts are diverse and affect the economic, environmental, and social sectors of society. This fact was reinforced dra-

matically in 1996 in the Southwestern United States. Impacts in Texas alone were estimated to be more than $5 billion.

Almost without exception, the occurrence of widespread severe drought in the past decade has illustrated the inadequacy of existing assessment, mitigation, response, and planning efforts at the federal, state, local, and tribal level. Rather than the "crisis management" approach of the past, a "risk management" approach is needed where the emphasis is on preventive measures, such as contingency planning, mitigation strategies, and public education. Until the creation of the Center in 1995, little attention has been focused on drought among the long list of natural hazards that affect the Nation. The Center is receiving non-federal funds in support of this research from the University of Nebraska. In addition, the Center is attracting support for specific projects that are an integral part of its mission from federal and state sources.

The original goal of this research was to create a National Drought Mitigation Center and develop a comprehensive program aimed at lessening societal vulnerability to drought. The Center has created an information clearinghouse and is delivering information to a diverse audience of users through its home page. Over 50,000 users now access the Center's home page each month. The Center's award winning home page was used extensively by state and federal agencies during the 1996 drought to assist in the evaluation and response process. This home page networks users of drought-related information in the United States and elsewhere with information that would otherwise be unavailable or inaccessible to users.

The National Drought Mitigation Center played an important role in the response of Federal and state government to the 1996 severe drought in the Southwest and southern Great Plains states. In addition to providing timely and relevant information on drought severity and alternative response, mitigation, and planning measures, the Center participated in the Multi-state Drought Task Force workshop organized at the request of President Clinton and helped formulate long-term recommendations to improve the way this Nation prepares for and responds to drought. The Center was also a member of the Western Governors' Association Drought Task Force. This task force also made recommendations to reduce the risks associated with drought in the western United States.

There have been several notable outcomes of the Western Governors' Association actions and the Center has been closely associated with each of these outcomes:

1. A Memorandum of Understanding was signed between Western Governors' Association and key federal agencies to develop a partnership to improve drought management and preparedness in the West.

2. A Western Drought Coordination Council was formed in 1997 to implement these actions. The National Drought Mitigation Center is serving as headquarters for the Council and the Director of the Center, is serving as the administrative director of the Council.

3. The Center has worked closely with both the Senate and the House in the formulation of the National Drought Policy Act. This bill was passed by the Senate in November 1997 and will be considered by the House in early 1998. This bill would create a Commission to review federal, state, and local drought programs and make recommendations to the President and Congress on the needs for a national drought policy. The Commission's work will be done in consultation with the National Drought Mitigation Center.

4. The Center has been organizing and conducting a series of training workshops on drought contingency planning. The purpose of these workshops is to train representatives of local, tribal, state, and federal governments on how to develop a drought contingency plan. Two workshops were held in 1997; three workshops are planned for 1998.

5. The Center continues to work with specific states and tribal governments on drought contingency planning efforts. The number of states with drought plans has increased dramatically since 1982—from 3 to 27 states; and the Director of the Center has been instrumental in this increased attention to drought planning at the state level. His research is the basis for recent drought planning efforts in Texas and Oklahoma. In addition, the Center will begin working with New Mexico in 1998 in the development of a long-term drought mitigation plan.

The work supported by this grant received an appropriation of $200,000 in fiscal years 1995 through 1998, for a total appropriation of $800,000. The University of Nebraska contributed $75,737 of non-federal funds in support of this research in fiscal year 1995 and $58,977 in fiscal year 1996, and $61,545 in fiscal year 1997. The University of Nebraska will contribute $67,819 in fiscal year 1998.

The research will be conducted at the University of Nebraska-Lincoln. The research conducted under this project is being undertaken under a series of nine tasks. Significant progress on each of these tasks has been made, but these activi-

ties are ongoing. The information clearinghouse has been created, but new information and documents are continuously added to the home page in response to users' needs and requests. In addition, the drought watch section is updated monthly to assist users in evaluating current climate and water supply conditions. Research on new climatic indices to monitor drought and water supply conditions are being tested and mitigation technologies and existing state drought plans are continuously evaluated. New activities are also being initiated in response to the growing interest and awareness in drought mitigation in the United States and elsewhere. For example, the activities of the Western Drought Coordination Council provides the Center with a broadening range of activities on an annual basis.

ECOSYSTEMS, ALABAMA

This is a collaboration between Auburn University, Faulkner State Community College, and the Alabama Southern Community College. The Faulkner State Community College's research will focus on marine and estuarine environmental issues, including water quality, habitat loss, non-point source pollution and watershed management in the Gulf of Mexico region. The Alabama Southern Community College's research will focus on issues facing the forestry industry in the southeastern United States, including the reduction of chemical discharge from wood and pulp processing. Goals for this project are still being refined, and no work on this project has been initiated. However, we anticipate that work will begin during the Spring 1998, and the appropriation for fiscal year 1998 is $500,000.

Research will be conducted at the Faulkner State Community College Aquaculture Center and the Alabama Southern Community College Center for Forestry, Paper, and Chemical Technology. Objectives for the project and a timetable for completion should be included as part of the proposal, which has not been received by the agency. This project has not yet been evaluated, as it is still in the early stages. The first evaluation of the project will be a review of the research proposal, and will be conducted when the proposal has been received by the Agency.

ENVIRONMENTAL RESEARCH, NEW YORK

The environmental research in New York has several major goals. These are: (1) to better understand the impacts of nutrient flows, principally nitrogen, from agriculture on non-agricultural ecosystems, forests, wetlands, and water resources in mixed ecosystem landscapes; (2) to improve knowledge of agricultural contributions to greenhouse gas emissions and effects of projected climate change on crop production; and (3) to develop innovative approaches and technologies for improving the efficiency of agricultural production and/or reducing environmental impacts of agriculture. New goals for the coming year include: (1) to improve understanding of the impacts of land application of biosolids on the sustainability of New York agriculture and on water quality, and to develop management practices and guidelines for sustainable use of biosolids in New York agriculture; and (2) to evaluate spatial and temporal variability of crop yields within fields and to develop management practices that increase productivity, increase the efficiency of use of inputs, and reduce environmental impacts of agriculture.

Interactions between agriculture and the environment are many and complex and require multi-disciplinary efforts to both understand the interactions and to develop effective management strategies. Traditionally, research and research funding, has been discipline-based and, hence, uni-dimensional. Programs supported by the special grant are multi-disciplinary in nature, involving technical scientists from a range of disciplines, together with social scientists and economists. Additionally, translation of knowledge from plot or field studies to larger scales, such as landscape to regional and global, is needed to provide information that is useful to policymakers.

One goal of the program is to identify impacts of nitrogen flows from agricultural lands on adjacent natural ecosystems, forests and wetlands, and water resources and to devise management strategies to minimize these impacts. Nitrogen leaching from maize-based cropping systems has been shown to be higher when organic sources of nitrogen, manures, and plow-down alfalfa are used as nitrogen sources for crop growth compared to use of inorganic fertilizers. Attempts to use an interseeded cover crop to capture and recycle excess nitrogen left over after the cropping season were only marginally successful due to limited growth of the cover crop following maize harvest in New York's climate. Studies demonstrated that protection of groundwater resources in New York from contamination by nitrate in areas of intensive dairy farming must rely on dilution by water from non-intensively used areas within the watershed and on ammonia volatilization from manure. A com-

puter based nitrogen decision support system to improve recommendations for on-farm nitrogen management was developed and implemented in New York.

A second goal of the program is to investigate several interactions between agriculture and climate change. Studies have included:

—Impacts of agricultural use of land on methane fluxes to/from soils;
—Effects of interactions between elevated carbon dioxide and environmental variables on yields of vegetable crops;
—Effects of climate variability on crop production;
—Agronomic and economic effects of gradual climate change on grain yields, cropping patterns and food prices; and
—Carbon sequestration in agricultural soils.

Studies of methane fluxes to/from soils showed that northern hardwood forests are both a source and a sink for this powerful greenhouse gas and overall may be a net source of methane. In contrast, upland agricultural systems were consistently found to be a sink for methane; thus the surface land smoothing and improved drainage of upland agricultural lands has had a mitigating effect on atmospheric methane levels. Flooding land for rice production is known to create a substantial source of methane. Use of legume green manures to supply nitrogen in an organic production system increased methane emissions two-fold, creating a conflict between a sustainable agriculture practice and the environment.

Climate, crop production, and economic models were linked to provide an integrated framework for assessment of the impact of climatic change at the farm level. The model projected that a grain farm in a cool climate, Minnesota, could effectively adapt to climate change; whereas a similar farm in a warmer climate, Nebraska, would have reduced crop production and income.

No-tillage agriculture was shown to increase preservation of existing soil organic carbon but accumulation of carbon derived from crop inputs was higher with conventional tillage. Inputs of carbon to soils from root exudates and residues were found to be more important to carbon sequestration in soils than were residues from the tops of plants. The effects of soil texture and soil aggregation, coupled with tillage management, on carbon sequestration in soil organic matter are being investigated.

A third goal of developing innovative approaches to management, systems, and technologies has had the following components:

—Whole farm analysis and planning;
—Use of weather forecasts to predict weed management impacts on corn production;
—Soil quality changes in the Chesapeake farms sustainable agriculture project; and
—Use of constructed wetlands to mitigate phosphorus run-off from barnyards.

Assessments of nutrient use and management on farms have been carried out in Cayuga County, New York, and in Pennsylvania, in conjunction with Rodale Institute. In New York, mass nutrient balance data on dairy farms has shown that, because of nutrient imports in feed and inadequate cropland area, nutrients excreted in manure exceed crop requirements. Coupling of models for nutrient management and animal diets was used to develop improved management practices. On one farm, production of nitrogen in manure was reduced 25 percent by more accurate balancing of animal diets and on a second farm modification of the cropping pattern reduced the imported nitrogen in feed by 13 percent. In Pennsylvania, it was demonstrated that management of a mixed grain and livestock farm without external chemical inputs was economically feasible. Appropriate crop rotation was found to be the key element.

Soil quality assessments at the Chesapeake farms sustainable agriculture project on Maryland's Eastern shore, where various cropping systems are being compared with the conventional corn-soybean rotation, have shown that soil quality improves as the cropping system becomes more complex, involves less tillage, and has more organic inputs.

Mitigation of phosphorus in runoff from barnlots by a constructed wetland system is being evaluated on a 500-head dairy farm in New York. Different substrates in the wetland beds are being evaluated, including soil, limestone, norlite, and wollastonite. To date, the soil and norlite materials are proving to be the most effective at phosphorus removal.

The work supported by this grant began in fiscal year 1991 with an appropriation of $297,000. The fiscal years 1992–1993 appropriation was $575,000 per year; $540,000 in fiscal year 1994; and fiscal years 1995 through 1998, $486,000 each year. A total of $3,931,000 has been appropriated.

In fiscal year 1991, Cornell University provided $27,893 and the State of New York provided $118,014. In fiscal year 1992, Cornell University provided $37,476

and the State of New York $188,915. In fiscal year 1993, Cornell University provided $13,650 and the State of New York $243,251. In fiscal year 1994, the State of New York provided $214,989. In fiscal year 1995, the State of New York provided $233,085. In fiscal year 1996, the State of New York provided $388,301.

This research is being conducted at Cornell University. The original estimate was for a 5-year program, and many of the initial objectives in the nitrogen and climate change areas have been met. New objectives evolved from the original work; and the program was also oriented to consider broader dimensions of environmental management, particularly strategies for community-based watershed management, involving linkage of technical knowledge with social and local govern-mental perspectives and needs. Estimated completion dates for current program elements are:

1998–1999 program year

Nutrient processing in wetlands
Use of weather forecasts in weed management
Use of constructed wetlands to remediate barnyard run-off
Effect of climate variability on crop production
Carbon storage in soils

Completion beyond 1999

Watershed science and management
Effects of elevated CO_2 on crop yield potential
Remington farms sustainable agriculture project (a 10-year project)

The project was peer reviewed in 1997 and 1998. Overall, the project was rated very high. Specific ratings included the following:

1. Outstanding scientific merit.
2. Appropriate methodology
3. Excellent previous accomplishments.
4. The project has potential for significant impact concerning the relationship of agriculture to global change.
5. The proposal is well conceived and well written.

ENVIRONMENTAL RISK FACTORS/CANCER, NEW YORK

The American Cancer Society estimated that over 184,000 women in the United States were diagnosed with breast cancer in 1996. The role of environmental risk factors, such as pesticides, is of concern to women, the agricultural community, and policymakers. This project, emphasizing risk reduction prevention information, will work at filling that void.

The original goals of this research are:

1. To establish a database of critical evaluations on the current scientific evidence of breast carcinogenicity and effects on breast cancer risk for selected pesticides.
2. To effectively communicate database information to the scientific community, federal agencies, pubic health professionals, the agricultural community, and the general public using innovative electronic methods of communication, in-service training sessions, and printed materials.
3. To further develop the Breast Cancer Environmental Risk Factors World Wide Web to improve ease of use, add informational materials and hyperlinks, and determine the feasibility of developing an online, searchable bibliography on pesticides and breast cancer risk accessible through this Web site.

The work supported by this grant began in fiscal year 1997, and appropriations were as follow: fiscal years 1997–1998, $100,000 for a total of $200,000. The non-federal funds and sources provided for this grant were as follows: $150,000 state appropriations for fiscal year 1996; $250,000 in state funds (New York) were requested for fiscal year 1997.

Research is conducted at the Cornell University, Ithaca, New York and the anticipated completion date is March 31, 1999. As a relatively new project, an evaluation has not been conducted, although the proposal is currently under review. Periodic progress reports have been made throughout the year and the project is moving towards achieving its desired goals. A final evaluation will be made after March 31, 1999.

EXPANDED WHEAT PASTURE, OKLAHOMA

This project was designed to develop improved supplementation programs and new systems for technology delivery to reduce production risk of raising cattle on wheat pasture. The work involves evaluation of grazing termination date on grain and beef production, assess the impact of wheat cultural practices and develop an economic model to evaluate alternative decisions on grain/beef production. Addi-

tional effort is directed toward development of cool season perennial forage grasses to complement wheat pasture. The principal researcher believes that this work addresses the needs of wheat/cattle producers of Oklahoma as a primary focus. However, it would appear to have some application regionally in adjacent states.

The original goal of this research was to develop economically viable management systems for use of wheat for supplemental pasture for beef cattle before the crop starts making grain. This work has already shown how the use of feed supplements can increase net profit from cattle grazing on wheat pasture. The study has identified management practices, e.g. date of planting, cultivar selection, grazing intensity and date of cattle removal that produce the optimum grain yield and cattle gain. A Wheat/Stocker Management Model has been developed as a decision aid to help producers assess income risk in the operation. Work is underway on a Wheat Grazing Systems simulation model.

The work supported by this grant began in fiscal year 1989 and appropriations were as follows: fiscal year 1989, $400,000; fiscal year 1990, $148,000; fiscal year 1991, $275,000; fiscal years 1992–1993, $337,000 per year; fiscal year 1994, $317,000, and fiscal years 1995–1998, $285,000 each year. A total of $2,954,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows: $175,796 state appropriations in 1991; $174,074 state appropriations in 1992; and $236,584 state appropriations in 1993. The non-federal support for 1994 was $238,058 for state appropriations. Funds for fiscal year 1995 were $275,426, for 1996 were $120,000, and for 1997 were $190,510.

The research is being done at Oklahoma State University and this project started in 1989 with a projection of 10 years to complete the research objectives. Some objectives are nearing completion while others will probably require further study. A number of wheat cultivars have been identified which will tolerate grazing and still produce economic grain yields. The grazing cut off date for grain production has been established. However year to year variation need additional study in order to develop a reliable decision support system.

This program has not been subjected to a comprehensive review. However, each year's funding cycle is reviewed internally by CSREES scientists for scientific merit and relevance. Results from this project are currently being used by ranchers to help with management decisions concerning stocker cattle grazed on wheat that will be harvested for grain. Current work is designed to refine the current information and identify wheat cultivars and grazing management for optimum economic return.

EXPERT IPM DECISION SUPPORT SYSTEM

A prototype information and decision support system was developed in collaboration with Purdue University and the Department of Energy's Argonne National Laboratory that integrates and manages information from multiple data sources. Information on the US Environmental Protection Agency (EPA) review status of pesticides, crop losses caused by pests, status of minor use registrations (IR–4), current research in progress, and priorities of IPM implementation teams are components of the Pest Management Information Decision Support System (PMIDSS). With the information in the current data bases, commodity/pest problems are prioritized using a science-based logic. The need for decision support and information is greater than in the past with the passage of the Food Quality Protection Act (FQPA) of 1996. The Act recognizes IPM as helping to provide workable solutions to pest problems. The decision support system is incorporating increased information to address these needs. The PMIDSS serves national, regional, and local needs for research and extension activities. At the national level, the system supports the USDA/USEPA Memorandum of Understanding (MOU) to identify crop protection gaps and to find alternatives to pesticides under regulatory review or those being lost due to pest resistance. The system has identified priorities for the Pest Management Alternatives Program request for proposals for the past two years. It also is interacting with the identification of priorities for research and extension activities in the regional IPM Special Grant and Special Projects. It provides a mechanism for growers and grower organizations to interact with the priority-setting process and the ultimate result is to help insure that farmers have adequate alternatives for managing pests at the specific local level.

The goal of the PMIDSS is to refine the process to identify IPM needs of USDA, EPA, and states by addressing critical needs, reinforce state and federal partnerships to disseminate important pest management information for improved decision making, profitability, and environmental quality, and to address future applications and needs. In 1996 and 1997, the program addressed priority commodity pest management needs due to voluntary pesticide cancellations and regulatory cancellations

responding to the MOU and supplemental MOU between EPA and USDA. The supplemental MOU was signed in April, 1996, at which time there were 58 pesticides and 374 uses identified and prioritized. The process included information on cancellations furnished by EPA, selected uses were sent to the states' NAPIAP and IPM network; and impacts of cancellations effecting individual state agriculture were reported for inclusion in the decision support system. Twenty-five minor commodities on which 40 specific pests were identified in the 1997 request for proposals. Results were also used by the regional IPM request for proposals. The Pest Management Alternatives Program WorkBench (a major component of PMIDSS) has been refined and placed on the CSREES local area network and is available to all pest management national program leaders.

In fiscal year 1994, we expended $40,000 of CSREES administrative funds and $90,000 from Science and Education Evaluation Funds to initiate collaborative work with the Argonne National Laboratory. In fiscal year 1995, we expended $172,000 as a Cooperative Agreement with Purdue University and Argonne National Laboratory from the Pest Management Alternative Special Grant Funds and $5,000 from NAPIAP funds. In fiscal year 1996, we expended $177,000 in a cooperative agreement with Purdue University and Argonne National Laboratory from Pest Management Alternative Special Grant Funds, $21,000 from Research, Extension, and Education Evaluation Funds, and $40,000 from NAPIAP funds (for development of NAPIAP data fields). In fiscal years 1997–1998, we are expending $177,000 per year to Purdue University and Argonne National Laboratory. The total resources to date are $887,425. Purdue University and Cornell University have contributed non federal resources to the oversight of the information, decision support system as well as a number of states that have provided information that is part of the information base. Many program areas are contributing data bases that are part of the Pest Management Information Decision Support System.

The work is carried out by the Argonne National Laboratory which has a Washington, D.C. office where information, decision support personnel are housed and there are frequent interactions between CSREES and other USDA staff. Interactions and information is provided by every state in our system.

Our original estimate was two-to-three years with adequate resources to complete the developmental work. However, the design considerations become more complex as program needs dictate expansion of the information base such as the developments under FQPA. In addition, the technology is moving so swiftly that we must continue to do updating. We feel we are reasonably meeting our objectives with resources that are available. As indicated, we are institutionalizing this activity and it will become an ongoing activity of the agency of increasing importance.

PMIDSS underwent a formal review in June, 1997 and a major piece of the system, the Pest Management Alternatives Program WorkBench was reviewed by regionally selected land grant scientists in November, 1997. The June review recommendations included: focus of the system on the needs of the Pest Management Alternatives Program, delivery of the software product to USDA, and development of a plan to sustain the system in a user-friendly, widely available format. Evaluation of the WorkBench in November brought the following comments and recommendations: the WorkBench provides good linkages to relevant data bases and brings together essential information on pest management issues; the system should be placed on the World Wide Web for greater access and utility; tell potential users that it is available; and invest in high quality data bases to support and enhance data integrity of the WorkBench. In addition, we have a PMIDSS guidance committee that gives us input on an ongoing basis.

FARM AND RURAL BUSINESS FINANCE: ILLINOIS AND ARKANSAS

Federal funding for this project provides partial support for the Center for Farm and Rural Business Finance which conducts an on-going program of research and information focused on financing of farms and rural businesses in the United States. The long-range plan of work for this program focuses on three principal areas: (1) financial management and performance or rural businesses; (2) research on financial markets and credit institutions serving rural America; and (3) the impact of public policies and programs on the financial health of rural America. The need for the program is national in scope with some of the individual projects focusing on regional or local needs associated with particular commodities or situations. The need is greater now than when the program was first initiated because government commodity programs which reduced financial risk for agricultural producers have been substantially altered. Traditional characteristics of agriculture such as capital intensive businesses, variable prices and production and seasonality present unique risks with important implications for the cost and availability of financial capital

for farm and rural businesses. Identification of new sources of financial capital and innovative programs are essential to enhance the financial capacity for undertaking rural development programs and responding to growth opportunities in rural businesses.

The goal is to assist farmers and rural businesses with research-based information on financial management as they deal with changing and increasingly complex financial markets. The program has completed projects on the financial structure and efficiency of grain farms, risk and financial implications of vertical coordination in hog production, commercial bank access to agency market funds through government sponsored enterprises, and competitive challenges for bankers in financing agriculture. Additional projects in various stages of completion include are examining time and risk attitudes of decision makers, risk-adjusted returns on Illinois farms, management performance and the role of nontraditional lenders, financial implications of property tax reform at the State level and investment options for farmers and businesses during high income periods. Other projects are weighing regulatory costs in rural lending, conducting statistical analysis of Chapter 12 bankruptcy filing data and identifying determinants of the type and terms of leases used in agriculture, and their impact on firm profitability.

The work has been underway since 1992. Appropriations were $125,000 in fiscal year 1992, $125,000 in fiscal year 1993, $118,000 in fiscal year 1994, $106,000 in fiscal year 1995 through fiscal year 1997, and $87,000 in fiscal year 1998. Appropriations through fiscal year 1998 total $773,000.

The non-federal sources and funds provided for this program in fiscal year 1992 totaled $259,427 with $58,427 in State appropriations, $189,000 from industry and $12,000 from miscellaneous sources. In fiscal year 1993, the total was $287,890 with $94,588 in State appropriations, $133,000 from industry and $25,000 from miscellaneous sources. In fiscal year 1994, the total was $391,000 with $221,000 coming from State appropriations, $45,000 from industry and $125,000 from miscellaneous sources. In fiscal year 1995 the total was $185,000 where $46,000 came from State appropriations, $62,500 from industry and $76,500 from miscellaneous sources. In fiscal year 1996, the total was $344,000 where $294,000 was appropriated from State sources and $50,000 from private sources. In fiscal year 1997, $125,000 was appropriated from State sources, $103,000 was received through a National Research Initiative grant, and $150,879 was received from the Council on Food and Agricultural Research. Non-federal support for fiscal year 1998 has not been identified.

The work is being carried out by the Center for Farm and Rural Business Finance. Investigators are located at the University of Illinois and the University of Arkansas. The original objectives of the program were amended with additional funding and new termination dates which now extend to fiscal year 1998. While initial objectives have been met, changing conditions and new financial environments call for continuing work to address new dimensions of the objectives as originally proposed. Anticipated completion date of these related objectives extend to August, 1998.

The project is evaluated periodically during the year through direct contact with the Director of the Center, as reports are received, and annually when proposals are received. The Project Investigators also prepare a biannual summary which details accomplishments during that period. The general objectives are met on a continuing basis with specific aspects being addressed as they evolve from year to year. One dimension, accomplished annually, is the sponsorship and conduct of a National Symposium for Agricultural Finance Executives which provides a valuable service as well as visibility for the Center. During this past year, the projects have addressed financial structure and efficiency of grain farms, vertical coordination in hog farms, competitive challenges to bankers, farm business planning, stochastic simulation analysis of Farm Credit System income allocations, and the impact of banking structure on rural financial markets. Evaluation of the program considers the focus of specific projects on current issues as well as review of the conduct and products from the various projects.

FLORICULTURE, HAWAII

The research carried out with these funds involves wholesale and retail U.S. and Japan market research, development of new varieties for aesthetic values and pest resistance, and pest and disease management strategies to meet quarantine needs and consumer expectations. The researcher believes the tropical cut flower and foliage industry in Hawaii, which includes anthurium, orchids, flowering gingers, bird of paradise, heliconia, protea, and cut foliage—ti leaves and other greens—is worth over $50 million primarily in out-of-state sales. Development of disease resistant

cultivars and quarantine pest and disease management strategies which reduced pesticide usage are included in the national high priority improved pest management systems.

The original goal of the research was to develop superior Hawaii anthuriums, orchids, protea, and exotic tropical flower varieties with disease resistance, particularly to anthurium blight which devastated the Hawaii anthurium industry through the mid-1980's and reduced Hawaii's market share. Additionally, research focused on development of post-harvest handling practices and quarantine pest control. To date, a new anthurium cultivar has been patented and released. Additional blight resistant cultivars are being propagated and tested by the anthurium industry. Disease resistant protea germplasm has been obtained from South Africa and is being used in the protea breeding program. A post-harvest hot water dip treatment has been developed and is being used commercially on tolerant cutflower species to meet quarantine requirements.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $300,000; fiscal years 1990–1993, $296,000 per year; fiscal year 1994, $278,000; and fiscal years 1995–1998 $250,000 each year. A total of $2,762,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: State appropriations of $87,937 in 1995, 1996, and 1997.

Research is being conducted by the University of Hawaii at Manoa and Hilo. The objectives in the original project were to maintain Hawaii floricultural industry competitive. This objective continues to be the principal direction for the projects. Because the industry and the markets are changing, pests are becoming either resistant or newer strains, and quarantines are changing with technology the objective remains valid. The individual projects funded under this Special Research Grant are evaluated through merit review to ensure that good science is being used. This evaluation is the major tool used to award funds to the projects.

FOOD AND AGRICULTURE POLICY INSTITUTE, IOWA AND MISSOURI

The Food and Agriculture Policy Research Institute (FAPRI) was established by Iowa State University and the University of Missouri, Columbia, in 1984. The purpose of the institute is to conduct comprehensive analyses and disseminate results about the economic impacts of U.S. food, farm, and trade policies to agricultural producers, agribusinessmen, and public policymakers. Iowa State conducts research on the economic interrelationships within and between domestic and foreign food and agricultural markets from the farm gate to market destinations; develops and maintains databases and analytical support systems to facilitate the analysis of agricultural and trade policy issues; and evaluates the impacts of U.S. and foreign commodity supply, demand, and public policy programs on agricultural trade. The University of Missouri maintains models of the domestic agricultural economy and directs its efforts primarily to the analysis of domestic policy issues. The two universities maintain linkages with a number of other universities who provide data and analytical support to the system. The universities maintain a comprehensive analytical modeling system of the U.S. and international food and agricultural sectors to evaluate near-and long-term economic implications of alternative farm policies for the basic commodities. The system is capable of providing economic information on potential impacts out to 10 years in the future of farm policies on farm prices, income, output, government program costs and means to enhance the management of farm programs at the national level. The Nation's agricultural sector and its components are subject to numerous Federal policies and programs. FAPRI is the only publicly supported, non-federal organization with the analytical capability to assess and evaluate the numerous public policies and programs affecting the agricultural sector and report results to a broad constituency including farmers, agribusinessmen, and Federal and State policymakers.

The original goal was to develop the analytical capability to assess and evaluate U.S. farm policies on the U.S. agricultural sector and disseminate this information to farmers, farm and other agricultural organizations, and public policymakers. The mission has been expanded to include assessment of trade and environmental policy impacts and their interaction with the agricultural sector at national, regional, and farm levels. The models in place are also used to assess fiscal and monetary policy implications and impacts of new technologies such as biotechnological innovations on the agricultural sector. Both institutions maintain large econometric models and data sets which are regularly updated to analyze farm and trade policy alternatives and the impacts of various programs on the several sub sectors of the agricultural economy. This update was especially valuable for conducting analyses to assess policy options for the 1996 farm bill. During the past year, the FAPRI completed roughly 50 studies addressing policy issues such as assessments of the 1996 Farm

Bill, alternative ethanol programs, the impact of changing interest rates, alternative crop insurance programs and the impact on U.S. agriculture of the European Union's Agenda 2000 policy reform. Numerous studies were completed addressing improvements made to the empirical modeling system to improve domestic and international policy capabilities. The FAPRI staff has made numerous public appearances throughout the U.S. before agricultural groups and Congressional committees and Executive branch groups addressing policy issues.

Grants have been awarded from funds appropriated as follows: fiscal years 1984–1985, $450,000 per year; fiscal years 1986–1987, $357,000 per year; fiscal year 1988, $425,000; fiscal year 1989, $463,000; fiscal year 1990, $714,000; fiscal years 1991–1993, $750,000 per year; fiscal year 1994, $705,000; fiscal years 1995–1996, $850,000 each year, and fiscal years 1997 and 1998, $800,000 each year. The total amount appropriated is $9,471,000.

The non-federal funds and sources provided for this grant are as follows: $260,355 State appropriations, $113,565 industry, and $37,913 miscellaneous for a total of $411,833 in 1991; $321,074 State appropriations, $51,500 industry, and $35,100 miscellaneous for a total of $407,674 in 1992; $234,796 State appropriations and $70,378 industry for a total of $305,174 in 1993; $78,286 State appropriations, $43,925 industry, and $29,750 miscellaneous in 1994 for a total of $151,961 in 1994; $80,155 State appropriations, $37,128 industry, and $42,236 miscellaneous for a total of $159,519 for 1995; $124,123 in State appropriations with no other funding for 1996; $79,000 in State appropriations, $50,000 industry and $25,000 miscellaneous for a total of $154,000 in 1997; and $88,800 State appropriations, $75,200 industry, and $34,687 miscellaneous for a total of $198,687 in 1998.

The program is carried out at the Center for Agriculture and Rural Development, Iowa State University and the Center for National Food and Agricultural Policy, University of Missouri. This is a continuing program of research and analysis for the purpose of assessing farm and related policy actions and other policies and proposed actions likely to affect the agricultural sector and its components. The annual proposal is carefully reviewed for adherence to stated objectives and progress before the special research grant is awarded. No formal evaluation of this program has been conducted.

FOOD IRRADIATION, IOWA

Since the Linear Accelerator Facility was placed in operation in March 1993, studies on the effect of irradiation on shelf-life extension, safety and quality of ground beef, beef steaks, ham, pork chops from loins, chicken breasts, and turkey have been conducted. Studies combining irradiation with high hydrostatic pressure and cooking, using whole chicken breasts, turkey and ham, have been conducted to determine the combination of these treatments that will yield a shelf-stable product while maintaining high eating quality. Several studies were conducted to determine whether consumers can detect a difference between irradiated and non-irradiated ground beef patties. Experiments were also conducted to investigate consumer acceptance of pork products irradiated to prevent trichinosis. Test markets of irradiated chicken breasts were conducted to determine consumers' willingness to pay for irradiated products. Research on the effect of packaging materials on quality of irradiated meat is in progress. The principal researcher believes consumers' attention and concern about the safety of fresh meat and poultry has increased with recent outbreaks of foodborne illness from E. coli 0157:H7. The meat industry has also expressed interest regarding the quality of irradiated products, and how this process can be used to yield high quality fresh meats that are free of pathogens. The recent massive recall of over 25 million pounds of ground beef due to illness caused by E. coli 0157:H7 contamination has resulted in huge economic losses. With the recent FDA clearance of irradiation of red meat, research needs leading to commercialization of this technology have been enhanced. Additionally, researchers from eight other research institutes have used the irradiation facility for research projects. Thus, the principal researcher believes this research to be of national, regional and local need.

The original goal of the research was to generate knowledge necessary to develop a research and technology transfer program leading to commercial use of irradiation of foods, whereby consumers would be provided with food products with enhanced safety. The effectiveness of irradiation, using an electron beam accelerator, in destroying known pathogenic bacteria in pork and beef has been determined. Mathematical models have been developed to predict the growth of bacteria in low-dose irradiated ground pork. Demonstration of irradiation technology has been presented to some commercial firms, and plans are being developed for some large scale test markets.

The work supported by this grant began in fiscal year 1991 when $100,000 was appropriated for this project. The appropriations for fiscal years 1992 and 1993 were $237,000 per year; fiscal year 1994, $223,000; fiscal years 1995–1997, $201,000 each year; and fiscal year 1998, $200,000. A total of $1,600,000 has been appropriated.

The project received $1,037,270 in State of Iowa funds-$1 million of which was for capital construction-in fiscal year 1991; $37,942 in state funds and $67,800 in industry grants in fiscal year 1992; $68,897 in state funds, $78,300 in industry grants and $9,666 in user fees in fiscal year 1993; $70,652 in state funds, $35,420 in industry grants and $47,788 in user fees in fiscal year 1994; $72,772 in state funds, $100,000 in industry grants and $55,211 in user fees in fiscal year 1995; $81,540 in state funds, $115,300 in industry grants and $50,963 in user fees in fiscal year 1996; and $77,963 in state funds, $253,450 in industry grants and $46,550 in user fees in fiscal year 1997.

Research is being conducted at Iowa State University. The principal investigator anticipates that the project will continue through June 1998. Since irradiation continues to be viewed skeptically by many non-scientists as a tool for improving shelf-life and preserving food, and because optimal dose and use parameters are still being defined, additional research will be needed to move this technology to broader consumer acceptance and industry use to enhance safety of food products. Research on the factors affecting the quality of irradiated red meat will be primarily conducted using the Iowa State University facility.

An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal supporting the fiscal year 1997 appropriation was conducted on December 20, 1996. Previous studies funded under this project have provided useful information toward understanding how irradiation can be useful in eliminating or reducing foodborne pathogens in meat products. It is anticipated that the proposed research will continue to further the understanding of how irradiation can be used to improve shelf-life and enhance safety of meats and meat products.

FOOD MARKETING POLICY CENTER, CONNECTICUT

The Food Marketing Policy Center was established in 1988 at the University of Connecticut at Storrs. The Center conducts research on food and agricultural marketing and related policy questions. The general intent is to provide information that can contribute to improved performance of the food production and marketing system. The Policy Center is primarily an economic research organization, but conducts interdisciplinary research when appropriate and communicates results to the public. Key users include farmer and consumer organizations, agribusiness firms, public agencies, state legislatures, and the U.S. Congress. The Center facilitates research at cooperating institutions by organizing research workshops twice annually, furnishing common data bases, preparing research publications, and providing leadership for joint research efforts including the sponsorship of research conferences. The research proposal identifies an ongoing national need to continually improve the economic efficiency and operation of the U.S. food marketing system to benefit farmers, merchants, and consumers.

The ongoing research goal is to identify marketing problems and assess alternatives that improve economic performance of the U.S. agricultural and food marketing sector. The Center serves as a core research group for Regional Research Project NE–165, Private Strategies, Public Policies, and Food System Performance. The research agenda includes industrial organization, strategic marketing, food safety economics, agricultural cooperatives, and public policy including antitrust and regulatory issues. The Center conducts research on food marketing, including descriptions of food quality issues and enhancement policies; private label branding; advertising strategies for agricultural cooperatives; assessment of food retail mergers and competition; evaluation of dairy regulations; branded product marketing strategies; supermarket chain entry; oligopsony in agricultural markets; and the impact of agricultural cooperatives on food processor market performance.

The Center has prepared 45 working papers, 35 policy research reports, 16 policy issue papers, 8 books, and has reprinted and distributed 61 important journal articles to researchers, industry, and Federal and State legislators, and decision makers. This grant will be used to support research on nine projects with research targeted at two problem areas: analysis of impacts of changes in strategies, technologies, consumer behavior and policies on the economic performance of the food system, and to provide economic analysis of private and public strategies in order to assess their impact on improvement in food safety and other quality attributed. Projects include competitive strategy analysis of cooperatives and investor-owned firms; firm dominance in food manufacturing; advertising and the U.S. food system;

mergers, product relatedness and performance outcomes; effects of market structure and concentration on promotional activity; testing theories of oligopoly conduct; relationships between market structure, firm position and price levels; strategic responses to food safety and nutritional regulation; and, trade agreement effects on food quality and trade.

Grants have been awarded from funds appropriated as follows: fiscal year 1988, $150,000; fiscal year 1989, $285,000; fiscal year 1990, $373,000; fiscal years 1991–1993, $393,000 per year; fiscal year 1994, $369,000; and, for fiscal years 1995–1998, $332,000 each year. A total of $3,684,000 has been appropriated.

The non-federal funds and sources provided for this grant are State appropriations as follows: $234,259 in fiscal year 1991; $231,741 in fiscal year 1992; $201,288 in fiscal year 1993; $234,557 in fiscal year 1994; $219,380 in fiscal year 1995; $134,399 in fiscal year 1996; and, $135,490 in fiscal year 1997. The decline reflects a change in reporting only salary and related fringe benefits and excludes overhead for facilities and utilities.

The research is being carried out by the Agricultural Experiment Station at Storrs, and at the University of Massachusetts. The original proposal in 1987 was for 24 months. According to the principal researcher, the objective of conducting policy-oriented research on food manufacturing and distribution industries to assist state and Federal policy makers in improving the performance of the food system is still an ongoing public concern, given increasing levels of concentration in food processing. The current phase, initially funded in fiscal year 1997, will be completed in 2001. CSREES annually reviews project reports, succeeding annual project proposals, research studies and educational programs. A merit review of the fiscal year 1997 proposal was conducted in January 1997. An outside review is scheduled for April 1998. Assessment criteria include peer review of results and publications, administrative review and approval of proposals, and reports by external sources.

FOOD PROCESSING CENTER, NEBRASKA

The University of Nebraska Food Processing Center has been conducting short-term, highly applied research projects to assist small and mid-sized food processing companies and entrepreneurs to develop or improve processes and products and to develop new food processing enterprises. Projects were selected based on the estimated economic impact of the technical assistance or the criticality of the technical assistance to the future of the firm or venture. Priorities were placed on projects relating to the safety of the food product or process and to the fulfillment of regulatory mandates such as nutrition labeling, use of approved and effective ingredients, and adherence to regulations imposed by foreign governments. In addition, several research projects were conducted to improve or assess the quality, extend the shelf-life, or assess or improve the processing efficiency of specialty food products which impacted several processors or used alternative agricultural products. The principal researcher believes the primary impact of this project will be statewide. Small and mid-sized food processing companies and entrepreneurs have limited technological capabilities for addressing issues related to product development, process development, product and process evaluation, food safety, quality assurance, and regulatory mandates. The short-term research and technology transfer projects conducted as part of this overall project will aid these companies in appropriately addressing these oftentimes complicated issues.

The goal of the research, as stated previously, is to assist small and mid-sized food processing companies and entrepreneurs to develop or improve processes and products and to develop new food processing enterprises. Technological evaluations were conducted for 181 individuals or companies interested in developing new food processing businesses. These evaluations included formulations, processes, processing equipment, packaging, shelf-life, sensory, nutritional attributes, microbiological quality, regulatory considerations, and other factors. Additionally, microbiological analyses, shelf-life assessments, sanitation audits, and nutritional analyses were conducted for numerous Nebraska food companies.

The work supported by this grant began in fiscal year 1992. The appropriations were $50,000 per year for fiscal years 1992–1993; $47,000 for fiscal year 1994; and $42,000 for fiscal years 1995–1998 each year. A total of $315,000 has been appropriated. The Food Processing Center received $300,054 in State funds and $1,515,721 in food industry grants and miscellaneous sources from 1992 through 1997.

Research is being conducted at the University of Nebraska. Because this project supports ongoing technical assistance to clients, the objectives are ongoing. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal was conducted

on January 12, 1998. Progress under previous grants for this project appears to be satisfactory, with numerous examples of assistance cited and summaries of short-term projects provided by the principal investigator.

FOOD SAFETY

This program is to provide funding for competitively-awarded research grants. It is the intention of this program to focus on very high priority issues each year and reflect major concerns under the Food Safety Initiative. The Request for Proposals (RFP) for fiscal year 1998 is planned to have a focus on major issues related to safety of fresh and minimally processed fruits and vegetables which are of increasing concern to the public. As a part of the needed research effort under the President's Food Safety Initiative, this program will address gaps in information available to support control measures in food safety. Several agencies have combined to establish priorities for research in support of regulatory actions in food safety and the RFP will reflect these priorities. The goal of this research program is to provide needed information about sources of contamination of food products, develop rapid sampling and detection systems, and provide support for various interventions to reduce contamination of food with human pathogens. Because this is new program and no awards have yet been made, there are no accomplishments to report at this time. The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $2,000,000.

Research projects will be funded at several land-grant universities after the proposals have been reviewed for scientific merit and responsiveness to the RFP. This program has been proposed for one year at this time but additional funds are being requested for fiscal year 1999 to support this important area. Because no projects are in progress as yet, no review of the program has been scheduled at this time. It is anticipated that reviews of progress on funded projects will be performed at regular intervals of 6–12 months.

FOOD SYSTEMS RESEARCH GROUP, WISCONSIN

The Group conducts research on contemporary issues affecting the organization and competitiveness of the U.S. food system in domestic and international markets. The issues include new technologies, market structure, and government policies and programs. Studies have been completed on pricing of cheddar cheese, fed cattle and hogs; changes in private label product markets; causes of structural change in the flour milling, soybean oil milling, wet corn milling, cottonseed milling, beef packing, and broiler processing industries; competition in U.S. food markets; and the relationship between U.S. food market structure and the industry's performance in global markets. The principal researcher believes that the U.S. food system is changing rapidly in response to a large number of global economic, social, and technological changes. Research is needed to determine the effects of these changes on the system's organization and performance, and to ascertain needed adjustments in public policies based upon sound research. There is a national need to assess and evaluate the organization and performance of the Nation's food industry to ensure that it continues to satisfy performance expectations of farmers and consumers and adheres to acceptable standards of conduct.

The original goal was to assess and evaluate the organization and performance of the U.S. food industry and provide recommendations for improvements. The Food Systems Research Group recently completed a study of the National Cheese Exchange which resulted in a major public report, Congressional hearings, and a Wisconsin task force. Alterative pricing mechanisms are being developed to avoid the problems of a very thin market which is used to price a large volume of off-market sales. The group is also examining the impact of "tough competition" policies on industry performance. Deregulation in the United States and privatization in the U.K., Mexico, and Eastern Europe provide empirical bases for evaluating the impact. The Group has completed numerous studies on economic structure and performance issues of the U.S. food manufacturing and distribution system. Basic research is conducted on market theories; effects of mergers, new technologies, and firm conduct on industry structure and organization; factors affecting industry prices, profits, efficiency and progressiveness; and impact of public policies and regulations on food system organization and performance.

Grants have been awarded from funds appropriated as follows: fiscal years 1976–1981, $150,000 per year; fiscal years 1982–1985, $156,000 per year; fiscal years 1986–1989, $148,000 per year; fiscal year 1990, $219,000; fiscal years 1991–1993, $261,000 per year; fiscal year 1994, $245,000; and fiscal years 1995–1998, $221,000 per year. A total of $4,247,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: State appropriations of $120,304 in

1991; $119,448 in 1992; $85,188 in 1993; $96,838 in 1994; $59,435 in 1995; $50,636 in 1966; $56,421 in 1997; and $69,626 in 1998.

The grant supports research at the University of Wisconsin, Madison. The original proposal in 1976 was for a period of 36 months. The current phase of the program will be completed in 2001. CSREES performed a merit review of the project in January 1997, as it evaluated the 1997 project proposal, and concluded that the project's researchers have done unique work on the structure, conduct and performance of selected segments of the food industry. In spite of the growing concentration in food production-processing and increasing public policy questions concerning the performance of this industry, few organizations are providing the research needed for public and private decision making. Research results appear in several peer reviewed professional journals and the popular press, and researchers have ongoing dialog with private and public decision makers.

FORESTRY RESEARCH, ARKANSAS

The Arkansas Forest Resources Center offers programs of teaching and research to the landowners of Arkansas and the surrounding region. This has been done through continuing education workshops for landowners, the development of a series of educational distance-learning tutorials, and the funding of 10 graduate assistantships for the first class in the new forest resources master's program. A partial list of workshops includes: Uneven-aged Silviculture of Loblolly and Shortleaf Pine Forest Types, Environmental Law & Policy, Timber Income Tax Update, Thinning Methods and Operations, Introduction to ArcView 3.0, Estate Planning, Forest Finance Applications: Basic Tools for Daily Practice, and Opportunities in Forest Regeneration. The educational thrust has combined Center and private dollars to establish one of only three ArcView Learning Centers for natural resources. To better provide the highly educated professionals needed to meet the challenges of natural resources, new educational tutorials are being developed in dendrology, tree ID, plant morphology, silvics, that aid in the (1) transitioning of transfers to institutions with forest resources offerings and (2) forest resources education of non-majors at institutions without forest resources faculty. Furthermore, Arkansas will activate a new Master's-level graduate program in the Fall 1998. Research projects address issues of species diversity, richness, redundance, and the resilience of disturbed and undisturbed hardwood stands of the Delta. Furthermore, evidence exists that neo-tropical migratory birds are indicators of ecosystem health. Factors implicated as influencing their breeding range include habitat destruction/alteration, forest fragmentation, etc. Thus, issues of re-establishment and structure of regenerated hardwood stands are important for timber, nontimber values, and the quality of life enjoyed regionally, nationally, and internationally. Also, other projects are contributing to the development of (1) a biological control agent for the southern pine beetle, (2) alternative forest crops for the economically oppressed Delta region, and (3) technologies for enhanced fiber and wood production from nonindustrial and industrial lands. These issues will grow in importance as southern forests assume greater proportions of the national demand for fiber and wood.

The principal researcher believes that with the reduced levels of production of wood products from the Northwest, southern forests are increasingly bearing the brunt of producing the majority of wood products for the United States. This increased production makes more imperative the appropriate and efficient balance in the use of southern forests in producing timber and non-timber outputs. This would prevent these conflicts or at least reduce them significantly.

The thrust of goal one is developing alternative forest management strategies of achieving multi-resource objectives; i.e. joint production of timber, wildlife, recreation and other outputs of the forest on private industrial and non-industrial forest lands and pubic forest lands. Significant progress has been made in several areas. Some examples include: developing intensive fiber farming systems as alternatives to soybeans for Mississippi Delta farmers, taking the first step toward biological control of the southern pine beetle by discovering the nutrient needs of predators of the beetle so they can be grown and studies in artificial cultures, delivery systems for introduction of the bait, and conducting the first survey of nonindustrial landowners in Arkansas for 15 years. The survey show some areas for concern, such as the fact that the average age of landowners is over 60. There will be a massive change in ownership in the next 10–20 years. Landowners continue to not be aware of assistance programs and a concern about government programs and intervention on private land. This is information needed to prepare institutions for transitions and to design more effect programs. Ongoing projects include a broad array of topics, competitively awarded within the Center, concerned with best management practices, ecological characteristics, effects of different management intensities,

stream-side buffer zone effectiveness, effects of winter logging, and secondary processing efficiency.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $470,000, and for fiscal years 1995–1998, $523,000 each year. A total of $2,562,000 has been appropriated. The non-federal funding and its source provided to this grant in 1994 was $411,726 State appropriations and $380,000 industry for a total of $791,726; $491,301 State appropriations and $785,262 industry for a total of $1,276,563 for 1995; a total of $695,204 from State and industry sources for 1996; a total of $1,115,341 from these sources in 1997; and an estimated total of $1,000,000 for 1998.

The Arkansas Forest Resources Center is administered from the School of Forest Resources on the campus of the University of Arkansas at Monticello. Grants were received in 1994–1998 with funds distributed for use over the 5 years following the activation year. This means projects initiated in 1994 will commonly mature in 1999, 1995 projects in 2000, 1996 projects in 2001, and so on. Projects are on schedule. Projects from 1994 funding are nearing completion. Forestry research is long term. Center objectives and selected projects will be continued using the infrastructure and capacity developed with these Special Research Grants. In 1991, an agency team visited Monticello and reviewed faculty qualifications, supporting sources, and the feasibility of the proposal. The team exit report indicated the faculty was highly capable, the infrastructure needed strengthening, and the proposal concepts were feasible. Since 1991, there has not been a formal program review; however, the agency is planning one in fiscal year 1998, pending fund availability.

The objectives outlined for fiscal year 1997 were to develop and evaluate alternative forest management strategies for achieving multi-resource objectives on private industrial and non-industrial forest land and to evaluate the environmental implications of forest management alternatives. Ongoing work addresses these issues.

Presently, the only criteria used to assess the projects would be the scientific review process, prior to publication. Since some of this research funding is used for extension and education, there are no commonly used assessment criteria other than attendance at courses and workshops. This makes an outside review by the agency extremely important in evaluation, since review team members will be selected with expertise in all these areas.

FRUIT AND VEGETABLE MARKET ANALYSIS, ARIZONA AND MISSOURI

The purpose is to provide timely knowledge of the impacts of trade, environmental, monetary, and other public policies and programs upon the Nation's fruit and vegetable industry to farmers, agribusinessmen, and policymakers through a program of empirical assessment and evaluation. The U.S. fruit and vegetable sector is experiencing increased growth from greater domestic and export demand. However, the growth of this sector depends upon its ability to compete domestically and internationally and to conform with the regulatory environment in which it operates. This program of research provides information to farmers and policymakers on the implications and impacts of various policies and programs such as environmental, trade, labor, and food safety. The goal is to develop the analytical capability to assess and evaluate public policies and programs impacting the U.S. fruit and vegetable industry and disseminate the results to policy makers, industry organizations, producers, and other users. Proposals have been submitted that outline long-range plans and specific projects for funding. Models have been developed for 17 major (as measured in production, consumption, and trade) U.S. fruits and vegetables with one additional crop model, strawberries, to be completed in the coming year. Trade models for those commodities with a significant import and/or export sector have also been developed. These models feed in to a larger food and agricultural sector model to support analyses of cross commodity and policy effects.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $329,000, and for fiscal years 1995–1998, $296,000 each year. A total of $1,513,000 has been appropriated. The non-federal funding and its source provided to this grant in 1994 was $50,073 State appropriations and $11,000 industry for a total of $61,073; $21,876 State appropriations and $36,624 industry for a total of $58,500 for 1995; a total of $62,400 from State and industry sources for 1996; $50,000 from these sources in 1997; and an estimated $50,000 for 1998.

The work is being carried out at Arizona State University and the University of Missouri. The university researchers anticipate that work is an ongoing project to look at the impact of various public policy proposals on the U.S. fruit and vegetable industry.

We have conducted no formal evaluation. However each annual budget proposal is carefully reviewed and work progress is compared with prior year's objectives. In-

formal discussions with congressional staff, USDA officials and industry representatives indicate that these analyses are extremely useful.

GENERIC COMMODITY PROMOTION, NEW YORK

The grant supports, in part, the National Institute on Commodity Promotion Research and Evaluation which provides objective analysis of national and state commodity checkoff programs designed to enhance domestic and export demand. The overall project proposal was merit reviewed at the university level; a competitive peer review process was used to select specific research projects. The principle researcher believes that producers are contributing about $1 billion annually to commodity research and promotion funds designed to expand the domestic and export markets for their products. The number of commodity groups participating and the size of the funds available could continue to grow. The 1996 FAIR Act requires all Federally-constituted research and promotion boards to evaluate their programs at least every five years. The goal is to determine the economic effectiveness of generic promotion programs designed to increase the sales of agricultural commodities in domestic and international markets. Recent accomplishments include: the impact of promotion and other factors on the sales of almonds, beef exports, pork exports, and wheat exports; development of a major database of commodity advertising expenditures for future research; new methods of measuring advertising wearout; comparisons of research techniques to determine sensitivity of results based on various methods used.

The work supported by the grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $235,000 and for fiscal years 1995–1998, $212,000 each year. A total of $1,083,000 has been appropriated. The non-federal matching funds and sources allocated to this grant by Cornell University are as follows: $97,333 a year in State appropriations for 1994–96; $125,650 for 1997; and $130,430 for 1998. Collaborating institutions performing work under subcontract also contribute non-federal matching funds.

The work is being carried out at Cornell University in collaboration with eight other land-grant universities. The original proposal in 1994 was for a period of 21 months, however, the need to evaluate the benefits of commodity promotion and research programs is a growing regional and national concern, as producers take on greater responsibility for marketing their products. An increasing number of promotion and research programs are being evaluated. The current phase of the program will be completed in 1999. CSREES performed a merit review of the project in January 1997, as it evaluated the 1997 project proposal, and determined that the project provides leadership for a unique body of research and education on the impact of commodity promotion programs. Research results appear in several peer reviewed professional journals and popular press and researchers have ongoing dialog with private and public decision makers.

GLOBAL CHANGE

Radiation from the sun occurs in a spectrum of wavelengths with a majority of wavelengths being beneficial to humans and other living organisms. A small portion of the short wavelength radiation, what is known as the Ultraviolet or UV-B Region of the spectrum, is harmful to many biological organisms. Fortunately, most of the UV-B radiation from the sun is absorbed by ozone located in the stratosphere and does not reach the surface of the earth. The discovery of a deterioration of the stratospheric ozone layer and the ozone hole over polar regions has raised concern about the real potential for increased UV-B irradiance reaching the surface of the earth and the significant negative impact this could have on all biological systems including man, animals, and plants of agricultural importance. There is an urgent need to determine the amount of UV-B radiation reaching the earth's surface and to learn more about the effect of this changing environmental force. The Cooperative State Research, Education and Extension Service, CSREES, is in the process of establishing a network for monitoring surface UV-B radiation which will meet the needs of the science community of the United States, and which will be compatible with similar networks being developed throughout the world. This grant is part of a government-wide initiative. The research is closely coordinated with other Federal agencies involved in the U. S. Global Change Research Program Inter-agency UV-Monitoring Network Plan.

The principal researcher believes destruction of the stratospheric ozone layer, our shield from the full intensity of solar radiation, continues to increase. This creates a high priority need for information to document not only the levels of UV-B radiation reaching the earth's surface, but the climatology of that radiation. The United States, and the rest of the world, needs to know the strength of the UV-B radiation

reaching the earth and the potential impact on all forms of life, especially animal and plant life of agriculturally important species. The principal researcher believes this research to be of national as well as regional and local importance.

The USDA UV-B Network is to provide accurate, geographically dispersed data on UV-B radiation reaching the surface of the earth and to detect trends over time in this type of radiation. A primary problem which had to be overcome in order to reach this goal is the development of instrumentation adequate to make the measurements required for the monitoring network. A major advance occurred during 1996 with the availability to the network of a new multi-band instrument which will provide the spectral information needed to support both biological and atmospheric science research and to serve as ground-truth for satellite measurements. These instruments have been deployed and are currently in operation at twenty-six monitoring sites across the United States, including Hawaii. The researchers plan to have additional sites in Florida, Alaska, Puerto Rico, Southern California, Oregon, North Carolina, Tennessee, and Oklahoma operational by the summer of 1998. Two grants to design and build advanced spectroradiometers have been awarded under the National Research Initiative Competitive Grants Program. These instruments are to be used in a research network to make precise measurements of the total UV-B spectra at selected sites. The first of these instruments failed to meet spectral performance standards when tested and calibrated by the National Institute of Science and Technology. An alternative design which resulted in a much larger and more difficult instrument to deploy has been developed. The first two advanced instruments will be deployed at two test sites during the spring or summer of 1998.

To gain experience in network operation, broadband instruments along with ancillary instruments were installed at ten sites and have been in operation for the last 40–48 months. These sites are now equipped with a full compliment of instruments including the new multi-band instrument. Additional sites developed during the last 12 months are similarly equipped with broadband and the new multi-band UV instrument. Data from each site is transmitted daily to Colorado State University for preliminary analysis, distribution, and archiving. These data are available, within 24 hours of collection, on the Internet via a World Wide Web Site located in the Natural Resources Research Laboratory at Colorado State University. The Department of Agriculture is also a participant in the development of a central calibration facility at Department of Commerce facilities in Boulder, Colorado. The purpose of the central calibration facility is to ensure uniform and acceptable calibration and characterization of all instruments used in interagency UV-B monitoring programs.

The work supported by this grant began in fiscal year 1992, and the appropriation for fiscal years 1992–1993 was $2,000,000 per year; fiscal year 1994 was $1,175,000; fiscal year 1995 was $1,625,000; fiscal year 1996 was $1,615,000; fiscal year 1997 was $1,567,000; and fiscal year 1998 is $1,000,000. A total of $10,982,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: $162,000 state appropriations in 1993; $183,106 state appropriations in 1994; and $285,430 provided by Colorado State University in 1995.

Colorado State University is managing the operating network, which when completed will include all regions of the country. At least thirty sites are planned for the climatological network including sites in Hawaii, Alaska, and Puerto Rico in order to provide broad geographic coverage. Ten sites have been operational with broad band instruments for up to four years, and twenty-six sites are now operational with new generation instruments. The research level network will begin with the first instrument to be installed at the Table Mountain, Colorado instrument intercomparison site and the second possibly at the Department of Energy Solar Radiation site near Ponca City, Oklahoma as part of the Atmospheric Radiation Measurements field network. As with other weather and climate observations, this network will be an ongoing need for the predictable future. These measurements will provide information on the nature and seriousness of UV-B radiation in the United States and will provide ground truth validation to other predictions of UV-B irradiance. The project has now met its first objective of the establishment of a climatological network to monitor UV-B radiation at the surface of the earth. Years of operation will be required to measure trends in UV-B radiation and to develop models to predict the climatology of UV-B radiation.

The agency has assigned two technical staff to continuously monitor activities in the global change research program. A team of three experts in UV-B radiation measurement technology reviewed specifications for the development of the advanced spectroradiometers in July, 1996 prior to the procurement of major components of the instrument. A panel of radiation spectra scientists was brought in to review data derived from the new multi-band instruments in December, 1996 to advise on the interpretation and analysis of data derived from these instruments. Agency staff is in contact with program management on a weekly basis and has vis-

ited the program headquarters six times during the last year. A review of the UV-B Monitoring Program by a panel of technical experts from outside the Department is planned for 1998.

GLOBAL MARKETING SUPPORT SERVICES, ARKANSAS

This grant supports the University of Arkansas Global Marketing Support Services program to provide research and service to agribusinesses. The objective of the university research is to identify potential foreign markets for Arkansas products and to conduct and disseminate foreign market assessment and evaluation studies to agribusiness firms. The principal researcher believes the emerging importance of global trade to the nation's economy and the reduction of trade barriers worldwide present unprecedented opportunities for cooperative public-private-university research to develop expertise in world markets. The goal is to develop a university research and service organization to support international trade development activities by local area businesses. Research is conducted to determine the demand for specific Arkansas products in selected countries. Recent results include: twelve "Industry/Company Opportunity Reports" that provided local businesses with information about potential export markets; a report on consumer attitudes in Mexico and Columbia toward imported products; an evaluation of the food system in China, with emphasis on poultry sector; two new fact sheets; and additions to an electronic export information database that is accessed by local firms.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $47,000; for 1995 through 1997, $92,000 a year; and for 1998, $127,000. A total of $450,000 has been appropriated. The non-federal funds and sources provided for this grant were $90,000 per year in State appropriations for 1994 through 1996; $51,700 for 1997; and $80,000 for 1998. State appropriations to date total $401,700.

This research is being conducted at the University of Arkansas, Fayetteville. The original proposal in 1994 was for a period of 12 months, but the objective of expanding the export capacity of small to medium-sized agribusiness firms will not be met until 2000. CSREES performed a merit review of the project in January 1997 as it evaluated the project proposal that year. The proposal was sent back to the university for revision because two of the three objectives did not adequately reflect the kind of work being done and the project was falling behind in the initiation of new research and the distribution of results. The project proposal was subsequently revised by the university and approved by CSREES. The main purpose of this project has been to encourage global business expansion as a means of economic development in Arkansas. To accomplish this purpose, the project leadership discovered that most of their effort had to be focused on the development of educational materials, training, and technical assistance to get firms ready for and involved in exporting. The initial objectives focused only on the development of primary research data and analysis of demand in international markets and lacked the emphasis on education. A February 1998 review of the project documented continued progress with the educational component.

GRAIN SORGHUM, KANSAS

This project was designed to address the lack of yield improvement in grain sorghum cultivars, particularly when grown under dryland conditions where a considerable portion of this crop is grown. The research will focus on identification of early maturing lines which will shift more of the production to grain and less to vegetative growth and thereby making more efficient use of the limited water supply. These funds are awarded by the institutions to scientists at Kansas State University working on sorghum. The focus of this research is toward the non-irrigated lands of Kansas where sorghum can produce a grain crop under conditions that would not be possible with corn and is, therefore, very important in the rotation with wheat. While the research is directed toward Kansas conditions, it would also apply to adjoining states. The original goal of this research is to identify/develop grain sorghum cultivars that mature earlier with more of the production in grain rather than vegetative growth. Studies conducted this past year have made progress toward identifying genetic characteristics controlling grain yield under a range of climatic conditions. Fiscal year 1998 request for proposal has been issued.

The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal years 1997 and 1998 is $106,000 per year. Total appropriations to date are $212,000. Research will be conducted at Kansas State University. This is a new project starting in fiscal year 1997, so the objectives have not yet been met. The research proposal will be peer reviewed prior to awarding of funds. Preliminary results contribute toward the understanding of factors controlling grains yield and the

development of higher yielding sorghum cultivars for Kansas. The project is subjected to the institutional review and approval process as well as CSREES review.

GRASS SEED CROPPING SYSTEMS FOR SUSTAINABLE AGRICULTURE

This program was developed to provide management systems for sustainable grass seed production without field burning of the straw residue following harvest which results in adverse air quality problems. Grass seed yields are often significantly reduced the following season if the residue is not burned. Funds from this grant are awarded competitively to scientists at Oregon State University, the University of Idaho, and Washington State University engaged in research on grass seed production. Each award has been merit reviewed by a peer scientist. The principal researcher believes that according to information provided by technical committees representing researchers and the grass seed industry, the need for this research is to develop sustainable systems of seed production that do not depend on field burning of straw residue. Much of the grass seed for the United States including lawn grasses is produced in the area. Field burning of straw residue creates unacceptable levels of air pollution and yields of some cultivar decline without burning. The original goal for this project is to develop grass seed production systems that do not depend on field burning of straw residue. To date joint planning by state experiment station administrators and researchers from the three states with industry input for an integrated regional research effort to solve the problem.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $470,000, and for fiscal years 1995–1998, $423,000 each year. A total of $2,162,000 has been. The nonfederal support for this project in fiscal year 1994 was $266,055, $298,052 for fiscal year 1995, $282,053 in 1996, and $301,650 in 1997.

The research will be conducted by the three state agricultural experiment stations in Idaho, Oregon and Washington. Completion of the initial objectives was anticipated to take 5 years and, therefore, should be completed in 1999. The entire project is reviewed annually by a steering committee for focus and relevance. The combined proposal is reviewed by CSREES before funds are awarded. Considerable progress has been made toward identifying the consequences of phased out field burning of straw residue on grass seed production. Current and future efforts are directed toward development of sustainable systems without field burning. This program is subject to annual comprehensive evaluation by a team of scientist, industry representatives and farmers. The results are used to guide research for the next year.

HUMAN NUTRITION, IOWA

This research aims to develop animal and plant foods with nutritionally optimal fat content and to improve utilization of foods containing non-nutrient health protectants, components that may reduce health risks. The research includes human and animal nutrient utilization, consumer food choices, and economic impacts of nutritional optimization of food production and processing. The fiscal year 1997 grant supports research efforts of 25 investigators from six disciplines through June 1998. The research addresses food quality, nutrition and optimal health. Much of the research focuses on improving the nutritional quality of foods important to the economy of the Midwest, while making those improvements economically feasible. The principal researcher believes this research to be of national, regional, or local need.

The goal of the Center for Designing Foods to Improve Nutrition, the administrative unit for this grant, is to improve human nutrition and health maintenance by determining how to improve animal and plant food fat content and how to increase availability of health-protectant factors in the human food supply. The research includes food production, processing, consumer choices, biological utilization, and economic impacts. This research has identified soy oils which can be naturally hardened, and results indicate feasibility of processing these oils into shortenings, which may provide human health benefits in comparison with chemically-saturated vegetable fats containing trans fatty acids. Additional work further verifying the feasibility of production of more highly unsaturated pork fat has also been conducted, and human feeding trials demonstrated lowered blood cholesterol in people fed the modified pork. The isoflavone daidzein, a novel health-protective component of soybeans, was demonstrated to lower circulating cholesterol in a mouse feeding study. Studies of isoflavone bioavailability suggested different human phenotypes in the intestinal breakdown of isoflavones. Ongoing studies are assessing the ability of soybean isoflavones during menopause to maintain bone density and reduce menopausal symptoms. Further evidence has been found that oxygenated carotenoids potentially found in processed fruits and vegetables have greater antioxidant ability and would be expected to decrease cancer and heart disease risk.

The work supported by this grant began in fiscal year 1991 with an appropriation of $300,000. The fiscal years 1992–1993 appropriation was $500,000 per year; $470,000 in fiscal year 1994; $473,000 in fiscal years 1995 through 1998. A total of $3,662,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $293,000 university, $312,869 industry, and $14,000 miscellaneous in 1991; $90,000 state appropriations, $473,608 university, $131,160 industry, and $116,560 miscellaneous in 1992; $307,500 state appropriations, $472,081 university, and $222,267 industry in 1993; $486,000 university and $254,000 private in 1994; $210,000 university and $200,000 private in 1995; $613,770 university and $207,811 private in 1996; and $690,736 university and $1,024,196 private in 1997.

Research is being conducted at the Center for Designing Foods to Improve Nutrition, Iowa State University. The original overall objective to design foods to improve nutrition is continuing to be addressed. A set of related objectives will be completed in 2000. The grant proposal for fiscal year 1996 was subjected to extensive peer review. In 1997 comprehensive merit review conducted by the university lead to major revisions proposed for fiscal year 1998.

HUMAN NUTRITION, LOUISIANA

Obesity is a major problem in the United States. This grant, entitled Dietary Fat and Obesity, will help answer three issues about this problem. Will reducing dietary fat reduce the risk for obesity? Do lean and obese subjects respond differently to changes in dietary fat intake and how is this influenced by exercise and weight loss? And finally, how do specific dietary fats affect the response to insulin and the development of insulin resistence? The fiscal year 1997 grant supports research through July 1998. CSREES requested that the university submit a revised comprehensive grant proposal for fiscal year 1998 which is now being reviewed.

The overall goal of this grant is to identify the basis for the susceptibility to obesity of some people who eat high fat diets and to understand how they differ from those people who are resistant to becoming obese when eating a high fat diet. They have identified a taste system which responds selectively to some fatty acids. The importance of this system in humans and its relation to obesity are under study. In the second experiment they have shown that carbohydrate intake is well regulated, but fat intake is not. In the third set of experiments the relation between basic genetic make-up and the response to dietary fat and insulin is being evaluated.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991–1993 was $800,000 per year; for fiscal years 1994–1998 was $752,000 per year. A total of $6,160,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $523,100 state appropriations in 1991; $515,100 state appropriations and $2,216,606 private in 1992; $536,100 state appropriations and $940,000 private in 1993; $627,000 state appropriations and $3,775,000 private in 1994; $546,100 state appropriations and $3,100,000 private in 1995; $1,471,000 state appropriations and $2,488,000 private in 1996; and $1,998,000 state appropriations and $2,104,000 private in 1997.

Research will be conducted at the Pennington Biomedical Research Center, Louisiana State University. The anticipated completion date for the original objectives is fiscal 2000. The grant proposal for fiscal year 1996 was subjected to extensive peer review, and in January 1998 an on-site panel of researchers evaluated the proposed objectives and experimental protocols. On the basis of the critiques from the reviewers, the proposal for fiscal year 1998 was revised.

HUMAN NUTRITION, NEW YORK

The general objective is improving the knowledge base needed to evaluate and, when appropriate, implement, the increased reliance of plant-based foods that is at the core of current Federal dietary guidelines. Current dietary guidelines use this approach as a principal strategy to control energy consumption, reduce fat intake, modify the composition of ingested lipids, enhance the consumption of foods associated with reduced cancer risk, and simultaneously insure that macro-and micronutrient needs are met. The work brings together investigators whose expertise ranges from basic nutritional molecular biology to the behavioral sciences that are key in enabling consumers to adopt newly discovered knowledge easily and effectively. The fiscal year 1997 grant supports research through September 1998. CSREES has requested that the university submit a comprehensive grant proposal for fiscal year 1998.

Inappropriate diets and physical activity patterns are the second leading etiology of preventable morbidities and mortality in this country. As greater emphasis is

given to strategies that permit individuals to take increasing responsibility for their health and that are designed to achieve goals related to health promotion and disease prevention, the knowledge gained by work sponsored by this grant becomes increasingly valuable. This knowledge is expected to be of use to consumers in making informed food choices and to food producers and processors in anticipating consumer demands. The newly revised dietary guidelines reemphasize expected health benefits from the increased consumption of fruits, vegetables, and grain products. As pointed out in the response to the first question, investigations are carried out at the molecular, behavioral and community levels. Brief synopses typifying the accomplishments are reported. Changes in the American diet are expected to alter lipid metabolism by impacting fat levels and composition. Lipoprotein lipase is a pivotal enzyme that regulates lipid metabolism. New understandings about the enzyme were reported. Researchers identified in the promoter of lipoprotein lipase a silencing element that may play a major role in accounting for the tissue-specific expression of the enzyme and for its regulation. Using band shift assays it was demonstrated that the inhibitory factor is much more abundant in liver nuclear extracts that in fat or heart tissue.

The amount of essential sulfur amino acids is also altered by shifting to more plant-based foods. A researcher found that the cellular signal for the dramatic changes in rates of sulfur amino acid metabolism that occur in response to changes in dietary protein levels is the amino acid cysteine itself, not methionine or a metabolite of methionine or cysteine, and not an indirect response to the cellular redox state.

Work also has been done on strategies for improving food security by encouraging community-based initiatives linking research and extension. Approximately 300 food system stakeholders, from producers to consumers, were mobilized to develop community-based initiatives. These stakeholders are forming into 30 working groups across the region to implement their plans.

Another portion of the work focuses on the interrelationships among the behavioral factors that influence food choice at the community, family and individual levels. The approach involves a unique integration of research and intervention. They developed a model for understanding the development of trajectories for fruit and vegetable choice over the life course, and a conceptual framework for understanding the influence of ethnic identity on fruit and vegetable choice.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $450,000; fiscal years 1990–1991, $556,000 per year; fiscal years 1992–1993, $735,000 per year; fiscal year 1994, $691,000; fiscal years 1995–1998, $622,000 each year. A total of $6,211,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $154,056 state appropriations and $2,456 private in 1991; $238,430 state appropriations and $60,746 private in 1992; $19,401 state appropriations and $22,083 private in 1993; $202,441 state appropriations and $1,175 private in 1994; $296,794 state appropriations in 1995; $348,127 in state appropriations and $39,593 private in 1996; and $133,162 state appropriations in 1997.

Research is being conducted at Cornell University, New York. The original overall objective to integrate nutrition goals and food systems is continuing to be addressed. A set of new related objectives was submitted in 1997 and will be the research focus for the next three years. The grant proposal for fiscal year 1997 was subjected to extensive peer review, and the recommendations were incorporated into the ensuing experimental designs.

ILLINOIS-MISSOURI ALLIANCE FOR BIOTECHNOLOGY

The Illinois-Missouri Alliance has initiated a competitive grants program in agricultural biotechnology for research in targeted priority areas of need related to corn and soybeans. The scope of interest includes production, processing, marketing, utilization, inputs and support services, along with economic, social, environmental, and natural resource concerns. The Alliance has solicited research project proposals from scientists at Illinois and Missouri and other midwestern institutions, and have conducted peer reviews for science quality, commercial feasibility, and potential economic impact to select the proposals that will be funded. In 1997 the Alliance awarded five research grants at three institutions totaling $1,012,859. The Alliance also issued a third call for proposals and received 20 proposals from 10 different universities. The proposals are being reviewed for awarding of fiscal year 1998 funds.

The principal investigator has indicated that the goal of the Alliance is the precommercial development of emerging biotechnology discoveries for agriculture. The midwestern region produces more than half of the nation's output of corn and soybean crops, and is critical to domestic food security and United States competitive-

ness in global agricultural markets. Alliance grants are awarded on a regional basis to advance corn and soybean production in the Midwest. The Alliance is implementing a research strategy that it hopes will generate important biotechnological developments that are rapidly adaptable to unique local soil, climatic and socioeconomic conditions of the region. Alliance grants are awarded to projects with a clearly defined marketable product or service derived from biotechnology research.

Fiscal year 1997 was the third year of funding for the Alliance. The research program focuses on the two major commodity crops, corn and soybeans, as produced, processed, and marketed in the midwest. The goal of this bio-technology program is to fund integrated research and development projects that will lead to specifically defined practical technologies for commercialization. The projects funded in fiscal year 1997 include efforts to: (1) obtain greater control of cell death in plants with a molecular suppressor of cell death from maize, (2) enhance the use of core technologies for genome based food analysis, (3) develop soybean varieties resistant to nematode infection, (4) reduce the environmental impact of higher corn yields, and (5) study industrial networks in biotechnological structure and significance.

The work supported by this grant began in fiscal year 1995 and the appropriations for fiscal years 1995 and 1996 were $1,357,000 each year, and for fiscal year 1997, $1,316,000. In fiscal year 1998, $1,184,000 was appropriated, bringing the total appropriations to date to $5,214,000.

The Alliance has not specified a required amount of matching funds, but it is expected that most projects will have commitments for significant direct and in-kind non-federal support. Since Alliance projects are only now getting underway, the exact amount of the non-federal contribution is still unknown. The non-federal contribution is expected to be substantial, and a system for accounting for future non-federal contributions is in place.

The research projects identified for funding in fiscal years 1995 through 1997 are being conducted at the University of Illinois, the University of Missouri, Iowa State University, Northwestern University, and Southern Illinois University. Each project proposal for Alliance funding has a target date for completion. The four initial projects were three-year studies with anticipated completions at the end of fiscal year 1998. Most of the second round of projects are also three-year studies with anticipated completions at the end of fiscal year 1999.

The Illinois-Missouri Biotechnology Alliance was evaluated for scientific merit by an agency peer review panel on January 7, 1997. The panel recommended approval of the project pending receipt of supplemental information on administrative aspects of the project. The supplemental information was received and we are satisfied that the program is being administered in compliance with the purpose of the grant. A peer review panel of government and academic scientists will re-evaluate the project for scientific merit in 1998.

IMPROVED DAIRY MANAGEMENT PRACTICES, PENNSYLVANIA

The research focuses on developing methods to help dairy farmers in the adoption of new technology and management practices which lead to improved dairy farm profitability. Individual research projects funded by the grant are determined by a competitive peer review process administered by the Institution using peers from other Institutions located primarily in other States. The principal researcher believes the local need is the identification and implementation of profit enhancing management strategies for Pennsylvania dairy farms in response to changing market conditions and emerging technologies. The current focus is to develop economically-viable solutions to issues confronting Pennsylvania dairy farmers such as dealing with animal waste in an environmentally-friendly manner, reducing the cost of forage production systems, including grazing systems, and to develop a better understanding of decision processes by dairy farmers.

The original goal of this research is the development of methods to help dairy farmers in the adoption of new technology and management practices which lead to improved dairy farm profitability. A farm management survey is complete and analysis of results is in progress. Farm financial models have been developed and are undergoing field test on selected farms. Workshops to teach elements of business management to dairy farmers have been conducted, and survey instruments are in place to monitor effectiveness of workshops. Research is currently underway to develop improved models for nutrient management on northeastern dairy farms, to evaluate the potential role of intensive grazing systems to replace harvested forage, and to better understand how decisions are made by dairy farm families. Refinements of an expert computer based system to assist dairy farmers in controlling the udder disease, mastitis, is underway. A study to evaluate the induction of lactation on dairy profitability is underway. An additional study to evaluate the impact of im-

proved protein nutrition during late gestation on dairy cow performance has been initiated.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was $335,000 per year. The fiscal year 1994 appropriation was $329,000 and $296,000 each year in fiscal years 1995–1998. A total of $2,183,000 has been appropriated. During fiscal year 1992, $354,917 were from State funds, and $16,000 from Industry, for a total of $370,917. During fiscal year 1993, $360,374 were from State funds and $16,000 from Industry for a total of $376,374. Information is not available for fiscal years 1994–1997.

Research is being conducted at Pennsylvania State University. The principal researcher anticipated completion of the original objectives by March, 1994. The original objectives were met. Availability of continued funding has permitted the institution to develop a competitively awarded grant program within the institution to address priority issues related to management of dairy farms. Proposals are reviewed and ranked by peers in other institutions prior to award. It is anticipated that awards from the fiscal year 1998 appropriation will be complete in September, 2000. The agency accepts technical review of specific proposals funded by this grant on an annual basis. The overall proposal is reviewed by the agency on an annual basis. In addition, technical staff has conducted on-site review of the program in 1993 and in 1995. The overall objectives of the work funded by this grant has direct relationship to the development of Integrated Management System as well as to aspects of animal production systems on animal well-being and impact on the environment.

IMPROVED FRUIT PRACTICES, MICHIGAN

This research will involve a multidisciplinary approach to reduce chemical use on apple, blueberry, and sour cherry, three important Michigan fruit crops, and improve the management of dry edible beans and sugar beets. Research will be conducted on crop management techniques and reduced chemical use. The principal researcher believes Michigan's need for this research is to develop and maintain/expand their tree fruit and small fruits industry. There is a need to improve the culture and management of dry edible beans and sugar beets. The planned objectives of the research are to reduce the chemical contamination of the environment from fruit production and improve production practices for beans and beets through multidisciplinary research, including pesticides, and the development of new nonchemical production methods.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $494,000, and for fiscal years 1995–1998, $445,000 each year. A total of $2,274,000 has been appropriated. The nonfederal funds and sources provided for this grant in fiscal year 1994 were $437,338 from state appropriations and $135,000 from industry, for fiscal year 1995 were $574,494 from state appropriations and $127,000 from industry and a total of $908,969 for 1996. The nonfederal funds for 1997 totaled $752,500.

Research will be conducted at Michigan State University. The Principal Investigators have reported significant progress toward improved cultural practices for these speciality crops which is expected to reduce the need for chemical pesticides. This project has not been subjected to a comprehensive review. The annual proposals including all of its sub projects are subjected to CSREES before they are approved. The project has progressed toward the objective of developing management practices and strategies for economical production of speciality crops in Michigan with reduced chemical pesticide use. This program is evaluated at the end of each research cycle and priorities adjusted for the next years funding. The evaluation is performed by scientist at Michigan State University.

INSTITUTE FOR FOOD SCIENCE AND ENGINEERING, ARKANSAS

As the flagship center for the Institute for Food Science and Engineering, the Center for Food Processing and Engineering has as its objectives to facilitate and encourage value-added research and improve the efficiency and effectiveness of processing agricultural products. Its research program includes thirty-seven projects which have been funded and are underway or complete. The Center requires that researchers acquire the financial support of industry to support their research. Thus, four additional research projects have been approved but are awaiting funding from industry. The next request for proposals by the Institute will be issued in February 1998. The Center for Food Safety and Quality, with a mission to conduct research on the safety and quality of foods relative to microbiological and chemical hazards, was activated on January 1, 1997. Fiscal year 1997 funds are supporting research from March 1, 1997 through February 28, 1998. CSREES has requested and received a proposal in support of the fiscal year 1998 appropriation. Projects

included for funding in the proposal submitted to CSREES have been reviewed by industry representatives for relevance and by scientists at the recipient institution for scientific merit.

The principal researcher believes the Institute will provide technical support and expertise to small and mid-sized food processors that usually do not possess adequate expertise in-house. The economy of the southern region will be improved through the creation of new jobs and a high multiplier effect from the research. The Institute will develop and disseminate scientific information and provide educational programs related to value-added further processing, storage and marketing of food products. These efforts will assure food safety, improve the sensory and nutritional quality of food and meet the nutritional requirements and food preferences of a changing society.

The original goal of this research is to establish an Institute of Food Science and Engineering at the University of Arkansas-Fayetteville. Research helped determine the cause of post-millage breakage of rice kernels and subsequent effects on quality and end use functionalities of rice products. A patent has been filed for a machine that uses new defect recognition methods and algorithms for high-speed accurate sorting of fruits and vegetables. Research has shown that bacteria, including Salmonella typhimurium and Campylobacter jejuni, in salt solutions and poultry processing water, either chiller water or scalding water, could be reduced or eliminated using low voltage pulsed electricity in a treatment tank or a flow-through system with a food grade electrolyte. A commercial brine chiller will be designed with the electrical pasteurization system, flow-through type, first for lab-scale tests and then for pilot-plant tests. Other research produced an enzymatic method to produce rice bran protein from non-heat treated, defatted rice bran and determining the effects of processing and storage on flavor of dill pickles. The initiative to provide technical support to new food entrepreneurs has generated 13 requests for assistance. Individuals interested in starting a food processing business were provided with information on such topics as regulations, safety, labeling, ingredients and packaging. In addition, information was provided on financial aspects of starting a business and on marketing products. Also, improvement in product quality and safety was provided. The Institute provided information to new food business entrepreneurs on food regulations, safety, labeling, ingredients, packaging, and financial aspects of starting a food business and on marketing products. Several products were evaluated and specific recommendations made to those entrepreneurs. An introductory publication and a comprehensive volume on "Starting a Food Business" were published. An Institute Newsletter is prepared quarterly.

The work supported by this grant began in fiscal year 1996. The appropriation for fiscal years 1996 and 1997 was $750,000 each year and $950,000 for fiscal year 1998. A total of $2,450,000 has been appropriated. The non-federal funds and sources provided for this grant include $184,700 in state funds and $93,000 from industry in fiscal year 1996, and $187,357 in state funds and $320,403 industry funds in fiscal year 1997. Thus far in fiscal year 1998, industry has provided $93,599, with firm commitments of an additional $55,000. In just over two years, industry has donated new equipment valued at $360,000. The state has also provided facilities and administrative and clerical support estimated at $303,694 through June 30, 1998. The Institute received, as a donation worth $200,000 from industry, a trained sensory panel to qualify and quantify sensory properties of foods.

Research will be conducted at the University of Arkansas at Fayetteville. The principal researcher anticipates that work will be completed on the original goals in fiscal year 2001. The goals of this project related to establishing the centers of the Institute are sequential and have not been fully met. The Center for Food Processing and Engineering is fully operational and successful, the Center for Food Safety and Quality is operating well, and the activation of the Center for Human Nutrition is scheduled for 1999. The objectives related to research and service to industry, food entrepreneurs, and the general public would continue to be ongoing.

An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal was conducted on January 8, 1998. The assessment was that satisfactory progress was demonstrated in meeting the goals of the Institute. The progress report submitted as part of the proposal is compared with stated objectives. If all goals are not met, then the reviewer considers issues that may have hindered completion of expected goals which may include equipment failure and methodology problems that were not anticipated.

INTEGRATED PEST MANAGEMENT

This special research grant develops new pest management tools to address critical pest problems identified by farmers and others in a crop production region, and to find new approaches to managing pests without some of the most widely used pesticides. Farmers have identified the lack of effective alternative pest management tactics as a primary reason for not implementing IPM on their farms. Where effective alternative tactics have been developed, they are widely and rapidly implemented by farmers. These projects are a key element of USDA's goal of helping U.S. agriculture implement IPM practices on 75 percent of U.S. crop acreage, and will help the Nation's farmers adjust to changes in pesticide availability resulting from implementation of the Food Quality Protection Act of 1996.

The goal of this research is to provide farmers with options that allow them to shift from sole dependence on pesticides to a greater reliance on natural control methods. At the core of the integrated pest management approach is a dual focus on improving profitability and protecting vital natural resources. The research supported by this special grant has made an important contribution to increasing knowledge about new approaches to pest management, but the need for continued investment in this area of research is greater than ever.

Grants have been awarded from funds appropriated as follows: fiscal year 1981, $1,500,000; fiscal years 1982 through 1985, $3,091,000 per year; fiscal years 1986 through 1989, $2,940,000 per year; fiscal year 1990, $2,903,000; fiscal year 1991, $4,000,000; fiscal years 1992 and 1993, $4,457,000 per year; fiscal year 1994, $3,034,000; and fiscal years 1995–98, $2,731,000 each year. A total of $55,399,000 has been appropriated. Non-federal funds are as follows: for fiscal year 1993, state appropriations, $841,017, product sales, $33,987, industry grants, $17,081, and other, $31,737; for fiscal year 1994, state appropriations, $2,303,458, product sales, $77,157, industry grants, $210,110, and other, $216,552.

This research is currently being carried out by State Agricultural Experiment Stations in more than 40 states. The economic and environmental pressures facing U.S. agriculture today are at least as great today as they were in 1981 when Federal funds were first appropriated for this special research grant. There will be a need for continued investment in research to develop new approaches to managing pests for the foreseeable future. Proposals are evaluated by multi disciplinary panels. The projects supported by this special research grant have consistently provided key knowledge needed in developing new approaches to pest management.

INTEGRATED PRODUCTION SYSTEMS, OKLAHOMA

This grant focuses on the development of efficient management systems for production of watermelons and blackberries under intensively managed conditions. The work will address biotic and abiotic production components under Southeastern Oklahoma conditions for use in production guidelines. This will include planting densities, fertilizer studies, weed management, and insect and disease control. The request for proposal has been issued, the grant will be competitively awarded to scientists working at the West Watkins Agricultural Research and Extension Center based on a merit review conducted by Oklahoma State University personnel. The principal researcher believes the need for this research is focused on the local area of Southeastern Oklahoma, an area that is economically-depressed and in need of alternative crops to diversify the dominant cow/calf livestock production. The original goal of this research was to develop new and alternative crops to supplement and diversify the cow/calf livestock agriculture of Southeastern Oklahoma with emphasis on horticultural crops. Work to date has shown promise for strawberries, blackberries, cabbage, melons, and blueberries. CD–ROM technology transfer to research results to support an expert system will be developed for grower use.

Work supported by this grant started in fiscal year 1984 and the appropriations were: fiscal year 1984, $200,000; fiscal year 1985, $250,000; fiscal year 1986, $238,000; fiscal years 1987–1989, $188,000 per year; fiscal years 1990–1991, $186,000 per year; fiscal year 1992, $193,000; fiscal year 1993, $190,000; fiscal year 1994, $179,000; fiscal years 1995–1998, $161,000 each year. A total of $2,830,000 has been appropriated. The nonfederal funds and sources provided for this grant were as follows: $165,989 state appropriations in 1991; $160,421 state appropriations in 1992; and $164,278 state appropriations in 1993. Nonfederal support for 1994 was $141,850 for state appropriations. Funds for fiscal year 1995 were $129,552, for 1996 were $146,000, and for 1997 were $152,000.

This research is being done at the West Watkins Agricultural Research and Extension Center at Lane, Oklahoma, a branch of the Oklahoma State Agricultural Experiment Station. The original objectives of this project were to develop a production system for alternative crops with economic potential for southeastern Okla-

homa. Each year's funding cycle addresses specific crop and management objectives to be completed over two years time. These short term objectives have been met for each of the completed two-year projects. However the original objective of developing alternative cropping systems is very long term and have not been completed.

Each of the annual project proposals has been put through the institutions review and is reviewed by a CSREES scientist before approval. In addition to the annual review of individual proposals, a comprehensive review of the Lane Agricultural Center, where this research is conducted, was conducted in 1993. This review revealed that work supported by this grant is central to the mission of that station. This project is evaluated internally at the end of each year in order to set priorities for the next year.

INTERNATIONAL ARID LANDS CONSORTIUM

Fiscal year 1997 was the fourth year that CSREES funded the International Arid Lands Consortium. The Forest Service supported the program during fiscal year 1993 to develop an ecological approach to multiple-use management and sustainable use of arid and semiarid lands. Projects that began in 1994–1997 will continue to be funded to address issues of land reclamation, land use, water resources development and conservation, water quality, and inventory technology, and remote sensing. All proposals are peer reviewed and awarded competitively, whereby the principal investigator must be from a Consortium member institution. The principal researcher believes the consortium is devoted to the development, management, and reclamation of arid and semi-arid lands in the United States, Israel, and elsewhere in the world. The International Arid Lands Consortium will work to achieve research and development, educational and training initiatives, and demonstration projects. The current member institutions are the University of Arizona, The University of Illinois, Jewish National Fund, New Mexico State University, South Dakota State University, Texas A&M University, Kingsville, and Nevada's Desert Research Institute. The United States Department of Agriculture's Forest Service works very closely with The International Arid Lands Consortium through a service-wide memorandum of understanding. The Consortium's affiliate members include Egypt's Ministry of Agriculture and Land Reclamation Under secretarial for Afforestation and Jordan's Higher Council for Science and Technology.

The original goal of the Consortium was and continues to be acknowledged as the leading international organization supporting ecological sustainability of arid and semi-arid lands. To date, 45 projects have been funded, 31 of which are to conduct research and development, 12 for demonstration projects, and 5 for international workshops. Funds approximating $2.68 million have been used to fund these projects.

The International Arid Lands Consortium was incorporated in 1991. Funds were appropriated to the Forest Service in 1993. Additional funds were received during each of the years that followed. $329,000 has been appropriated from CSREES for fiscal years 1994 through 1998 for total appropriations of $1,645,000 for the 5-year period. Members of the International Arid Lands Consortium have provided funds to support the Consortium office in Tucson, Arizona, and for printed materials as needed. Each member has provided travel and operations support for semi-annual meetings, teleconferences, and other related activities. In fiscal years 1993–1996, $60,000 in state appropriations were provided. Industry provided $84,083 and $100,000 in fiscal years 1993 and 1995, respectively. Additional funds of $34,000 were received during 1996 from the Egyptian affiliate member to enhance future collaboration. Amounts for fiscal year 1998 will be available during March 1998.

Research is currently being conducted at the University of Arizona, South Dakota State University, Texas A&M University, Kingsville, New Mexico State University, University of Illinois, and several research/education institutions in Israel. Almost all research and demonstration projects that started during 1993 and 1994 have been completed. The projects started in 1995–1997 are expected to be completed within 6 months to 2 years depending upon the nature of the research. Several demonstration projects were completed and 5 international workshops were held during 1994 through 1997. The International Arid Lands Consortium is an organization with long-term goals that will require research and development for many years. All projects are evaluated every 6 months and require progress reports that are peer reviewed by scientists identified by the Consortium. The completed projects have met all proposed key objectives. The cognizant staff scientist has reviewed the project and determined that the research is conducted is in accordance with the mission of the agency.

IOWA BIOTECHNOLOGY CONSORTIUM

This consortium is the focal point for cooperative biotechnology research endeavors between Iowa State University, the University of Iowa and the City of Cedar Rapids, Iowa to develop and test methods to improve wastewater treatment processes for agricultural wastes. Whenever possible, efforts will be made to convert byproduct materials in agricultural wastes into useful new products. Both fundamental and applied research studies will be conducted with the goal of enhancing the recovery and utilization of byproduct materials through studies involving fermentation, enzyme catalysis and bioprocessing. The expectation is that new and improved technologies will be developed from the research to reduce the burden of agricultural bioprocessing wastes on municipal waste management systems and to transform components of these agricultural wastes into commercially viable products. This overall project involves a coordinated approach by a diverse group of investigators, and funding decisions within each participating institution for individual studies are based on a competitive process with a peer panel review and evaluation. In addition, the project proposal submitted to CSREES, which combines the selected individual studies, is also peer reviewed for scientific merit by a biotechnology panel designated by the Agency.

Developments in biotechnology have added to the national need for improved management systems that increase the capacity and sophistication of agricultural waste processing. These researchers believe that technological breakthroughs are possible to deal effectively with the increasing burden of agricultural wastes and that useful byproduct materials can be recovered and recycled through bioprocessing of wastes, especially fermentation wastes. The principal investigators consider this research to be of national, regional, and local importance.

The original goals of this project were aimed at enhancing the recovery and utilization of by-product materials arising from new and emerging industries using biotechnology. Recycling agricultural wastes, isolating useful byproducts and developing value added processing remain the primary thrusts of the project. A cadre of scientists has been established by the Consortium to assist them in finding uses for the by-product waste streams generated by agricultural processing. The Consortium is also making important progress in bioconversion, biocatalysis, membrane concentration, and bioseparation of by-products. In fiscal year 1998, new studies are being initiated on value-added products related to culture of polysaccharide-producing bacteria, screening of agricultural seed processing fractions for biocatalysts, conversion of lignocellulose to lactic acid, and the use of waste by-products as feeds for livestock and aquacultural species.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,225,000; fiscal year 1990, $1,593,000; fiscal year 1991, $1,756,000; fiscal year 1992, $1,953,000; fiscal year 1993, $2,000,000; fiscal year 1994, $1,880,000; fiscal years 1995–1996 $1,792,000 each year; fiscal year 1997, $1,738,000; and $1,564,000 in fiscal year 1998. A total of $17,293,000 has been appropriated. Non-federal funds and sources provided for this grant were as follows: $623,803 from the State of Iowa, $42,813 from the city of Cedar Rapids in 1991; $768,287 from the State of Iowa, and $365,813 from the city of Cedar Rapids in 1992; $858,113 from the State of Iowa, and $170,000 from the city of Cedar Rapids in 1993; $841,689 from the State of Iowa, and $36,000 from the City of Cedar Rapids in 1994; and $1,016,505 from the State of Iowa, and $36,000 from the city of Cedar Rapids in 1995.

Research is being conducted at Iowa State University and the University of Iowa, in collaboration with the City of Cedar Rapids. The Consortium was originally formed between the City of Cedar Rapids and the participating universities to assist the City in dealing with wastes associated with corn and oat processing and milling, biocatalysis to produce high-fructose syrups, and one of the largest fermentation facilities in the world. More recently, the diversified economic base of the Cedar Rapids area has attracted new biotechnology industries, which have added greatly to the volume of industrial waste streams. No firm date was established to complete this research at the beginning of the project. The researchers have worked closely with the City and the industries generating these agricultural wastes since 1989, and the nature of the studies have evolved as significant progress has been made in analyzing the waste streams and in devising laboratory procedures for extracting useful products. The City of Cedar Rapids is planning to invest funds from other sources in special waste treatment facilities to conduct large scale tests of new treatment methods. Thus, several years will be needed for these tests and to refine the existing separation technologies.

The Iowa Biotechnology Consortium proposal for fiscal year 1998 will be evaluated for scientific merit by a biotechnology peer review panel on January 29, 1998. The panel recommendations related to past progress and proposed future experi-

ments will be used in the approval process for the project. The Consortium was also featured in a biotechnology special grant seminar hosted by the Agency at which the principal investigators presented research progress and highlights to an audience of agency scientists, administrators, and awards management staff as a part of the program's post-award management. A site visit to the research facilities by the Program Manager for an assessment is anticipated during next year.

JOINTED GOATGRASS

Research is being conducted on control systems for jointed goatgrass in wheat production including integrated cultural management, seed bank studies, and modeling for management conducted as sub-projects by several states. The premier research project continues to be an "Integrated Management" study being conducted across states in the midwest and west. In this study, jointed goatgrass management is being evaluated based on planting dates, planting density, economic thresholds, and competitive varieties. Research is also being conducted on crop rotations, biological control, seed production and spread, and the development of computer-based decision aids. All funded work has a technology transfer plan and a national coordinator for technology transfer to insure that growers are fully informed about all options for managing this devastating weed. The National Technology Transfer Coordinator has been hired, with the concurrence of a steering committee, and that person is housed at the University of Nebraska To maximize cooperation among scientists, an annual meeting is held among all investigators and the national steering committee to strengthen collaborations and optimize the distribution of limited funds.

Jointed goatgrass infests nearly five million acres of winter wheat in the west and midwest and is spreading unchecked. It costs U.S. wheat growers an estimated $145 million annually. Control of jointed goatgrass in wheat is impossible with current methods because its seed survives in the soil for five or more years. Jointed goatgrass has increased rapidly in the past 20 years because of the widespread adoption of conservation tillage systems. Jointed goatgrass proliferated in such reduced tillage systems, and it seriously impedes the universal adoption of such practices. The research involves scientists from other states.

The goal of this project is to reduce the devastating effect of jointed goatgrass on wheat production and quality and to prevent its continued spread into new, non-infested areas. A jointed goatgrass population model has been constructed including a post-harvest—fall—seed bank, spring seed band, and fall and spring germination, seeding mortality, mature plants, and seed production. The underlying jointed goatgrass population model has been constructed with a vision that the weed management strategies are going to be long-term in nature and be focused on the impact of crop rotation, tillage, and weather on jointed goatgrass population dynamics.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $329,000, and for fiscal years 1995–1997, $296,000, each year, $346,0000 was appropriated in fiscal year 1998, bringing total appropriations to $1,563,000. The non-federal funds and sources provided for this grant were as follows: for 1994, $82,198 state appropriations, $82,256 from industry, and $14,871 miscellaneous; for fiscal year 1995, $67,442 state appropriations, $38,496 from industry, and $13,304 miscellaneous; and for each fiscal year 1996 and 1997, an estimated $70,000 state appropriations, $50,000 from industry, and $14,000 miscellaneous.

The research is being conducted by University scientists in the states with serious infestations including Washington State University—the principal coordinating institution—Colorado, Kansas, Nebraska, Oklahoma, Utah, Oregon, Idaho, Montana, Wyoming, and South Dakota. The project was initiated to accomplish significant results in about five years. The original objectives are being met, and the researchers anticipate that the original work may be completed in fiscal year 1999. Each year the grant is peer reviewed and reviewed by CSREES's senior scientific staff. Grants are awarded on a competitive basis using a peer review process. An external review is being planned for 1998.

LANDSCAPING FOR WATER QUALITY, GEORGIA

The project is a comprehensive, multi-disciplinary, multi-institution, 5 phase, 5-year study directed by the University of Georgia, in partnership with private producers and other agencies. The researchers believe it will lead to development of management guidelines for animal-based agriculture based on landscape-scale environmental quality considerations. Participating institutions and agencies include: the University of Georgia; the Joseph W. Jones Ecological Research Center; the Middle South Georgia Soil and Water Conservation District; the U.S. Department of Agriculture's Agricultural Research Service, Natural Resources Conservation Service,

and Cooperative State Research, Education, and Extension Service; and the Georgia Department of Natural Resources. Key partners in this project include growers from Brooks and Thomas counties in Georgia. This project undergoes merit review by the Cooperative State Research, Education, and Extension Service.

The economies of scale associated with modern animal production and processing have led to concentration of livestock operations within a very small geographic area. This has often led to problems of regional water quality degradation. In the southeastern United States, these water quality problems have often been exacerbated by location of livestock confinement facilities on sites lacking adequate good cropland for proper management of manure and waste management. One such region experiencing rapid growth in poultry production is the Gulf-Atlantic Coastal Plain of Georgia. Research is needed to create the information necessary to develop land management strategies to prevent environmental degradation, while maintaining profitability, with the intensification of animal-based agriculture in this region and similar regions of the country.

The goal of this research project is to provide the knowledge base for the integration of increased animal production into a regional agricultural system without sacrificing water quality. The goal will be met by completing five specific objectives over a period of 5 years. The planned research is on schedule. Since the project began on February 1, 1996, progress has been made on three of the five objectives and work on the final two objectives was initiated during fiscal year 1997. Specific accomplishments include:

1. Completed installation and began sampling for chemical and biological water quality parameters at seven stream monitoring sites in the 390 square kilometer Piscola Creek Watershed, and continued sampling eight stream monitoring sites in the 340 square kilometer Little River Research Watershed.

2. Nearing completion of Geographical Information System databases for these two watersheds including information on soils, hydrography, topography, and landcover.

3. Began compiling a database listing all regulations, guidelines, and recommended management practices pertaining to animal agriculture and environmental quality in the southeast region.

4. Installation of stream sampling sites is now in progress in the Ichawaynochaway Creek Drainage Basin—the final of the three study watersheds.

5. One year of chemical and biological water quality data has now been collected from the Piscola Creek Watershed and 2 years of data from the Little River Research Watershed.

6. Preliminary macroinvertebrate samplings were conducted in the Piscola Creek Watershed during 1997. Regular sampling is to begin in 1998. These samples will provide a good indicator of how non-point source pollution is affecting the streams' ability to support aquatic life.

The work supported by this grant began in fiscal year 1996 and the appropriation for fiscal years 1996, 1997, and 1998 was $300,000 per year. A total of $900,000 has been appropriated. Information provided by the University indicates that $202,000 in state funds was provided to support this grant during fiscal years 1996 and 1997. Similar amounts of state support are anticipated for future years. In addition, funds will be expended by the other participating non-federal institutions in support of this grant.

This research is being conducted by an interdisciplinary team of 19 scientists led by researchers at the University of Georgia's National Environmentally Sound Production Agriculture Laboratory in Tifton and Athens, Georgia. The experimental aspects of the project are being conducted in the coastal plain region of Georgia in watersheds that are representative of southern Georgia, southeast Alabama, and north central Florida. The anticipated completion date of the entire project is February 2002. Each of the project's five objectives will be completed by preset deadlines. The first deadline is January 31, 1998. The $900,000 in Federal funds appropriated for this project will provide a good foundation for completing the objectives. Good progress has been made on the five objectives of this project, as determined by the agency's review of the progress reports and meetings with the principal researcher. We are working with the principal researcher to schedule a peer evaluation of the project during 1998.

LIVESTOCK AND DAIRY POLICY, NEW YORK AND TEXAS

The purpose of this grant is to assess the possible economic impacts on the U.S. livestock and dairy sectors from various macroeconomic, farm, environmental, and trade policies and new technologies. Both Cornell University and Texas A&M University conduct analyses of these policies and disseminate the information to policy-

makers, farmers, and agribusinessmen. Cornell focuses on sector-level dairy policies, and Texas A&M focuses on policies affecting livestock and dairy at the farm level.

Information on the implications of new and alternative farm, trade, and macroeconomic policies affecting the livestock and dairy sectors is of special interest to policy-making officials, farmers, and others. Such information enables farmers and agribusinessmen to make necessary adjustments to their operations to enhance profitability and for public officials to consider alternatives to sustain adequate supplies and minimize public program costs. The original goal was to establish a specialized research program that could provide timely and comprehensive analyses of numerous policy and technological changes affecting livestock and dairy farmers and agribusinessmen and advise them and policymakers promptly of possible outcomes. This goal has been achieved and the program continues to provide timely assessments and evaluations of provisions and proposed changes in agricultural policies, the General Agreement on Tariffs and Trade, and the North American Free Trade Agreement; various income and excise tax measures; and alternative pricing measures for milk. The institutions are integrally involved in several current studies relating to dairy provisions in the 1996 farm legislation. These studies have contributed to the development of regulations called for in this legislation. Both institutions maintain extensive outreach programs to disseminate results of their analyses throughout the United States. They have organized a National Dairy Markets and Policy Extension Committee to advise and assist them in this effort.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $450,000; fiscal year 1990, $518,000; fiscal years 1991–1993, $525,000 per year; fiscal year 1994, $494,000; and fiscal years 1995–1998, $445,000 each year. A total of $4,817,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: $37,420 State appropriations in 1991; $162,086 State appropriations and $133,278 product sales for a total of $295,364 in 1992; and $301,817 State appropriations, $1,412 industry, and $7,121 miscellaneous for a total of $310,350 in 1993; $24,702 State appropriations, and $5,961 industry for a total of $30,663 in 1994; $235,526 State appropriations for 1995; $250,000 in State appropriations for 1996; and approximately $245,000 in State funding for each of the years 1997 and 1998.

The research is being conducted at Cornell University and Texas A&M University. This program is of a continuing nature for the purpose of assessing existing issues and proposed policy changes affecting the livestock and dairy industries. We have conducted no formal evaluations of this project. Annual proposals for funding, however, are carefully reviewed and work progress is noted.

LOWBUSH BLUEBERRY RESEARCH, MAINE

Interdisciplinary research is being conducted on many aspects of lowbush blueberry culture and processing includes investigation into factors affecting processing quality, biological control of insect pests, sustainable pollination, weed, disease and fertility management, cold hardiness and ground water protection. Maine produces 99 percent of all lowbush blueberries or 33 percent of all blueberries in the United States. This work is of major local interest, and helps maintain the continued availability and high quality of this native fruit commodity.

The original research goal was to provide research answers to unique lowbush blueberry production, pest and processing problems. Research to date indicates that the field sanitizer was able to use heat to control insect pests without adversely affecting plant growth, providing a non-chemical alternative to pest management. Eumenid wasps were found to control red striped fireworm, providing a potential biological control. Native leafcutter bees and alfalfa leafcutter bees were found to increase lowbush blueberry fruit set and yield, providing an alternative to imported honeybees. Clonal variation was found to affect stem and flower bud hardiness that will prove to be important in clonal selection for planting. Control of monolina disease was found in using 4 ounces of propiconazole instead of 24 ounces of triforine thereby reducing the chemical needed for control of this disease. Boron and calcium were found to have more influence on the ability of the stigma to stimulate pollen germination than the germinability of the pollen grains themselves. A mechanical harvester was found to be effective and had yields and fruit quality comparable to hand harvest, providing growers with a more efficient tool to harvest blueberries. Economic weed thresholds have been determined for weed species, thereby giving growers a method to determine when to use control measures. Mowing proved as effective as wiping to suppress two of these species, providing a non-chemical control alternative. A rope wick wiper effectively controls weeds growing higher than blueberry plants without injuring the crop. Pesticide residues in lowbush blueberries were found to be well below federal tolerances. Carboxymethyl cellulose and various

gums were found to control berry leakage, thereby improving quality for use in baked products. Products for use in food industry are being extracted from cull berries, thereby improving utilization and reducing waste.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, $170,000; fiscal year 1991, $202,000; fiscal years 1992 and 1993, $185,000 per year; fiscal year 1994, $208,000; and fiscal years 1995, 1996, 1997, and 1998 at $220,000 each year. A total of $1,830,000 has been appropriated. Direct industry support from blueberry tax funds has been about $65,000 in 1996 and 1997.

Research is being conducted at the University of Maine. The original objectives have not yet been met. The University of Maine researchers estimate that the project will be concluded at the end of fiscal year 2001 and have requested that funding be continued until then. The agency evaluates this project on a yearly basis as funding is renewed. Project proposals are peer reviewed by the University of Maine review mechanism. Progress reports are submitted to the Cooperative State Research, Education, and Extension Service on a yearly basis as part of the review of the proposed project.

MAPLE RESEARCH, VERMONT

The research is designed to increase understanding of how water moves from the soil into and through the maple trees affecting tree growth and sap production. It also examines the relationships of maple decline to acid precipitation. Moreover, the research measures the effectiveness of various fertilizer combinations in improving the health of declining maple trees. Lastly, the project is designed to identify sources of lead contamination in maple products and to begin testing lead-free equipment and possible commercial methods for removing lead from maple syrup. The project is annually subjected to the University's merit review process.

Maple products are an important cultural heritage, and a source of seasonal income in maple growing areas of rural America. Identifying source(s) of contaminants during processing and commercial methods to remove contaminants from products is important to assuring consumers that these food products are not harmful. The goal of this research is to conduct research on maple tree physiology, management of sugar maple stands, and related aspects of the maple syrup industry in Vermont and the Northeast. The U.S. Department of Agriculture approved an amendment to these goals to permit research on lead in maple syrup products.

Work under this project began in fiscal year 1985. Annual appropriations in support of this project are as follows: fiscal year 1985—$100,000; fiscal years 1986–1987—$95,000 per year; fiscal years 1988–1989—$100,000 per year; fiscal years 1990–1993—$99,000 per year; fiscal year 1994—$93,000; fiscal years 1995–1997—$84,000 each year; and fiscal year 1998—$100,000. This sums $1,331,000. Non-federal fiscal support for this project is provided by two primary sources and one secondary source. The primary sources are state appropriations and product sales. The secondary source is local support, but that support is not available each year. The total non-federal contribution from these sources provides an average ratio of .86 to 1. The low ratio was .6 to 1 early in the project. More recently, the ratio has been 1.1 to 1.

This research is being conducted at the Vermont Agricultural Experiment Station. The work, from this project, relative to maple tree physiology and management of maple stands has been completed. The new objective of identifying sources of heavy metals in maple syrup products and, subsequently, reducing them is underway. The anticipated completion date is 1999. Project proposals and progress reports are reviewed and evaluated annually by the U.S. Department of Agriculture. Satisfactory progress has been made on tree physiology and maple tree management. Progressive work on identifying sources and controlling maple syrup contaminants is in place and is being monitored by the Department.

MICHIGAN BIOTECHNOLOGY CONSORTIUM

The objective of the Michigan Biotechnology Consortium's research program is to develop bioprocessing technology to manufacture products from agricultural raw materials, to increase the utilization of raw materials, reduce surpluses, and to degrade agricultural and associated wastes, thereby decreasing environmental costs of agricultural products and processes, and to reduce the need to import foreign petroleum. Using the tools of bioprocessing, agricultural resources can be transformed into products equal in function and value to those currently made from petroleum. Bioprocessing may include fermentation, an enzymatic step, chemical catalysis, or physical modification of agricultural raw materials. The 1998 grant proposal will be peer reviewed for scientific merit. The principal researcher believes the results from the research will help to develop bioprocessing technologies to manufacture value-added

products from agricultural raw materials, which increases their utilization, reduces commodity surpluses, reduces environmental costs, decreases the need for foreign petroleum, and will contribute to regional and national priorities.

Besides increasing utilization, reducing surpluses and environmental costs, the goals of this research remain to select and develop market-viable technologies that form the basis for new companies, new jobs, and additional tax revenues for state, local and Federal governments. The Consortium has succeeded in developing numerous technologies that are now in the marketplace. Examples include the following: Production of lactic acid through fermentation using corn as the feedstock resulting in a polymer for biodegradable plastics and a disinfectant. A $200 million plant has been built in Nebraska to produce lactic acid by this process for domestic and foreign markets. Corn was used as a feedstock to develop plant growth formulations to enhance plant growth and productivity and to reduce nitrogen fertilizer requirements. These growth promoters have shown productivity increases of greater than 15 percent with a reduction in nitrogen fertilizer use greater than 25 percent in a variety of crops. Biodegradable plastic resins developed from cornstarch were made to produce compostable films for lawn and leaf litter bags, agricultural mulch films, and other soluble films. Compostable bags are used widely throughout the United States. Biodegradable plastic resins from cornstarch were also developed for moldable products such as disposable cutlery, plastic containers, and toys and toothbrushes. The market for resins for use in formulation and extrusion of plastics for all applications is in excess of $2 billion annually. Corn was also used for the development of all-natural flavors and derivatives including a salty-flavored compound that can replace monosodium glutamate in low sodium foods.

Low-cost, readily-available carbohydrates—from whey—were used to produce high-quality, high-value optically-pure chiral intermediates for the pharmaceutical and agrochemical industries. A sand/manure separation system for dairy farms was developed to cost-effectively separate manure from sand and recycle both components. Biodegradable adhesives have been developed from agricultural resources. Numerous enzymes have been characterized and are now in use to provide value added modifications in the processing of agricultural products. A stabilized phytase has been developed to improve digestibility of forage-based animal feeds and reduce animal wastes. Improved methods to clean up herbicides, pesticides and other agriculturally important materials have been developed.

Many of these products have been commercialized through licensing agreements with industrial partners or new company start-ups. In addition, there are many agri-based industral products under development including: natural succinate-based green chemicals for surfactants and detergents; paint removers; green solvents from corn-derived materials; plant stress promoters; natural food preservatives; biobased membrane polymers for liquid crystal, medical device coatings, metals recovery and other uses; improved enzymes for processing starch and fructose production; food flavors and pigments; and production of animal feed additives from agricultural wastes.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $1,750,000; fiscal year 1990, $2,160,000; fiscal year 1991, $2,246,000; fiscal years 1992–1993, $2,358,000 per year; fiscal year 1994, $2,217,000; fiscal year 1995, $1,995,000; fiscal years 1996 and 1997, $750,000 per year, and fiscal year 1998, $675,000. A total of $17,259,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $1,750,000 in State of Michigan appropriations, $160,000 from industry, and $1,000,000 from miscellaneous in 1991; $1,750,000 in State of Michigan appropriations, $175,000 from industry, and $1,000,000 from miscellaneous in 1992; $1,750,000 in State of Michigan appropriations and $100,000 from industry in 1993; $1,750,000 in State of Michigan appropriations, $175,000 from industry, and $100,000 from miscellaneous in 1994; $200,000 in State of Michigan appropriations and $2,035,000 from industry in 1995; $1,250,000 in State of Michigan appropriations and $350,000 from industry and $6,000,000 from miscellaneous in 1996; and $402,500 from industry and $10,000,000 from miscellaneous in 1997. A total of $29,947,500 has been provided to support this work by non-federal sources.

The research is being conducted on the campus of Michigan State University and at the Michigan Biotechnology Institute International. Demonstrations of technology occur throughout the United States. The Consortium reports specific milestones for technology development over a five year period. Specific milestones for technologies which will be commercialized in fiscal year 1998 were established in fiscal year 1994 and updated annually. Historically, work under this grant has shown that it requires five years to successfully move commercially-promising technologies from the bench scale to the marketplace. The Consortium has been successful in effectively closing the gap between research and commercialization in the five year period.

Each year, new projects are initiated that require five years to complete. The principal researcher believes that continued funding is necessary to successfully transfer new technologies under development to the marketplace. The Michigan Biotechnology Institute was evaluated for scientific merit by an agency peer review panel on January 7, 1997. The panel recommended approval of the project pending receipt of supplemental information on administrative aspects of the project. A peer panel of government and academic scientists re-evaluated the scientific merit of the project in 1998.

MIDWEST ADVANCED FOOD MANUFACTURING ALLIANCE, NEBRASKA

The stated purpose of the Midwest Advanced Food Manufacturing Alliance is to expedite the development of new manufacturing and processing technologies for food and related products derived from United States produced crops and livestock. The Alliance involves research scientists in food science and technology, food engineering, nutrition, microbiology, computer science, and other relevant areas from 12 leading Midwestern universities and private sector researchers from numerous U.S. food processing companies. Specific research projects are awarded on a competitive basis to university scientists with matching funds from non-federal sources for research involving the processing, packaging, storage, and transportation of food products. Projects selected for funding are merit reviewed by non-participating university scientists, industry scientists and scientists from professional organizations. Close cooperation between corporate and university researchers assure that the latest scientific advances are applied to the most relevant problems and that solutions are efficiently transferred and used by the private sector. Fiscal year 1997 funds are supporting research from June 1, 1997 through May 31, 1998. CSREES has requested and received a proposal in support of the fiscal year 1998 appropriation. The principal researcher believes the food manufacturing industry is the number one manufacturing industry in the Midwestern region and that opportunities for trade in high value processed food products will grow exponentially on a worldwide basis. The Alliance is positioned to fill the void in longer range research and development for the food industry.

The goal, as stated previously, was to expedite the development of new manufacturing and processing technologies for food and related products derived from United States produced crops and livestock. This is accomplished by conducting a research proposal competition among faculty from the 12 participating universities to fund research projects where matching funds are available from industry. Fourteen projects were funded from fiscal year 1994 funds with completion and final reports due by May 1, 1996. Ten projects were funded from fiscal year 1995 funds with anticipated completion and final reports due by August 31, 1997. Ten projects were also funded from fiscal year 1996 funds with anticipated completion and final reports due by May 31, 1998. Eleven projects were funded from fiscal year 1997 funds with anticipated completion and final reports due by May 31, 1999. Proposals are reviewed for scientific merit by independent scientists, and final selection of projects includes consideration of industrial interest and commitment on non-Federal matching funds.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was $470,000, and for fiscal years 1995–1998, $423,000 each year. A total of $2,162,000 has been appropriated. Industry matching funds were $823,148 in fiscal year 1994, $414,164 in fiscal year 1995, $576,600 in fiscal year 1996, and $429,579 in fiscal year 1997.

The work is being coordinated by the Nebraska Agricultural Experiment Station at Lincoln. Specific research projects are also being conducted at ten other universities that are part of the Alliance. The overall objectives of the Alliance are ongoing. Funding supports the continuing and evolving needs and opportunities for foods manufactured and processed from U.S. produced crops and livestock. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal was conducted on January 12, 1998. The principal investigator has provided descriptions of projects funded by this grant. Scientifically-sound, industry-relevant projects appear to be the basis of the project, with impactful results expected.

MIDWEST AGRICULTURAL PRODUCTS, IOWA

The Midwest Agribusiness Trade Research and Information Center does applied research to improve the global competitiveness and marketability of agricultural products produced in the Midwest and disseminates the results to small and medium-sized agribusinesses. Projects include analyses of potential markets for U.S. agricultural products and equipment/technology in several countries; attitudes of

foreign consumers; development of new/improved U.S. products to meet foreign needs. The overall project proposal received a merit review at the university level and individual research activities are reviewed by the principal investigator and other faculty. The principal researcher believes that agribusiness firms in the United States, especially small to medium-sized firms, have a large unrealized potential to expand export sales and foreign business ventures. These untapped opportunities exist in the Pacific Rim and in emerging markets such as Mexico, China, and Eastern Europe. The reluctance of small to medium-sized firms to explore these market opportunities is, in part, due to the high cost of market information and analysis and the perceived high risk of doing business in new markets. This project meets the needs of these firms at the local, regional , and national level.

The goal is to enhance the export of agricultural commodities, value-added products, and equipment produced by Midwestern agribusiness firms through research and education programs utilizing close-working relationships with those firms. Several studies were completed and distributed to interested firms, and new ones were initiated. Completed studies included: an analysis of conditions and prospects for agribusiness ventures in Egypt; market analyses for U.S. agricultural products in Cameroon, Senegal, and Cote d'Ivoire; an assessment of market opportunities for food processing equipment in China; Mexican consumer response to U.S. pork products; comparative advantage of U.S. pork in North American markets; impact of NAFTA on Midwest beef industry; an evaluation of the need for government regulation for maintaining or improving the quality of 12 export commodities; case studies of 16 outstanding food and agricultural exporters; evaluation of 60 varieties of corn for dry milling for the Mexican market; suitability of microsoy flakes for markets in Pacific Rim and African countries; use of the Internet for marketing goods and services. In addition several seminars and conferences were held, "Global Connections" newsletter was published regularly, and business contacts database kept up to date. As a result of much work to establish trading relationships with China, the Des Moines sister-city of Shijiazhuang, China established a trade office in Des Moines.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992–1993 was $700,000 per year; fiscal year 1994, $658,000; and fiscal years 1995–1998, $592,000 per year. A total of $4,426,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: $185,495 State appropriations and $373,897 industry for a total of $559,392 in 1992; $183,192 State appropriations and $318,966 industry for a total of $502,158 in 1993; $127,948 State appropriations and $500,394 industry for a total of $628,342 in 1994; $258,053 State appropriations and $389,834 industry for a total of $647,887 for 1995; $165,425 State appropriations for 1996; $162,883 State appropriations for 1997; and $165,000 State appropriations for 1998. Industry contributions continue but were not reported for 1996–1998.

The program is carried out by Iowa State University. The original proposal in 1992 was for a period of 24 months, however, the objective of expanding the export capacity of small to medium-sized agribusiness firms is an ongoing regional and national concern. The current phase of the program will be completed in 2000.

CSREES performed a merit review of the project in January 1997, as it evaluated the project proposal for 1997, and concluded that the Midwest Agribusiness Trade and Research Center at Iowa State University has an impressive record of producing high quality, useful research and trade information for agribusinesses in the Midwest and other states. Research results appear in several peer-reviewed professional journals and the popular press.

MILK SAFETY, PENNSYLVANIA

The overall goal of the milk safety program is to provide insight into factors that help ensure an adequate and safe milk supply. Toward that end, the research has focused on factors that affect milk production, processing, manufacturing, and consumption. Special attention has been given to ways of preventing and/or treating pathogens that enter the milk supply. Projects are selected for funding each year based on competitive, peer reviews by scientists outside the recipient institution. The fiscal year 1997 grant will support research through June 30, 1999. CSREES has requested the University to submit a proposal in support of fiscal year 1998 funds, but the proposal has not yet been received due to the University's merit review process to select projects for funding. The principal researcher believes that the question of microbial safety is of paramount interest to the milk/dairy industry at all levels-national, regional and local. Dairy products such as milk, nonfat dry milk, cheese, butter, and cream have been associated with several large outbreaks of staphylococcal food poisoning, and coagulase negative Staphylococcus infections are

one of the most common intramammary infections of dairy cattle. Listeria monocytogenes is present in about 4 percent of raw milk, and it has the potential to grow to dangerous levels during refrigeration and storage, making pasteurization critical in preventing foodborne illnesses from this organism. Bovine mastitis is the most important infectious disease affecting the quality and quantity of milk produced in the nation, costing producers an average $180 per cow per year. Ensuring safety of dairy products impacts not only consumer health and confidence in the safety of the food supply, but economic viability as well.

The research is aimed at minimizing or eliminating future foodborne disease outbreaks from milk and dairy products. Researchers demonstrated that when subjected to a sublethal heat shock prior to pasteurization, Listeria monocytogenes becomes much more heat-resistant than previously thought, likely requiring the design of new pasteurization guidelines that will ensure the safety of dairy products. In addition, they developed a simple, fast, sensitive, specific and inexpensive method for the detection of Listeria monocytogenes in dairy products that will allow dairy processors to rapidly and easily screen for the presence of this pathogen both in their products and in the processing environment. A computer model of Listeria monocytogenes growth in dairy foods under dynamic refrigeration conditions and during extended storage is under development to provide producers and processors with a proven technology for further enhancing the safety of fluid milk and related products. Another key accomplishment includes the discovery of potential approaches of enhancing natural defense mechanisms of the bovine mammary gland through vaccination and immunoregulation. Discoveries of factors influencing growth of Staphylococcus aureus could be used to prevent or contain growth of this pathogen in foods. Researchers have identified and sequenced a gene from this bacterium that is essential for growth under stressful conditions. Research also revealed that consumers having high general concern about milk and dairy product safety and nutrition were more likely to be female, to have lower levels of education, be non-white and report more attention to scientific news, health and nutrition news and news about government food safety regulatory attention.

Grants have been awarded for milk consumption and milk safety from funds appropriated as follows: fiscal years 1986 through 1989, $285,000 per year; fiscal year 1990, $281,000; fiscal year 1991, $283,000; fiscal year 1992, $284,000; fiscal year 1993, $184,000; fiscal years 1994–1998, $268,000 per year. A total of $3,512,000 has been appropriated for milk safety and milk consumption. The University estimates that non-federal funds contributed to this project include the following costs and salaries: $265,000 for fiscal year 1991; $224,700 for fiscal year 1992; $142,600 for fiscal year 1993; and $252,168 for fiscal year 1995. No data are currently available for fiscal years 1994 and 1996.

The research is being conducted at the Pennsylvania State University. The researchers anticipate that research supported by this grant should be concluded in 1999. Continuing and evolving needs related to the safety of milk and dairy products are expected to reveal new related objectives. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. Since the agency has not yet received the proposal in support of the fiscal year 1998 appropriation, the review of the proposal supporting the fiscal year 1997 appropriation was conducted on March 13, 1997. At that time, the agency science specialist believed that the projects addressed important issues related to safety of milk and dairy food products, were scientifically sound, and that satisfactory progress was being demonstrated using previously awarded grant funds.

MINOR USE ANIMAL DRUGS

The National Agricultural Program to Approve Animal Drugs for Minor Species and Uses—NRSP–7—was established to obtain the Food and Drug Administration (FDA) approval of animal drugs intended for use in minor species and for minor uses in major species. The objectives of the program are to identify the animal drug needs for minor species and minor uses in major species, generate and disseminate data for the safe, effective, and legal use of drugs used primarily in therapy or reproductive management of minor animal species, and facilitate the Food and Drug Administration in obtaining approvals for minor uses. Studies are conducted to determine efficacy, target animal safety, human food safety, and environmental safety. The funds for the special research grant are divided between the four regional animal drug coordinators and the headquarters at Michigan State University for support of the drug approval program. The NRSP–7 funds are being utilized by the State Agricultural Experiment Stations where the regional animal drug coordinators are located as well as by other stations to develop data required for meeting approval requirements. Participants in the research program consist of the regional co-

ordinators, State Agricultural Experiment Stations, USDA's Agricultural Research Service, the U.S. Department of Interior, schools of veterinary medicine, and the pharmaceutical industry. Research priorities are continually updated through workshops and meetings with producer groups representing species categories such as small ruminants, game birds, fur-bearing animals, and aquaculture species. Each request for drug approval is evaluated by the technical committee according to established criteria which include significance to the animal industry, cost of developing the necessary data, availability of a pharmaceutical sponsor, and food safety implications. The fiscal year 1997 research grants terminate in April 1999. The 1998 grant proposals have been requested by the agency. All grants are reviewed by the university and the agency for relevance to industry needs and scientific merit.

Animal agriculture throughout the U.S. has relied on chemical and pharmaceutical companies to provide their industry safe and efficacious drugs to combat diseases and parasites. The high cost incurred to obtain data to approve these drugs, when coupled with limited economic returns, has limited the availability of approved drugs for minor uses and minor species. The economic losses due to the unavailability of drugs to producers for minor species and minor uses threatens the economic viability of some segments of the animal industry. The need for FDA/Center for Veterinary Medicine approved drugs to control diseases in minor species and for minor uses in major species has increased with intensified production units and consumer demand for residue-free meat and animal products. The program provides research needed to develop and ultimately culminate in drug approval by FDA/CVM for the above purposes. The goals are accomplished through the use of regional animal drug coordinators as well as a national coordinator to prioritize the need, secure investigators at federal, state and private institutions, and oversee the research and data compilation necessary to meet federal regulations for approval. All drug approvals are national, although industry use may be regional. For example, certain aquaculture and the game bird industries are concentrated in specific geographic sections of the country. The administration believes this research to be of national, regional or local need.

The original NRSP–7 goal to obtain approval by the Food and Drug Administration for animal drugs intended for use in minor species and for minor uses in major species remains as the dominant goal. In recent years, the research program has expanded or given additional emphasis to aquaculture species, veal calves and sheep. In addition, several new animal drug requests were recently received from the game bird. The importance of environmental assessment, residue withdrawals and occupational safety have increasingly been given more attention during the approval process to help assure consumer protection. To date, 286 drug requests have been submitted to the Minor Use Animal Drug Program for approval. Working in conjunction with many universities. Twenty five public master files have been published in the Federal Register providing approval for drug use in minor species and 30 active research projects are being conducted in 15 states involving 18 animal species and 17 different drugs. Therefore, whereas a total of 286 animal drug requests have been submitted to the program since 1983, program funding has been available for only about one out of every five requests. In 1997, a Public Master File was prepared and published in the Federal Register for the use of clorsulon for control of liver flukes in goats. The research for this project was conducted in Florida. It is also anticipated that in the next year, ivermectin will be approved for use in bison.

The Center for Veterinary Medicine of the Food and Drug Administration is cooperating and supporting this program to the fullest extent. The program is a prime example of Federal interagency cooperation in coordination with academic institutions, pharmaceutical industries and commodity interests to effectively meet an urgent need.

Grants have been awarded from appropriated funds in the amount of $240,000 per year for fiscal years 1982–85; $229,000 per year for fiscal years 1986–1989; $226,000 for fiscal year 1990; $450,000 for fiscal year 1991; $464,000 per year for fiscal years 1992 and 1993; $611,000 for fiscal year 1994; and $550,000 for fiscal years 1995–1998. A total of $6,291,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $156,099 state appropriations, $29,409 industry, and $11,365 miscellaneous in 1991; $265,523 state appropriations, $1,182 product sales, $10,805 industry, and $59 miscellaneous in 1992; $212,004 state appropriations, $315 industry; and $103 miscellaneous in 1993; $157,690 state appropriations, and $7,103 miscellaneous in 1994; $84,359 state appropriations in 1995; $191,835 non-federal support in 1996, and $357,099 non-federal support in 1997.

The grants have been awarded to the four regional animal drug coordinators located at Cornell University, the University of Florida, Michigan State University and the University of California-Davis, and to program Headquarters at Michigan

State University. Research is conducted at these universities and through allocation of these funds for specific experiments at the State Agricultural Experiment Stations, the Agricultural Research Service, the U.S. Department of Interior, and in conjunction with several pharmaceutical companies.

Selected categories of the Special Research Grants program address important national-regional research initiatives. The overall objectives established cooperatively with FDA and industry are still valid. However, specific objectives continually are met and revised to reflect the changing priorities for FDA, industry, and consumers. Research projects for this program have involved 20 different animal and aquaculture species with emphasis given in recent years to research on drugs for the expanding aquaculture industry and increasing number of requests from the sheep, veal calf, and game bird industries. The minor use animal drugs program involves research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. Especially with the new sensitivities about food safety and environment protection, there is a high priority for continuation of these ongoing projects.

The agency conducted a formal review of the Minor Use Animal Drug Program in 1997. An external review team of experts representing animal drug research and development, the veterinary profession, the pharmaceutical industry, and academia, found the program to be very productive. Recommendations from the review included a) improve the visibility of the Minor Use Animal Drug Program, b) improve working relationships with the veterinary and pharmaceutical communities, c) and acquire additional support for the program by pharmaceutical companies, universities, and the federal government to meet the identified national needs with emphasis on responsiveness to industry needs and food and environmental safety. Annually, grant proposals are peer reviewed and twice a year the agency and representatives of the program meet with representatives from the Food and Drug Administration to evaluate progress and to prioritize research requests. Workshops are held periodically to identify priorities for the program whereby producers, pharmaceutical companies, FDA, and researchers participate. GAO also conducted a review in 1991 and recommended additional support for the program.

MOLLUSCAN SHELLFISH, OREGON

The research under this program was initiated in fiscal year 1995. A repository for the conservation of genetic material of molluscan shellfish was established during the first year of the project. This repository is serving as a source of genetic material for current breeding programs aimed at commercial production of shellfish with desirable traits. Researchers are currently evaluating selected families in cooperation with the industry. The proposal is put though the university's peer review process and is reviewed by the CSREES Program Manager. The researchers indicate that there is a national need for a molluscan broodstock development program to benefit the commercial industry through conservation, genetic manipulation and wise management of the genetic resources of molluscan shellfish.

The goals of this research program are to establish a repository for genetic materials of molluscan shellfish, to establish breeding programs for commercial production of molluscan shellfish, and to establish a resource center for the industry, researchers and other interested parties in the U.S. and abroad. During the first two years of the program an oyster broodstock selection program was implemented in partnership with industry. Performance trials of selected stocks will continue at commercial sites.

The work supported by this grant began in fiscal year 1995 with an appropriation of $250,000; fiscal year 1996 was $300,000; and fiscal year 1997 and 1998 is $400,000. A total of $1,350,000 has been appropriated. The university estimates a total of $135,454 of non-federal funding in fiscal year 1995 primarily from state sources; in fiscal year 1996 and 1997 no cost sharing was provided.

Research will be conducted at Oregon State University. Although the specific research objectives outlined in the original proposal were to be completed in 1996, researchers anticipated that the original broad objectives would be completed in 2002.

The agency evaluates the progress of this project on an annual basis. The university is required to submit an accomplishment report when the new proposal is submitted to CSREES for funding. The 1997 review, indicated that the researchers were well qualified to conduct the research, the research complements other research being funded though USDA, the research does address an important opportunity for the industry and that the research is being conducted in close cooperation with the private sector. The 1998 CSREES review will be completed within three weeks of submission of the proposal. The researchers are asked to develop a re-

search proposal consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

MULTI-COMMODITY RESEARCH, OREGON

The purpose of this research is to provide agricultural marketing research and analysis to support Pacific Northwest producers and agribusiness in penetrating new and expanding Pacific Rim markets for value-added products. The program examines the potential for increasing the competitiveness and economic value added by Pacific Northwest agriculture through improvements in food production, processing, and trade by assisting decision makers in developing economic and business strategies. The grant is not competitively awarded at the state or regional level, but the proposal is merit reviewed at the Experiment Station and the departmental levels. The principal researcher believes that Oregon and the other Pacific Northwest States produce a wide variety of agricultural commodities and products with commercial potential to export to Pacific Rim countries. Research and analysis is necessary to guide agricultural producers and processors in assessing these markets and developing market strategies and value-added products, and marketing strategics tailored to specific Pacific Rim markets. The principal researcher believes this research to be of national, regional and local need.

This goal of this research is to gain better specific understanding of the technical, economic, and social relationships that define Oregon's value-added agricultural sector, and examine how these factors affect the economic performance of this sector. This project will investigate and develop innovations in value-added agriculture to improve the economic performance of the agricultural and food manufacturing sectors in the Pacific North-west. The current research plan will examine economic variables that underlie competition in food production, processing and marketing in the Pacific Rim; address technological challenges in transport, storage, and quality maintenance; assist in testing and evaluating new product ideas; and, monitor the economic performance of the Oregon value-added agricultural industry.

Work in progress has resulted in research output in 4 topic areas: market research, packaging research, sensory research, and food processing industry strategic planning. Research output includes development of a pilot World Wide Web site for Pacific Northwest exports, data bases, survey work, and collaborative research activity with industry and with institute and university researchers in selected Asian countries. Manuscripts, working papers, journal articles, and several Masters of Science theses are outputs to date.

The research began in fiscal year 1993 with an appropriation of $300,000. The fiscal year 1994 appropriation was $282,000, and fiscal years 1995 through 1998 appropriations were $364,000 for each year. The total amount appropriated is $2,038,000. Non-federal funding for this grant was $168,824 in State appropriations in fiscal year 1991, $177,574 in State appropriations in 1993, and $162,394 in State appropriations in fiscal year 1994. Due to a change in university policy regarding indirect costs, the university has not reported the amount of non-federal funds appropriated for fiscal years 1995–1998.

The research program is carried out at Oregon State University in Corvallis and at the Northwest Food Innovation Center in Portland, Oregon. This Special Grant is awarded on a year-by-year basis. Oregon State University traditionally requests funds for this project on an annual basis and has budgeted the funds to individual sub-projects on that basis. Progress on the original objectives is as follows: baseline data have been accumulated; an economic growth assessment model is being formulated and refined; global competitiveness is being assessed for value-added Pacific Northwest agricultural products; targets for performance are being worked out with agricultural industries; and, many trade teams have been involved in assessing the ability of U.S. based in industries to meet the demands for noodle production for Asian markets. Anticipated complection date is currently 1998. A CSREES merit review was dated July 1997. The work was found to be scientifically sound and of high priority to the region.

MULTI-CROPPING STRATEGIES FOR AQUACULTURE, HAWAII

In fiscal year 1993, the university redirected this research program to address the opportunities of alternative aquaculture production systems, including the ancient Hawaiian fish ponds on the island of Molokai. The university has developed a community based research identification process and has developed specific research projects to be included in this program. Current research includes work in the area of water quality characterization to accelerate permitting of aquaculture systems. Field testing of alternative species is underway. The proposal is placed through the university's peer review process and is reviewed by the CSREES Program Manager.

The principal researchers indicate that the primary need for this research is to assist the native Hawaiians in improving the profitability and sustainability of the ancient Hawaiian fish ponds and other appropriate aquaculture systems as part of a total community development program.

The original goal of this program was to develop technology for the coproduction of shrimp and oysters in aquacultural production systems. Research led to the development of oyster production systems that have been field tested under commercial conditions. The current research effort is aimed at developing sustainable commercial aquaculture production systems on the island of Molokai. Hatchery techniques have been developed for the culture of the Pacific threadfin. Techniques for the culture of two edible aquatic plants have been refined. Multidimensional field testing and evaluation of existing and restored ancient Hawaiian fish ponds is currently underway. Researchers are currently characterizing differences in water quality in fish ponds to establish criteria for fish pond permitting and management.

This research was initiated in fiscal year 1987 and $152,000 per year was appropriated in fiscal years 1987 through 1989. The fiscal year 1990–1993 appropriations were $150,000 per year; $141,000 in fiscal year 1994; and $127,000 in fiscal years 1995–1998, each year. A total of $1,705,000 has been appropriated. The university reports a total of $137,286 of non-federal funding for this program in fiscal years 1991–1994, $318,468 in fiscal year 1995–1996 and $116,730 in fiscal year 1997. The primary source of non-federal funding was from state sources.

Research is being conducted through the University of Hawaii on the island of Molakai. The completion date for the original project was 1993. The original objectives were met. The specific research outlined in the current proposal will be completed in fiscal year 1999. The agency evaluates the progress of this project on an annual basis. The university is required to provide an accomplishment report when the new grant proposal is submitted to CSREES for funding. In addition, in 1996 the CSREES program manager conducted a site visit to Molokai to meet with the principal investigator and industry cooperators. The 1997 review indicated that progress has been made in the implementation of the program despite the challenges of developing a community based program in such a unique social and cultural environment. The researchers are asked to develop a research proposal consistent with the NSTC's Strategic Plan for Aquaculture Research and Development.

NATIONAL BIOLOGICAL IMPACT ASSESSMENT PROGRAM

The National Biological Impact Assessment Program was established to facilitate and assess the safe application of new technologies for the genetic modification of animals, plants, and micro-organisms to benefit agriculture and the environment. This program was established in fiscal year 1989. During the last decade there has been an explosion of new information produced by rapid advances in biotechnology and its beneficial application to agriculture and the environment. The research proposed for this program fulfills an important national need to provide scientist easy access to relevant information that will facilitate the preparation of scientific proposals that comply with the oversight and regulatory requirements for testing potential biotechnology products and foster the safe application of biotechnology to benefit agriculture and the environment. This program supports the agricultural and environmental biotechnology community by providing useful information resources to scientists, administrators, regulators, teachers and the interested public.

The original goal of the National Biological Impact Assessment Program was to provide easy access to reliable information on public health and environmental safety of agricultural biotechnology research. Its objectives were to increase the availability, timeliness and utility of relevant information to the biotechnology research community; facilitate the compliance of biotechnology research with oversight and regulatory requirements for testing biotechnology products; and provide informational resources to the scientific community that would foster the safe application of biotechnology to agriculture and the environment. This same goal continues today. Each year much new information is added and integrated into the computerized database. The system has evolved to adapt new computer technologies and is now available via internet and the World Wide Web. This computer-based information system now includes texts of federal agency biotechnology regulations, proposed rules and policy statements; databases of biotech companies, and research centers, institutional biosafety committees and state regulatory contacts; resource lists of publications, directories, bibliographies and meetings; monthly newsletters developed and distributed by this program; relevant Federal Register announcements; and links to other electronic information resources. In addition, this program provides biosafety training through workshops for academic and corporate scientists,

biosafety officers and state regulators. A Field Test Notebook has been developed as a reference text for these workshops.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, $125,000; fiscal year 1990, $123,000; fiscal years 1991–1993, $300,000 per year; fiscal year 1994, $282,000; and fiscal years 1995–1998, $254,000 per year. A total of $2,446,000 has been appropriated. The co-principal investigator of this grant is Head of the Department of Biochemistry and Anaerobic Microbiology at Virginia Polytechnic Institute and State University. The university contributes his time to administer this grant which amounts to approximately $5,000 each year.

This grant award is with Virginia Polytechnic Institute and State University. Former and current partners in the program include The Pennsylvania State University, Louisiana State University, North Carolina Biotechnology Center, University of Arizona, University of Missouri, Michigan State University, Purdue University, and the National Agricultural Library.

There remains a continuing need to address the safety of field testing of genetically modified organisms to benefit agriculture and the environment. This continues to be a rapidly expanding field. Increasing amounts of new information needs to be properly integrated into the computerized information system each year. This program has been very successful in providing essential, updated information on the conduct of safe field experiments. Thus, the program remains a high priority and needs to be continued.

The National Biological Impact Assessment Program was extensively reviewed by an external panel of scientists in October 1994. The review report was highly complimentary regarding the Information Systems for Biotechnology funded by this special grant and recommended continuation of this program.

NEMATODE RESISTANCE GENETIC ENGINEERING, NEW MEXICO

This research is designed to investigate naturally occurring compounds from diverse sources that may confer pesticidal resistance if introduced into agronomic plants. The main target pests are plant parasitic nematodes. The work is using molecular biological techniques to incorporate genes into agronomic plants which will shorten the time frame to produce transgenic plants. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES. The principal researcher believes that the successful development of these techniques and subsequence transfer of nematode resistant genes into agronomic plants will provide an environmentally sound system for all plants susceptible to plant parasitic nematodes. The principal researcher believes that project has the potential for both regional and national application.

The original goal of this research was to provide an alternative approach for the control of plant parasitic nematodes through the use of molecular biological technologies to transfer pesticide resistance to plants. A nematode-stimulated promoter element was engineered for insertion in front of a bacteria toxin. A unique technique utilizing insect intestinal membrane vesicles were used as tools for detection of specific protein binding domains. The synthetic gene, CRY3A Bt has been successful in field trails on potato and eggplants.

The work supported by this grant began in fiscal year 1991 and the appropriations for fiscal years 1991–1993 were $150,000 per year; $141,000 was appropriated in 1994; and $127,000 in fiscal years 1995–1998, each year. A total of $1,099,000 has been appropriated thus far. The non-federal funds and sources provided for this grant were as follows: $65,000 state appropriations in 1991; $62,000 in state appropriations in 1992; $75,000 in state appropriations in 1994; and $75,000 state appropriations in 1995. For 1996, the University and the Plant Genetic Engineering Laboratory are providing matching contributions in faculty and staff salaries, facilities, equipment maintenance and replacement, and administrative support. In 1997, there were no matching non-federal funds. In 1998, $48,000 state appropriated funds were provided.

Research is being conducted at the New Mexico State University, and at collaborating universities in the region. The completion date for this project is estimated to be in 2001.

The last evaluation of this project was a merit review conducted December 19, 1996. In summary, the overall goal of this project is to use molecular technology to develop pesticide capability in plants of agronomic importance. A plant transformation system was developed to improve the historically difficult transformation efficiently of monocots. In field trails of transformed eggplants and potatoes, high levels of effectiveness against insects have been found. Several potato and alfalfa lines have been transformed and established in field plots and are being tested at

this time. Other constructs are being used in many crops to determine resistance to nematodes and other crop pests.

NONFOOD AGRICULTURAL PRODUCTS PROGRAM, NEBRASKA

This work focuses on the identification of specific market niches that can be filled by products produced from agricultural materials, developing the needed technology to produce the product, and working with the private sector to transfer the technology into commercial practice. Major areas of application include starch-based polymers, use of tallow as diesel fuel, improvements in ethanol production, use of vegetable oil as drip oil for irrigation wells, production of levulinic acid, the extraction of wax from grain sorghum and production of microcrystalline cellulose from crop biomass. Projects are merit reviewed internally at the University of Nebraska. The principal researcher believes our ability to produce agricultural commodities exceeds our needs for food and feed. These commodities are environmentally friendly feedstocks which can be used in the production of many biochemicals and biomaterials that have traditionally been produced from petroleum. The production of the commodities and the value-added processing of these commodities is regional in scope.

The objectives are to identify niche markets for industrial utilization of agricultural products, improve and develop conversion processes as needed for specific product isolation and utilization, provide technical, marketing and business assistance to industries, and coordinate agricultural industrial materials research at the University of Nebraska, Lincoln. Accomplishments include developing a formula that combines starch from corn and wheat, plastic resin from polystyrene and polymethylmethacrylate and compatibilizing agents to make loose fill packaging materials. We are currently negotiating a licensing agreement with Biofoam for the commercial use of this technology. Crude degummed and dried soybean oil has been proven to be an effective drip oil for irrigation wells. Archer Petroleum in Omaha is developing a marketing plan for regional distribution through 2500 distributors. Bruning Grain Company is currently working with us on a Drip Oil II product that they hope to market in the summer of 1998. Crude beef tallow has been converted to methyl esters and studied as diesel fuel. Fuel tests and extensive engine studies have shown it to be compatible with petroleum diesel and diesel engines. More recent studies have improved the process for converting tallow to esters for fuel use. Starch has been converted to levulinic acid using acid hydrolysis and an extruder. A patent is pending and commercialization efforts are underway. A patent application has been prepared on our micro-crystalline cellulose production technologies. CSREES is currently working with M.C.C. Technologies on commercialization. Their goal is to commercially produce microcrystalline cellulose in 1998.

The work supported by this grant began in 1990 and the appropriation for fiscal year 1990 was $109,000 in 1990; $110,000 per year in fiscal years 1991–1993; $103,000 in fiscal year 1994; $93,000 in fiscal year 1995; and $64,000 in fiscal years 1996–1998 per year. A total of $827,000 has been appropriated. The non-Federal funding for this project is: in fiscal year 1992, $315,000; fiscal year 1993, $330,000; fiscal year 1994, $330,000; fiscal year 1995, $309,000; fiscal year 1996, $251,000; fiscal year 1997, $250,000; and fiscal year 1998, $340,000. These funds were from Nebraska Corn, Soybean, Wheat, Sorghum and Beef Boards, World Wildlife Fund, Nebraska Bankers Association, United Soybean Board and National Corn Growers Association, Bioplastics, Inc., Biofoam, Inc. and M.C.C. Technologies, Inc.

This work is being conducted at the Industrial Agricultural Products Center, L.W. Chase Hall, University of Nebraska, East Campus, Lincoln, Nebraska. The objectives of the original projects have been completed. Specific objectives have been identified in each renewal request. This project is evaluated annually based on an annual progress report. The cognizant staff scientist has reviewed the project and determined that the research is conducted in accordance with the mission of this agency.

OIL RESOURCES FROM DESERT PLANTS, NEW MEXICO

The Plant Genetic Engineering Laboratory has been exploring the potential for the production of high value industrial oils from agricultural products. The effort has been focused on transferring the unique oil producing capability of jojoba into oilseed rape and soybean. With the development of technology to both isolate the enzyme components of oil biosynthesis and successfully transform the target plants, significant advances have been made with jojoba. In addition, oil enzymes have been studied in soybean, castor, oilseed rape, and meadowfoam. A peer panel of government and academic scientists is expected to re-evaluate the scientific merit of the project on January 29, 1998.

The principal researcher believes desert plant sources of valuable oils for industrial applications are typically low yielding and limited in climatic areas for farm production. Genetic engineering offers an opportunity to move genetic capability to high yielding major crops. Many of the oils and their derivative acids, waxes, and others can directly substitute for imports of similar polymer materials, especially petroleum.

The goal of the research is to transfer the unique oil producing capability of jojoba and other native shrubs into higher yielding crops such as oilseed rape and soybean. This is a form of metabolic engineering and it requires the transfer of coordinated groups of genes and enzymes into the host plant to catalyze the necessary biochemical reactions. Progress has included characterization and isolation of several lipid biosynthetic enzymes along with associated genes, binding proteins, and molecular enhancers.

This research began in fiscal year 1989 with a $100,000 grant under the Supplemental and Alternative Crops program. Grants have been awarded under the Special Research Grants program as follows: fiscal year 1990, $148,000; fiscal years 1991–1993, $200,000 per year; fiscal year 1994, $188,000; fiscal years 1995–1996, $169,000 each year; and fiscal years 1997 and 1998, $175,000 per year. A total of $1,724,000 has been appropriated. Non-federal funds are not provided for operational portions of this research. However, New Mexico State University and the Plant Genetic Engineering Laboratory provide $90,000 for in-kind support per year including faculty salaries, graduate student stipends, facilities, equipment maintenance, and administrative support services.

The research is being conducted by the Plant Genetics Engineering Laboratory at New Mexico State University, Las Cruces, New Mexico. An estimate of the total time in Federal funds required to complete all phases of the project is 3 to 4 years. The application of this research for improved management of natural resources will evolve and expand as technology in the area advances. The Oil Resources from Desert Plants, New Mexico project was evaluated for scientific merit by an agency peer review panel on January 7, 1997. The panel recommended approval of the project pending receipt of supplemental information on administrative aspects of the project. A peer panel of government and academic scientists is expected to re-evaluate the scientific merit of the project on January 29, 1998.

ORGANIC WASTE UTILIZATION, NEW MEXICO

Composted dairy waste is utilized as a pretreatment to land application. Composting dairy waste before land application may alleviate many of the potential problems associated with dairy waste use in agronomic production systems. Composting may also add value to the dairy waste as a potential landscape or potting medium. High temperatures maintained in the composting process may be sufficient for killing enteric pathogens and weed seeds in dairy waste. Noxious odors and water content may be reduced via composting. Composted dairy waste may be easier to apply, produce better seed beds, and not increase soil salinity as much as uncomposted dairy waste. The principal researcher believes the research will address the utilization of dairy waste combined with other high-carbon waste from agriculture and industry, including potash and paper waste, for composting. This approach to waste management will have high impact for states where dairy and agriculture are important industry sectors. This is especially true for New Mexico and the southwest United States where the dairy business is growing rapidly. This research will also provide an additional pollution prevention tool for the industrial sectors dealing with potash and paper waste. The principal investigator believes this research to be of local, regional and national importance.

The original goal of the research was and continues to determine the feasibility of simultaneously composting dairy waste from agriculture and industry. The research will determine effects of utilizing composted waste, as opposed to raw waste, as a soil amendment on plant growth, irrigation requirements, and nutrient and heavy metal uptake. Phase I, to determine the feasibility of simultaneous composting dairy waste with available high carbon wastes from agriculture and industry, has been completed. Phase II, to determine the appropriate ratios of waste to carbon substrate for successful composting, is almost completed.

The work supported by this grant began in fiscal year 1996 and the appropriation for fiscal year 1996 was $150,000, and for fiscal years 1997 and 1998 $100,000 per year. A total of $350,000 has been appropriated. The non-federal funds for the duration of this grant from the state appropriation is $75,000. There is another $50,000 in-kind support from the industrial partners. Additionally, a sum of $15,000 from the New Mexico State Highway Department has been leveraged by this project.

This work is being carried out in New Mexico under the direction of the Waste-Management Education and Research Consortium in collaboration with The Composting Council and industrial partners, such as Envio (Ohio), Plains Electric, and McKinley Paper (New Mexico). Completion date will be March 1999. Objectives are being met as the project continues. The project has been progressing according to the specified targets. Phase 1 of the projects has been completed and phases 2 and 3 are being completed according to the identified targets. This project has been evaluated based on the semi-annual progress report and research findings presented at the annual Composting Council Conference. The cognizant staff scientist has reviewed the project and determined that this research is conducted in accordance with the mission of this agency.

PASTURE & FORAGE RESEARCH, UTAH

This research is designed to develop and evaluate management systems for grazing-based livestock production systems appropriate to the needs and conditions faced by Utah producers. Utah State University will conduct field research to determine optimal forage, appropriate nutrition and management for cattle and sheep in a forage-based production that will optimize returns with minimum environmental impact. Results from simulated intensive grazing management studies indicate six harvest cycles between May 15 and October 1. Orchard grass, meadow bromegrass and tall fescue were most promising forage plants. Future work will address weed control, stocking rate, animal performance and economic returns. This information will be incorporated into production in Utah.

The work supported by this grant in fiscal year 1997 was $200,000 and appropriation for 1998 is $225,000. A total of $425,000 has been appropriated. Non Federal funds in support of this work for fiscal year 1997 was $360,200.

The research is being conducted at the Utah Agricultural Experiment Station. The principle investigators anticipate the completion date for these objectives to be in 2002, at which time the pasture management guides using these results are anticipated. The initial proposal for fiscal year 1997 received a complete peer review through the institution's project approval process and was reviewed by CSREES scientists. The fiscal year 1998 proposal and those for each year thereafter, will be subjected to the same level of review.

PEACH TREE SHORT LIFE IN SOUTH CAROLINA, SOUTH CAROLINA

Progress continued in 1997 with focus on the evaluation and longevity and productivity of Guardian rootstocks on peach tree short life sites in the southeast and replant sites throughout North America. More fundamental work has involved the biochemical characterization of the egg-kill factor produced by a bacteria on nematode eggs. Other basic studies involved the cloning of genes associated with production and expression of toxins from bacteria. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES.

According to the principal researcher the problem of disease on peach, nectarine, and plum trees in the southeastern United States effects is very great. More than 70 percent of peach acreage in the southeast is effected. Research continued in 1997 on the improvement of rootstocks and the use of the cultivar Guardian BY520–9 has potential to benefit the entire peach rootstock industry including California, New Jersey and Michigan where bacterial canker is a problem. The goal of this research was the continued evaluation of productivity of peach Guardian BY520–9 rootstocks on peach tree short life and investigations into novel management for ring nematodes by bacteria. Recent accomplishments include the increase in bulk commercial production of Guardian seed while two new Guardian selections have had very good nursery trails. Guardian rootstock continues to be tested in 22 states and is performing well. A marker for a gene for rootstock resistance to two root-knot nematode species was sequenced and successfully use to correctly sort current commercial rootstocks according to their known nematode resistance or susceptibility. A major find is that the egg-kill factor produced by the bacteria kill root-knot nematode eggs as well as ring nematode eggs.

Grants have been awarded from funds appropriated as follows: fiscal year 1981, $100,000; fiscal years 1982–1985, $192,000 per year; fiscal years 1986–1988, $183,000 per year; fiscal year 1989, $192,000; fiscal year 1990, $190,000; fiscal years 1991–1993, $192,000 per year; fiscal year 1994, $180,000; fiscal years 1995–1998, $162,000 per year. A total of $3,203,000 has been appropriated. The non-federal funds and sources for this grant were as follows: $149,281 state appropriations in 1991; $153,276 state appropriations in 1992; $149,918 state appropriations in 1993; $211,090 state appropriations in 1994; $193,976 in state appropriations in 1995;

$169,806 in state appropriations in 1996 and 1997; and $150,693 state appropriations in 1998.

This research is being conducted at South Carolina Agricultural Experiment Station. The researchers anticipate that the work may be completed in fiscal year 1999. Adequate progress has been made to assure that the objectives will be met before the completion date. The last agency evaluation of this project was a merit review completed January 5, 1997. In summary, the evaluation of peach rootstocks with resistance to peach tree short life is of continued importance in managing this disease. The use of biological control strategies in suppression of plant parasitic nematodes are a complementary area of research in that it can enhance disease management by protecting the peach rootstocks. Progress was made in all the objectives in 1997. Some accomplishments were the increased production and release of commercial Guardian seed and continued evaluation of rootstock in 22 states and provinces. A molecular techniques that separates resistant and susceptible peach rootstocks was validated.

PEST CONTROL ALTERNATIVES, SOUTH CAROLINA

This grant supports research and technology transfer to provide growers with alternatives for managing pests and to implement the use of new alternatives reducing the sole reliance on chemical pesticides. The investigators contributing to the research and technology transfer at South Carolina believe that need for the development of alternatives for managing pests on vegetables is a regional and national problem. Contributions from the South Carolina work are projected by South Carolina to impact vegetable production in the Southern region and consumers of vegetable production from the Southern region.

The goal of this program is to investigate alternative methods of managing insects, plant diseases, and nematodes in vegetable crops as complements to or as substitutes for conventional chemical sprays. Principal accomplishments appear to rest in a four year comparison of study plots of organically grown and conventionally grown vegetables. Residual nutrient levels in subplots treated with organic sources of fertilizer were greater than in subplots which received inorganic source of fertilizer. After four years of summer cropping followed by winter cover crop treatments, no herbicides nor pesticides have been applied to the study area. Weekly scouting has determined that harmful insect thresholds have not been reached. Naturally occurring beneficial insects were sufficient for pest control. The role of indigenous predators, parasites, and pathogens in controlling insect pests are being evaluated. Technology transfer to conventional and IPM systems has resulted in modified thresholds for caterpillar pests in collards and tomatoes which incorporate the impact of beneficials in the system and a sampling plan for tomato fruitworm which considers numbers of parasitized eggs used to schedule insecticide sprays.

This work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was $125,000 per year. In fiscal year 1994 the appropriation was $118,000 and in fiscal years 1995 through 1998, $106,000. A total of $792,000 has been appropriated. South Carolina has provided $124, 860 per year from State appropriations. This research and technology transfer program is being conducted at the South Carolina Agricultural Experiment Station, Clemson University at Clemson, Florence, and Charleston, South Carolina.

The original objectives of the project were for five years. Funding last year completed the five-year duration and researchers indicated that the work would be completed by the end of the last fiscal year as we reported to you last year. Objective A: Develop and evaluate microbial pest control agents for control of plant pathogens and insect pests of vegetables, is defuse and non-conclusive. It would be far superior for continued work in this area to be submitted to competitive peer review programs where the investigators would need to clearly focus specific activities and receive the benefit of the comments of peer scientists. Objective B: Determine the efficacy of innovative cultural practices for vegetable production systems in South Carolina. Objective C: Assess the role of indigenous predators, parasites, and pathogens in controlling insect pests; determine environmental and biological factors that influence the abundance and distribution of these indigenous beneficials; and consider the presence of natural enemies, as well as pests, in management decisions, is the area where the most progress appears evident and has been cited in the accomplishments in my response to your earlier question. We feel that the base of information and orientation of the research in this area is adequate and of quality that the investigators could compete well in competitive grant programs such as sustainable agriculture or regional IPM grant programs, and would benefit from the peer review process. Progress in this area is an ongoing process as explanations are sought for the results being obtained. Objectives D: Evaluate and develop germplasm, breeding

lines and cultivars for resistance to major pathogens of commercially important vegetables. Objective E: Transfer new technology to user groups, has not demonstrated any progress that would not be anticipated from ongoing conventional sources of funds. We evaluate this project annually when we process the grant. An on-site comprehensive merit review of this project is scheduled by CSREES for June of 1998.

PEST MANAGEMENT ALTERNATIVES

This special research grant supports projects that help farmers respond to the environmental and regulatory issues confronting agriculture. These special grant funds support research that provides farmers with replacement technologies for pesticides that are under consideration for regulatory action by EPA and for which producers do not have effective alternatives. The passage of the Food Quality Protection Act of 1996—FQPA—makes this special research grant of critical importance to the Nation's farmers.

New pest management tools are being developed to address critical pest problems identified by farmers and others in a crop production region, and to identify new approaches to managing pests without some of the most widely used pesticides. Farmers have identified the lack of effective alternative pest management tactics as a primary reason for not implementing IPM on their farms. Where effective alternative tactics have been developed, they are widely and rapidly implemented by farmers. These special research grant funds are awarded on a competitive basis to all eligible research institutions through the Pest Management Alternatives Program or PMAP. Research priorities for PMAP are established with the help of a database analysis system, which draws upon the expertise of the land-grant university system, commodity groups, and others.

The ability of the Nation's agricultural production system to keep pace with domestic and global demand for food and fiber is dependant on access to safe, profitable and reliable pest management systems. For a variety of factors, farmers and other pest managers have fewer chemical control options available to them than they did at the beginning of the decade, and this trend is likely to continue at an accelerated rate. The Food Quality Protection Act of 1996 (FQPA) will have significant impacts on pest management systems in the United States over the next decade, and the "minor use"—high value crops grown on relatively few acres—will be particularly hard hit. For these reasons and others, it is essential that farmers be provided with new pest management tools and better information so they can remain competitive in today's global marketplace.

This research is conducted to help farmers respond to the environmental and regulatory issues confronting agriculture by providing them with new options for managing pests. The research supported by this special grant is identifying new ways to manage pests without key pesticides that may no longer be available as FQPA is implemented. Some highlights of the research funded through PMAP include progress on surface amendment to reduce air pollution by Telone, a fumigant; latent infection assessment and fungicide mixtures for brown rot control; development of a pesticide use/pesticide recommendation database; implementation of alternatives to carbofuran for control of rice water weevil; substitution of behavavioral control for organophospate sprays against apple maggot; pheromone mating disruption in orchards; biodegradable fiber barriers for root maggot control; pesticide risk mitigation by improved application technology; and integration of natural enemy thresholds for greenbug management in wheat. Progress on additional research has been made to collect data on alternatives for pest management in watermelon insects and diseases of cucurbit crops in the South Central States; on developing IPM and monitoring networks in Northeastern vegetable crops; assessment of insecticide and IPM usage in alfalfa and small grains; and alternative management practices for minor tree fruit crops.

Grants have been awarded from funds appropriated as follows: fiscal years 1996 through 1998, $1,623,000 per year. A total of $4,869,000 has been appropriated. Non-federal funds are not required by this grants program. All states are eligible to compete for this funding. This research is currently being carried out by State Agricultural Experiment Stations and other research institutions located in 23 states.

The economic and environmental pressures facing U.S. agriculture today are at least as great today as they were in 1996 when federal funds were first appropriated for this special research grant. There will be a need for continued investment in research to develop new approaches to managing pests for the foreseeable future as the Food Quality Protection Act of 1996 is implemented.

Proposals are evaluated by multi disciplinary panels. The projects supported by this special research grant have consistently provided key knowledge needed in developing new approaches to pest management.

PESTICIDE CLEARANCE (PEST MANAGEMENT FOR MINOR CROPS—IR–4)

The Pest Management for Minor Crops (IR–4) Program, formerly the Pesticide Clearance Program, is a joint effort between the State Agricultural Experiment Stations, CSREES, and the Agricultural Research Service. IR–4 provides the national leadership, coordination and focal point for obtaining tolerance and safety data for pesticides and biological control agents for specialty crops such as horticultural crops. In many cases, the agricultural chemical industries cannot economically justify the time and expense required to conduct the necessary research for pesticides with small market potential. With assistance from IR–4 registration-related costs are manageable, and producers of a large number of small acreage crops such as vegetables, fruits, nuts, spices and other specialized crops have access to necessary pest control products. Protocols are written after careful review and inputs from representatives of grower groups, industry and researchers. The researchers then carry out field trials on priority needs to determine their effectiveness, safety and usefulness and then analyze the field grown commodities, where appropriate, to identify and quantify any residues that may persist. All of this is done according to the Environmental Protection Agency's (EPA) Good Laboratory Practices guidelines. The research program then assimilates the data from all the participating experiment stations, grower groups and chemical industry, and petitions are written for tolerances and Federal registration or reregistration. The 1996 grants terminate between March 1996 and March 1998.

The basic mission of IR–4 is to aid producers of minor food crops and ornamentals in obtaining needed crop protection products. IR–4 is the principal public effort supporting the registration of pesticides and biological pest control agents for the $31 billion minor corp industry. This is a national research effort which identifies needs by a network of users and state university and Federal researchers. This research is highly significant to national and regional as well as local needs. The goal is to obtain minor use and specialty us pesticide registrations and assist in the maintenance of current registrations and to assist with the development and registration of biopesticides and safer pesticide produce useful in IPM systems for minor corps. During the past five year period, over 1600 new minor food use clearance requests were submitted to IR–4 from growers, state and federal scientists and extension specialists. After evaluation and prioritization, nearly 1300 studies were conducted involving 2610 field reports and 2230 laboratory reports. Accomplishments included the registration of a fungicide to control eastern filbert blight on filberts resulting in an economic benefit of $4 million per year. Without the availability of this product, it is estimated that one-third of the filbert orchards in the producing states of Idaho, Oregon and Washington would have gone out of business. IR–4 recently provided data for a national registration for a new herbicide on cucumbers for broadleaf weed control. It is estimated by Washington scientists that growers will realize a savings of $1,000,000 in herbicide and labor costs on 2500 acres of the crop grown in that state alone. With more than 130,000 acres of cucumbers produced nationally, the potential savings are enormous.

IR–4 provided residue data to support the FIFRA 88-mandated reregistration of more than 600 minor uses identified by growers as critical needs. One of these was streptomycin for the treatment of edible dry beans grown for seed on 15,000 acres in California and valued at $4 million annually. California seed is sold to growers in Colorado, Nebraska, Minnesota, the Dakotas, Wisconsin, Michigan and New York where a disease known as halo blight can devastate untreated bean plantings. For this reason, growers will not purchase seed that is not treated with streptomycin.

Registrations for the control of insect disease and weed pests of commercially grown ornamental crops continues to be an important objective of the IR–4 Project. Since 1977, IR–4 has assisted with the registration of over 5000 pesticides and biological pest control agents on woody nursery stock, flowers and turf grass. During the past two years, IR–4 has developed data to allow the use of a herbicide for the control of yellow nutsedge and other grassy weeds in woody and perennial ornamental crops. In California alone, over 100,000 acres are treated with this herbicide, thereby saving growers $1.6 million compared to hand weeding. IR–4 also continues to work closely with nurserymen and growers to develop pesticides such as azadirachtin, a naturally occurring insecticide, for integrated pest management systems.

Biopesticides have been an important IR–4 thrust since 1982. IR–4 conducts a competitive grants program to develop research data to support the registration of

microbial and biochemical pest control products on minor crops. Equally important, IR–4 interacts with public sector and venture capital registrants to assist with Experiment Use Permits and provide guidance on EPA registration procedures. The Pesticide Clearance program continues to have a high productivity which, according to EPA, supports 40 percent of all EPA pesticide registrations.

Grants have been awarded from appropriated funds as follows: Program redirection in fiscal year 1975, $250,000; fiscal year 1979, $500,000; fiscal years 1977–1980, $1,000,000 per year; fiscal year 1981, $1,250,000; fiscal years 1982–1985, $1,400,000 per year; fiscal years 1986–1989, $1,369,000 per year; fiscal year 1990, $1,975,000; fiscal year 1991, $3,000,000; fiscal years 1992–1993, $3,500,000 per year; fiscal year 1994, $6,345,000; fiscal year 1995 through 1997, $5,711,000 per year and fiscal year 1998, $8,990,000. A total of $61,519,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: $891,856 state appropriations and $65,402 industry in 1991; $1,002,834 state appropriations and $104,292 industry in 1992; $1,086,876 state appropriations and $310,133 industry in 1993; $550,160 state appropriations, $408,600 industry, and $924,169 miscellaneous in 1994; $775,432 state appropriations, $266,714 industry, and $751,375 miscellaneous in 1995; and an estimated $800,000 state appropriations, $250,000 industry, and $800,000 miscellaneous in each year of 1996 and 1997.

Field work is performed at the State and Territorial Experiment Stations. Laboratory analysis is conducted primarily at the California, New York, Florida and Michigan Agricultural Experiment Stations with assistance by the Oregon, Hawaii, North Dakota, Arkansas, North Carolina, Washington, Virginia, Mississippi, Idaho, Pennsylvania and New Jersey Agricultural Experiment Stations. Protocol development, data assimilation, writing petitions, and registration processing are coordinated through the New Jersey Agricultural Experiment Station. ARS is conducting minor use pesticide studies at locations in California, Georgia, Illinois, Maryland, Ohio, Oregon, South Carolina, Texas, and Washington. ARS laboratories in Georgia, Maryland, and Washington are cooperating with analyzes.

Selected categories of the Special Research Grants program address important national and regional research initiatives. The pesticide clearance program, also referred to as pest management for minor crops and also IR–4, involves research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. The IR–4 workload is anticipated to be long term because of the sensitivities about food safety and the environment, and the eventual loss of a large number of conventional pesticide registrations for minor crops because of the 1996 Food Quality Protection Act. IR–4 developed a strategy in 1989 to defend needed minor use pesticides that were subject to reregistration but would not be supported by industry for economic reasons. In 1997, IR–4's updated its strategic plan to focus on the registration of biopesticides and safer pest control technology for minor crops in addressing the Food Quality Protection Act. That Act calls for more extensive residue data requirements which would take into account an additional safety factor for infants and children. The IR–4 program thrust will be carried out along with the traditional minor crop pesticide clearance program.

Each year the program is peer reviewed and reviewed by CSREES' senior scientific staff. A summary of those reviews indicate excellent progress in the achieving the objective of providing safe pest controls for minor users.. In December, 1997, CSREES sponsored a nine-member peer panel review of the IR–4 program, conducting an on-site review at Rutgers University. A final report is expected in early 1998. In addition to the yearly evaluations, the program received an on-site external review sponsored by CSREES in December 1990, and a GAO review. These previous reviews have resulted in significant improvement in the IR–4 programs productivity and quality of research. Additionally, the customers served by IR–4 have provided input to the program to enhance its effectiveness.

PESTICIDE IMPACT ASSESSMENT PROGRAM

Research funded by the National Agricultural Pesticide Impact Assessment Program (NAPIAP) discovers, gathers, publishes, and distributes information relating to the use and effectiveness of pest management alternatives essential to the maintenance of U.S. agricultural crops and livestock production. These data involve evaluating the biologic and economic impact and consequences of restricting the use or availability of key pesticides through voluntary cancellations or regulatory action. NAPIAP data augments National Agricultural Statistic Service (NASS) data by conducting commodity based assessments and crop profiles on minor-use or small acreage crops. All projects are peer reviewed through a regional competitive process.

This program provides the Environmental Protection Agency (EPA) and the USDA with information on the use, importance and effectiveness of pest manage-

ment alternatives essential to U.S. agricultural crops and livestock production. NAPIAP, in responding to the information needs of EPA for implementation of the Food Quality Protection Act, has focused its studies on minor crop production systems. To insure relevance and focus, minor crop producers provide input to NAPIAP, thus permitting coordination of studies and information gathering with NASS, the Environmental Protection Agency, and the United States Department of Agriculture's Office of Pest Management. Nationally, EPA uses these data in making environmentally sound regulatory decisions within the regulatory framework of the Food Quality Protection Act and the economic balance of U.S. agriculture. USDA uses these data to identify commodity sites where there are critical pest threats to production because no or few pest management alternatives exist. This national research and information delivery effort involves interactions with scientists in all State Agricultural Experiment Stations and Cooperative Extension Services. Through this cooperative interaction, the USDA and EPA receive state generated agricultural information needed for sound regulatory decision-making and the state partner receives federal funds, participatory input into the regulatory process, and direct access to timely regulatory information.

The National Agricultural Pesticide Impact Assessment Program (NAPIAP) has been an on-going research effort whose original goal in 1977 was to gather data to provide comprehensive assessments documenting what would be the impact on agriculture if certain pesticides would no longer be available. A federally coordinated network of state scientist contacts was developed in the intervening years as broader and more environmentally enlightened goals evolved within this program. Today the NAPIAP's goals are defined in its strategic plan as: first, in collaboration with USDA, EPA, and Land-Grant partners, to focus activities on collecting and delivering high quality, science based pest management information for use in the regulatory process: and second, maintain and enhance a strong partnership between the USDA and the Land Grant System in order to continue the positive interactive flow of vital pest management information between the USDA, the regulatory community, and production agriculture.

Grants have been awarded from funds appropriated as follows: Fiscal years 1977–1981, $1,810,000 per year; fiscal years 1982–1985, $2,069,000 per year; fiscal years 1986–1988, $1,968,000 per year; fiscal year 1989, $2,218,000; fiscal year 1990, $2,437,000; fiscal years 1991–1993, $2,968,000 per year; fiscal year 1994, $1,474,000; and fiscal years 1995–1998, $1,327,000 per year. A total of $43,571,000 has been appropriated. The majority of the cost of the state scientist and the NAPIAP program is born by the state partner. The exact contribution of each state is not known, nor has this information been requested to be reported to the federal partner during the duration of this program. The federal program funds provided to the states by the Cooperative State Research, Education, and Extension Service have been used by state partners to partially defray their costs of staffing a Pesticide Impact Assessment Program State Liaison Representative on their Land Grant campus. The remaining program expenses, beyond the federal program funds, of program participant salaries, facility costs, clerical support expenditures, supplies and program costs of the program's State Liaison Representative have been born by each state and these costs are considered the state funding provided to support this program. State estimates of their matching support for this program have ranged from 3 to 6 times the federal dollars that have been provided to support their cooperative efforts.

This work is underway at State Agricultural Experiment Stations in 50 states and 5 Territories. The distribution of competitively awarded regional research grants is coordinated through a lead state in each of the four regions of the United States: namely, California—West; Ohio—North Central; Pennsylvania—Northeast; and Florida-South. The National Agricultural Pesticide Impact Assessment Program has been an on-going research effort to gather relevant pest management information necessary for changing. A federally coordinated network of state scientist contacts was developed in the intervening years to address the information needs of the regulatory agency. NAPIAP is a multi-agency on-going program which attempts to address the increasing needs for pest management information by EPA. The combined data needs of the Food Quality Protection Act, IPM implementation documentation, and Government Performance and Results Act will is resulting in an even greater need for pest management information. Thus the original objectives have been met but data needs continue to change and grow.

A comprehensive evaluation and review of the National Agricultural Pesticide Impact Assessment Program was conducted in February 1995. The review panel's report was published in June 1995. The review team was composed of 10 scientists from EPA. Industry, commodity groups, the federal government, and the Land Grant System. A recurring theme which emerged from the 1995 review was a direc-

tive to focus the NAPIAP program on data collection on the benefits of pest management alternatives. In response to this recommendation, CSREES brought together the programmatic and budgetary components of the program into a single coordinated NAPIAP effort. Each of the 14 recommendations provided by the review panel were addressed and implemented. In 1997, the USDA Office of Pest Management policy assumed programmatic leadership for NAPIAP to direct the program's activities to the informational needs of FQPA.

PHYTOPHTHORA ROOT ROT, NEW MEXICO

Work has continued to focus in general on the development of strategies for sustainable vegetable production in irrigated lands. Work has continued on the search for Phytophthora root rot resistance in chilies, identification of molecular markers for rot tolerant genes, investigation on irrigation modification as a means to manage root rot, and soil bed temperature control as a means to manage disease. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES. The principal researcher believes that since Phytophthora disease threatens chili production in west Texas, New Mexico, and Eastern Arizona, this problem is of state-and regional significance. The original goal was to improve chile production through genetically superior cultivars, combined with new improved cultural practices. Researchers have developed a highly effective disease screen that selects resistant seedlings, found that genes for resistance to root rot do not provide protection against Phytophthora foliar blight, that a wild species of Capsicum is immune to the fungus, and that molecular markers are useful to introgress genes for tolerance. They also found that alternate row irrigation and drip irrigation significantly reduce Phytophthora root rot. Control of soil temperature with soil mulches can greatly impede the progression of root rot in the irrigated field.

The work supported by this grant began in fiscal year 1991 with an appropriation of $125,000 for that year. The fiscal years 1992–1993 appropriation was $150,000 per year; $141,000 in fiscal year 1994; and $127,000 in fiscal years 1995–1998, each year. A total of $1,074,000 has been appropriated. Non-federal funds from state appropriations and the California Pepper Commission were $255,614 in 1997; and $253,614 in 1998.

Research is being conducted at New Mexico State University. The anticipated completion date for the original objectives was 1995. These objectives have not been met. Related programs deal with research and development efforts designed to prevent or manage diseases impacting vegetable production in irrigated areas, and cooperators estimate that the objectives of these programs should be met by 2002.

The last agency evaluation was made in December, 1996. In summary, the development of resistant cultivars and research on interactions of Capsicum and Phytophthora for developing strategies for irrigated crop growers to be competitive in the international economic arena continued. More than 26,564 seedlings were screened for resistance to root rot and/or foliar blight in the greenhouse. This technique allows the resistant plants to be saved and used in the breeding program. Field evaluations of advanced lines continued with 11 green chile lines and 18 paprika lines tested for release. Two jalapeno lines were released by this program.

PLANT, DROUGHT, AND DISEASE RESISTANCE GENE CATALOGING, NM

The objective of this work will be to identify important genes in crop plants that result in the ability to resist stress caused by drought and disease organisms. CSREES has requested the university to submit a grant proposal that has not yet been received. The focus of this research will be to improve plant resistant to drought and disease for New Mexico crops. However this information can have application through out the nation especially in the arid/semi arids.

The goal of this research is to produce better adapted crops for New Mexico. The work will be started in 1998 and therefore no results have been obtained at this time. The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $150,000. The project has not yet started and the availability of nonfederal funds has not been determined.

The research will be conducted at New Mexico State University and is anticipated to require four years to meet the major objectives. The project is anticipated to be reviewed annually by the project approval process of the institution.

POSTHARVEST RICE STRAW, CALIFORNIA

The postharvest rice straw special grant was initiated in May 1997 and has two main objectives: (1) characterize current capabilities, costs and constraints in harvesting and handling rice straw as a renewable material for commercial products

and (2) investigate alternative harvest and handling systems and evaluate their specialized equipment and system designs. Although this special research grant is awarded noncompetitively, the proposal is reviewed for merit by the university before submission to CSREES and reviewed by CSREES for technical merit and allowable costs and procedures. California legislation mandates reduction in the amount of open rice straw burning, the principal method of rice straw disposal. Efficient harvest and handling may make rice straw a suitable raw material for user businesses while meeting straw burning regulations and improving air quality. The goal is to demonstrate efficient and economic rice straw harvest and handling, thereby establishing rice straw as a feedstock for value-added manufacturing and other uses. This project is only recently initiated and is fully organized, including outreach to the rice industry.

The work supported by this grant began in fiscal year 1997. The appropriation for fiscal year 1997 was $100,000 and fiscal year 1998 is $300,000. A total of $400,000 has been appropriated. The University of California-Davis cites cooperation by the California Rice Industry Association and the California Rice Research Board. Cost-sharing support from non-federal funds is not included. Cost-sharing may become available from industry later in the project as prototype harvest and handling equipment and systems for rice straw are developed and tested.

Research will be conducted at the Department of Biological and Agricultural Engineering, University of California-Davis, California. It is anticipated by the University of California-Davis that the postharvest rice straw project will be completed in 2002, after a five year-period to meet objectives. Since 1997 was the first year for the postharvest rice straw project, no evaluation has been conducted.

POTATO RESEARCH

Scientists at several of the State Agricultural Experiment Stations in the Northeast, Northwest, and North Central States, are breeding new potato varieties, high yielding, disease and insect resistant potato cultivars, adapted to the growing conditions in their particular areas, both for the fresh market and processing. Research is being conducted in such areas as protoplast regeneration, somoclonal variation, storage, propagation, germplasm preservation, and cultural Practices. CSREES published a request for proposals in the Federal Register and awarded eight grants competitively based on a scientific peer review.

The principal researcher believes this research effort addresses needs of the potato producers and processors. Research areas being studied include storage and postharvest handling of potatoes and their effect on potato quality. Potato producer and processor needs are breeding and genetics, culture factors, and pest control on potato production. The original goal was to improve potato production through genetics and cultural practices as well as improve storage for quality potatoes for processing and fresh market. This research has resulted in a number of new high yielding, good quality, disease and insect resistant, russet type cultivars, which are now being used in the processing industry and in the fresh market. Research by the Pacific Northwest States of Washington, Oregon, and Idaho has resulted in the release of a number of cultivars, including Gemchip, Calwhite, Century Russet, Ranger Russet, Frontier Russet, and Chipeta. In addition, North Dakota developed Norkatah as a result of this program.

Grants have been awarded from funds appropriated as follows: fiscal year 1983, $200,000; fiscal year 1984, $400,000; fiscal year 1985, $600,000; fiscal years 1986–1987, $761,000 per year; fiscal year 1988, $997,000; fiscal year 1989, $1,177,000; fiscal year 1990, $1,310,000; fiscal year 1991, $1,371,000; fiscal years 1992 and 1993, $1,435,000 per year; fiscal year 1994, $1,349,000; and fiscal years 1995 through 1998, $1,214,000. A total of $16,652,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $401,424 state appropriations, $4,897 product sales, $249,830 industry, and $30,092 miscellaneous in 1991; $567,626 state appropriations, $6,182 product sales, $334,478 industry, and $44,323 miscellaneous in 1992; $556,291 state appropriations, $9,341 product sales, $409,541 industry, and $44,859 miscellaneous in 1993; $696,079 state appropriations, $21,467 product sales, $321,214 industry, and $226,363 miscellaneous in 1994; $935,702 state appropriations, $35,376 product sales, $494,891 industry, and $230,080 miscellaneous in 1995; and an estimated $900,000 state appropriations, $10,000 product sales, $400,000 industry, and $200,000 miscellaneous in each of 1996 and 1997.

The research work is being carried out at the Cornell, Idaho, Maine, Maryland, Michigan, North Dakota, Oregon, Pennsylvania, and Washington State Agricultural Experiment Stations.

The project was initiated to accomplish significant results in about five years. Because the research is based on genetic varietal development, progress is developing new potato varieties takes from 5 to 10 years. Beginning in fiscal year 1997, these funds have been awarded on a competitive basis using a scientific peer review. In addition, the agency has at least one formal meeting with representatives from the potato industry to review research needs.

POULTRY CARCASS REMOVAL, ALABAMA

This is a new grant which is being funded for the first time in fiscal year 1998. This project is intended to examine the problem of disposal of dead chickens using alternative procedures. The procedure to be investigated is to pelletize and dehydrate the chicken carcasses so that they can then be used as a safe and high quality animal feed product. The disposal of dead chickens is an increasing problem due to refusal by most land fill operations which take solid waste to continue to accept animal carcasses. This is a need that is being recognized at all levels, national, regional and local. The goal of this research is to develop an economically-feasible procedure for disposal of chicken carcasses using a process that pelletizes and dehydrates the carcasses and produces a safe and high quality animal feed. Because it is a new project there is no progress to report at this time.

Fiscal year 1998 is the first year of funding for this project and $300,000 has been appropriated. Information is not available on non-Federal funding support. The research work will be carried out at the University of West Alabama and Alabama Protein Recycling. The anticipated completion date is March 15, 1999. Because the work is just now being initiated, there has been no evaluation.

PREHARVEST FOOD SAFETY, KANSAS

The project is to examine the incidence of shedding of E. coli 0157:H7 in feces of beef cattle and the impact of various management procedures such as calving, weaning, routine cattle handling for vaccination, etc. on the frequency and amount of shedding of these bacteria. The study is designed to provide information about small and large cow-calf operations in Kansas. This project was reviewed for merit by three scientists in CSREES prior to the initial award and for the renewal in fiscal year 1997. The presence of E. coli in cattle destined for slaughter and entry of meat products into the human food chain has given impetus to the need for understanding the ecology of the organism and the impact of management strategies, including herd size, on the prevalence of the organism and likelihood of contamination of meat supplies. Other organizations such as the National Cattlemen's Beef Association and the Livestock Conservation Institute have given strong support for increased numbers of projects on topics related to preharvest food safety such as this one. The principal researcher believes this research to be of national and regional need.

The original goal of this research was to determine the relative incidence of shedding of E. coli 0157:H7 from beef cattle in small and large cow-calf operations and the impact of various management events in the production cycle on this bacterial shedding. The principal researcher expects this information will assist in reducing the prevalence of this organism in beef cattle and, thus, reduce the incidence of food-borne illness in humans due to this bacterium. To date, the research team has established new highly effective and rapid detection systems utilizing nested PCR and enriched culture systems for identifying the E. coli organism in feces of cattle. They have demonstrated significant increases in recovery of E. coli from feces using these methods when compared to prior culture systems that were in use. The cooperating herds have been identified and sampling is in progress. Collaborative arrangements have also been established with scientists at the University of Nebraska-Lincoln for doing more intensive work with animals that are identified as "shedders". Data collected to this time supports the concept that stressful incidents such as calving caused a marked increase in shedding of E. coli in feces of cows. At this time they have met all of their goals on time and expect to continue to do so.

The work supported by this grant began in fiscal year 1996. The appropriation for fiscal years 1996, 1997, and 1998 was $212,000 per year. A total of $636,000 has been appropriated. Non-Federal funds have been contributed to this project as follows: In fiscal year 1996 non-federal funds provided to this project were $150,000 in state appropriations and $91,450 in contributed indirect costs; 1997 non-federal funds provided to this project were $90,300 in contributed indirect costs and $165,000 in state appropriated funds.

This research is being conducted at Kansas State University, University of Nebraska-Lincoln and at ranches in Kansas, Nebraska and Colorado. The anticipated

completion date was October 1, 1998 for the original objectives. At this time, the research team has completed all objectives that were planned for Year 01 and Year 02 of the grant and are working on the objectives for Year 03. Because of a slight delay in the start of the funding, it is anticipated that the other original objectives will be completed by March 1999 and the project should be finished by September, 1999.

The project was evaluated on October 28–29, 1997 during a site visit by W. C. Wagner on the Kansas State University campus. The group has excellent collaborative activities in place and they are proceeding very well. It was impressive to see how they have utilized this approach to be successful in meeting their objectives. There are multiple units involved in the project and they are coordinating this work with the Food Safety Consortium which includes Kansas State University, Iowa State University and the University of Arkansas. They have met their objectives as listed in the original proposal for the first two years of the project. Their results to date suggest that the infection of cattle with E. coli is probably a rather transient event and may not establish the true carrier state as one normally thinks of it. While certain events such as calving increase the rate of shedding in the feces and was thought to be a response to stress at that time, other types of stress such as trucking for 150 miles do not result in an increase in shedding of E. coli by the animals.

PRESERVATION AND PROCESSING RESEARCH, OKLAHOMA

Research has focused on the effects of preharvest and postharvest factors on the market quality of fresh and minimally processed horticultural products, including factors affecting marigold petal pigment content, minimal processing procedures for extending the shelf life and reducing the oil content of pecans, and harvest quality evaluations for watermelons, pecans and peaches. Researchers are developing harvester prototypes for multiple harvest of marigold flowers and drying and threshing systems for marigold petal drying and separation. Work is being finalized to develop a fruit orienting mechanism for incorporation into an on-line grading system and to develop integrated harvesting/postharvest handling systems for fresh market and processing market horticultural products. Research is also ongoing to develop methods to determine textural properties of pecans, determine optimum operating parameters for supercritical carbon dioxide and other alternative partial oil extraction, and develop and optimize modified atmosphere packaging techniques for pecan shelf life extension. Fiscal year 1997 funds are supporting research through June 30, 1999. CSREES has requested, but not yet received, a proposal in support of the fiscal year 1998 appropriation.

The principal researcher believes that technological improvements in fruit, nut and vegetable handling systems are critically needed to supply domestic markets and to support continued participation in international commerce and thus serves the national need. New environmentally friendly processing systems have been developed and are being commercialized in Oklahoma which have broad application to numerous crops with international marketing potential. Regionally, processing systems under development for commercial adaptation provide crucial solutions required for market expansion of pecans, affecting product market potential and value throughout the southern U.S. Locally, improvements in postharvest handling and processing are necessary to support growth of the industry and ensure competitive involvement in national and international commerce of horticultural commodities uniquely suited for production in Oklahoma. New extraction facilities will also have a positive impact on local economies, incorporating a new value added processing industry and providing local employment opportunities.

The goal of the research has been to define the major limitations for maintaining quality of harvested fruits, vegetables and tree nuts and prescribe appropriate harvesting, handling and processing protocols to extend shelf life and marketability of harvested horticultural commodities, thus maintaining profitability of production systems and assuring an economic market niche for Oklahoma producers and food processors. A systems approach to develop complementary cropping, harvesting, handling and processing operations has resulted in development of improved handling systems for cucurbit and tree fruit crops. Matching funding has supported development of nondestructive processing systems for partial oil reduction of tree nuts, to extend shelf life and lower the calorie content for the raw or processed product, resulting in development of a business plan for a commercial facility. Funding has been secured for construction of a commercial extraction facility in Oklahoma, pending successful pilot testing which is underway. Technologies and procedures previously developed for cucurbit and tree fruit systems are now being applied to support development of profitable okra, pepper, sage, basil, tree nut, sweetcorn, and

marigold cropping, handling and light processing systems, with a targeted completion date of 2000. Research from this project provided the basis for commercial high relative humidity storage of peaches and to attract companies to the state to construct new value added food processing facilities.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, $100,000; fiscal year 1986, $142,000; fiscal year 1987, $242,000; fiscal years 1988 and 1989, $267,000 per year; fiscal year 1990, $264,000; fiscal year 1991, $265,000; fiscal year 1992, $282,000; fiscal year 1993, $267,000; fiscal year 1994, $251,000; and fiscal years 1995–1998, $226,000 each year. A total of $3,251,000 has been appropriated. Support from the State of Oklahoma, through the Oklahoma Agricultural Experiment Station and through the Oklahoma Centers for Advancement of Science and Technology, have been provided as follows: fiscal year 1991, $126,900; fiscal year 1992, $209,783; fiscal year 1993, $219,243; fiscal year 1994, $308,421; fiscal year 1995, $229,489; fiscal year 1996, $366,570; and fiscal year 1997, $397,881; for a total of $1,858,287 in state funds. An additional $16,100,000 was committed by the State of Oklahoma for development of an Agricultural Products and Food Processing Center to support, among other programs, the horticulture processing initiatives. The Oklahoma State University Division of Agriculture Sciences and Natural Resources appropriated approximately $2 million dollars in recurring funds to staff the facility.

This work is being conducted at the Oklahoma State Agricultural Experiment Station, in conjunction with ongoing production research at the Wes Watkins Agricultural Research and Extension Center and the South Central Agricultural Research Laboratories.

The principal investigator anticipated that the fiscal year 1997 grant would support work through June 1999. It is expected that ongoing research will be completed in 2002. Additional related objectives beyond this date would address further opportunities for horticulture industry growth and economic development. An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. A review of the proposal supporting the fiscal year 1997 appropriation was conducted on December 20, 1996. Though research progress was satisfactory, development and commercial adoption of new practices and equipment has been less certain. The project was evaluated as part of a comprehensive CSREES program site review in the fall of 1995, with a recommendation by the review team to continue the value-added product development.

REGIONAL BARLEY GENE MAPPING PROJECT

The objectives of this project are to: construct a publicly available medium resolution barley genome map; use the map to identify and locate loci, especially quantitative trait loci controlling economically important traits such as yield, maturity, adaptation, resistance to biotic and abiotic stresses, malting quality, and feed value; provide the framework for efficient molecular marker-assisted selection strategies in barley varietal development; identify chromosome regions for further, higher resolution mapping with the objective of characterizing and utilizing genes of interest; and establish a cooperative mapping project ranging from molecular genetics to breeding that will be an organizational model for cereals and other crop plants. The fiscal year 1998 grant proposal has been requested but not yet received. All funds are awarded on a competitive basis.

The principal researcher believes barley breeders nationwide need information about the location of agriculturally important genes controlling resistance to biotic and abiotic stresses, yield, and quality factors in order to rapidly develop new, improved cultivars and respond to disease and pest threats. This project provides that information along with appropriate molecular markers to track these traits through the breeding and selection process. The original goal of this project has been to develop a restriction fragment length polymorphism map for barley and associated important genetic traits as a map to provide closely linked molecular markers for barley breeders. The project successfully mapped 300 molecular markers. Portions of the map are described as very dense and contain key location points for enhanced utility. The project is now using the map to locate quantitative traits loci of economic importance. These include genetic determinations for yield, maturity, rust resistance, plant height, seed dormancy, and components of malting quality. Technical papers have been published to report research results to the scientific community.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, $153,000; fiscal year 1991, $262,000; fiscal years 1992–1993, $412,000 per year; fiscal year 1994, $387,000; and fiscal years 1995–1998, $348,000 each year. A total of $3,018,000 has been appropriated. The nonfederal funds and sources provided for this grant were as follows: $203,760 from industry in 1991; $212,750 from industry

in 1992; $115,000 from industry in 1993; and $89,000 from industry in 1994; and $35,000 from the State of Washington and $108,000 in other nonfederal funding, for a total of $143,000 in 1995. Nonfederal funds were $163,000 for 1996 and $178,240 in 1997.

Research is being conducted in the following state agricultural experiment stations; Oregon, Colorado, Washington, Montana, Idaho, North Dakota, Minnesota, New York, Virginia and California. The original objective of the "Regional Barley Gene Mapping Project" was to produce a genetic map of agronomically important traits of the barley genome. The anticipated time to complete this task was estimated at 10 years with completion in 1999. Many important genes have been mapped, some of which are being used to improve barley cultivars. Agronomically-important barley genes identified through this work is being used in barley breeding across the nation to improve yield and quality of the crop. Additions to this map are expected to aid future breeding efforts. This project is made up of many competitively awarded sub projects that are reviewed annually by a peer panel and selected for relevance to the original objective and scientific merit of the proposed research. This project has been judged as an exceptionally productive project which serves as a model for multi institutional-multi disciplinary competitively awarded research project.

REGIONALIZED IMPLICATIONS OF FARM PROGRAMS

The purpose of this research is to estimate the impacts of farm, trade, and fiscal policies and programs and assess their alternatives on the economic viability of typical crop and livestock production operations located in different regions of the United States. There is a national need for research that provides an assessment and evaluation of the potential impacts of Federal farm, trade, and fiscal policies on the economic viability and competitiveness of farmers located in different regions of the United States. Policy impacts vary regionally because of differences in farm productivity, input costs, climate, farm enterprises and size. The research results are widely used by farmers and public policymakers concerned about minimizing policy and program inequities between regions and farm sizes.

The original, as well as current, goal was and continues to be to provide the farm community, extension, and public officials information about farm, trade, and fiscal policy implications by developing regionalized models that reflect farming characteristics for major production regions of the United States. The researchers have developed a farm level policy analysis system encompassing major U.S. farm production regions. This system interfaces with existing agricultural sector models used for farm, macroeconomic, and trade policy analysis. The universities have expanded the number and types of representative farms to 80. Typical farm models also are being developed for Mexico and Canada under a collaborative agreement for use in analyzing impacts of the North American Free Trade Agreement.

Approximately 25 policy studies were completed this past year at the request of policymakers and farm groups including analyses of the impacts of various farm policy proposals on representative crop farms in the U.S., land tenure arrangements for program crops in connection with the implementation of the 1996 FAIR Act, conservation reserve program impacts on farms west of the Mississippi river, and revised baseline projections for representative farms. The representative farms were used extensively for analysis of farm level impacts of the alternative farm program proposals considered for the 1996 farm bill as well as implementation alternatives after passage of the bill. Various income and estate tax options, including capital gains proposals, for the 1997 tax legislation were analyzed for their impacts on representative United States farms.

The work supported by this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was $346,000. The fiscal years 1991–1993 appropriations were $348,000 per year; $327,000 in fiscal year 1994; and $294,000 in each of the fiscal years 1995 through 1998. A total of $2,893,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $288,843 State appropriations and $46,773 industry for a total of $335,616 in 1991; $45,661 State appropriations in 1992; $33,979 State appropriations in 1993; $40,967 State appropriations in 1994; $161,876 State appropriations in 1995; $187,717 State appropriations for 1996; $137,100 in 1997; and $161,400 for 1998.

Research is being conducted by the Texas A&M University and University of Missouri at Columbia. This program is of a continuing nature for the purpose of assessing the impacts of existing policies and issues and proposed policy and program changes at the individual firm level for feed grain, wheat, cotton, rice, oilseed and livestock producers. No formal evaluation of this project has been carried out; how-

ever, the CSREES representative is in frequent communication with the principal investigator concerning policy analyses procedures and studies.

RICE MODELING

The purpose of this research project is to develop a rice industry model with domestic and international components to aid U.S. farmers, millers and policymakers in making production, investment, marketing and public policy decisions. Research is needed to assist both the U.S. rice industry and national policymakers in assessing the impact of existing and proposed changes in public policies for rice. This research enables improved analysis of both international and domestic policy changes on rice production, stocks, prices of substitute crops and consumption. It has been, and is being used to analyze the impacts of farm policy proposals on the U.S. rice industry, to analyze the impact of World Trade Organization (WTO) and the Uruguay Round agreements on U.S. trade, and to analyze the impact of emerging rice importing and exporting countries on U.S. rice exports. The principal researcher believes this research addresses national, regional, and local needs. The original goal of this research was to develop improved global, national and regional models to analyze the impact of foreign and domestic policy changes, and forecast changes in production, trade, stocks, prices of substitute crops, farm prices, and consumption.

The work actually began about four years ago and federal research grants from various sources have totaled roughly $2 million prior to this year. The work supported by this grant began in fiscal year 1996. The appropriation for fiscal years 1996 and 1997 was $395,000; for 1998, the appropriation is $296,000, for a total of $1,086,000. The non-federal funds over the 4 years prior to this year totaled approximately $500,000. For the 1996 fiscal year, state appropriations were $178,000; for 1997, $150,000; and for 1998, are estimated to be roughly $150,000 as well.

The research is being carried out at the University of Arkansas-Fayetteville and the University of Missouri-Columbia. The researchers anticipate that the domestic portion of the rice model will be complete by September 30, 1997. The international modeling research is a little over half completed and the researchers estimate another 5 years is required. The purpose of constructing the models, however, is to provide on-going analyses of the impact of various policy proposals on the U.S. rice industry.

We have conducted no formal evaluation of this project. However, each annual budget proposal is carefully reviewed for adherence to stated objectives and annual progress is discussed with the principal investigators.

RURAL DEVELOPMENT CENTERS

The overall objectives of the research agenda of the five rural development centers are to: Improve economic competitiveness and diversification in rural areas; support management and strategic planning for economic development; create community capacity through leadership; assist in family and community adjustments to stress and change; and promote constructive use of the environment. The function of the Centers is to increase the productivity of regional faculty both in doing research on rural issues and in using that research to do effective outreach with rural communities. These projects have undergone a merit review. The number of research faculty who are addressing broader rural issues id declining in many places. The multidisciplinary, multi-state work supported by the Centers becomes even more crucial in a period of reduced research emphasis. Critical needs are being met by Center support including public lands policy, changing rural migration patterns, fiscal alternatives for local-governments, and forest stewardship education. Specific needs for regional research are reviewed annually by the Centers. The focus of proposals varies from year-to-year depending on the shifting priorities of rural clients.

The Rural Development Center mission is to strengthen rural families, communities, and businesses by facilitating collaborative socioeconomic research and extension through higher education institutions in the various regions. Research programs are undertaken after evaluating broader regional and national priorities. Following are some accomplishments of selected research activities conducted under the auspices of various centers.

A research study funded by the Northeast Rural Development Center assessed the consumer credit knowledge of rural poor and ethnic minorities and determined their use and management practices. An educational program that focuses on the wise use of consumer credit was developed and offered to a diverse extension audience. In-service workshops also were offered to extension educators in several states in the Northeast. Two additional Northeastern states, New York and New Jersey, have duplicated the curriculum for distribution to all counties. This program was coordinated with and contributed to the development of a short video that promotes the

Money 2000 program, a program that encourages participants to save and/or reduce debt by $2,000 by the end of the year 2000. The video was distributed widely to extension personnel within the region and nation, and to financial counselors at several military bases.

The Southern Rural Development Center partially funded and provided all logistical support for a National Conference, "Linking Family and Community Strengths." The conference was also supported by CSREES, W. K. Kellogg Foundation, Farm Foundation, National 4-H Council and the other regional rural development centers. The conference was funded to support 12 mini-grant ($1,000) projects that would transform learning at the conference to action.

Using a Western Rural Development Center supported Business R&E (retention and expansion) program, New Mexico State University Extension has assisted seven communities expand their economic base by saving and creating local jobs. Seven jobs were saved in Silver City when task force members facilitated a propane company's move to a new location. The Clovis task force intervened with city officials to save a $1 million business complex. The R&E staff in Torrance County created 75 jobs by helping a commercial greenhouse find suitable land. BC Hydro in Burnaby, British Columbia recently requested and received permission to adapt the Business R&E program materials for use in rural Canada.

Grants have been awarded from funds appropriated as follows: fiscal year 1971, $75,000; fiscal year 1972, $225,000; fiscal year 1973, $317,000; fiscal years 1974–1981, $300,000 per year; fiscal years 1982–1985, $311,000 per year; fiscal years 1986–1987, $363,000 per year; fiscal year 1988, $475,000; fiscal year 1989, $500,000; fiscal year 1990, $494,000; fiscal years 1991–1993, $500,000 per year; fiscal year 1994, $470,000; and fiscal years 1995–1998, $423,000 per year. A total of 10,118,000 has been appropriated. Non-federal funds available to the four Regional Centers for Rural Development were: fiscal year 1991, $1,117,000; fiscal year 1992, $790,000; fiscal year 1993, $900,000; fiscal year 1994, $776,591; and fiscal year 1995, $710,050; for a total of $4,293,641 across the five years for which there are complete data.

The regional rural development centers include the following. Northeast Regional Center for Rural Development, Pennsylvania State University, North Central Regional Center for Rural Development at Iowa State University; Southern Rural Development Center at Mississippi State University; and Western Rural Development Center at Oregon State University. There is also a rural development project at North Dakota State University which receives funding from the annual Rural Development Centers appropriation. Most of the research sponsored by the four regional centers is actually performed by resident faculty at land-grant universities in the respective region through subcontracts from that center's grant. The regional rural development centers were established to provide an on-going "value added" component to link research and extension and by doing so to increase rural development under the special conditions in each region. The work of the Centers is being carried out in all 50 states and in some territories. The Centers compile a report of annual accomplishments and share those with the states in the region. The list of needs is constantly evolving and is being addressed through projects that are matched to the constantly shifting local agenda. The current phase of the program will be completed in 1998.

The Centers enlist the help of academic and private/public foundations personnel on advisory committees and boards of directors to help establish operating rules and provide professional, technical counsel and peer evaluation of Center projects and the principal investigators. The projects are evaluated annually by the advisory committees and the boards of directors against the five key issue areas and the objectives of each project for relevance, achievement, and initial impacts. Follow-up evaluation is carried out by the Center staffs in order to assess long-term impacts of these projects on local communities.

RURAL POLICIES INSTITUTE

The Rural Policy Research Institute is a consortium of three universities designed to create a comprehensive approach to rural policy analysis. The Institute conducts research and facilitates public dialogue to increase public understanding of the rural impacts of national, regional, state, and local policies on rural areas of the United States. There is a need to be able to estimate the impacts of changing programs and policies on rural people and places. Objective public policy analysis can provide timely and accurate estimates of the impacts of proposed policy changes to allow more reasoned policy discussions and decisions. The principal research believes this research to be of national, regional, or local need.

The original goal of the Rural Policy Research Institute was to create a new model to provide timely, accurate, and unbiased estimates of the impacts of policies and new policy initiatives on rural people and places. The Institute has completed a number of successful policy research projects and developed three analytic models central to its mission. These projects focus on the rural implications of health care, education, housing, rural development, tax and telecommunications policy proposals. In addition, the Institute uses expert panels to provide policy decision support to a number of policy making groups at national and State levels. The expert panels and other collaborative research have, over the life of RUPRI, involved 150 scientists representing 16 different disciplines in 60 universities, 40 states, and three foreign countries have participated in RUPRI projects. Currently 50 nationally recognized scientists and policy practioners from 38 institutions and organizations serve on RUPRI panels, task forces or work groups.

The work supported by these grants began in fiscal year 1991 and the appropriation for fiscal year 1991 was $375,000. The fiscal year 1992 appropriation was $525,000; for fiscal year 1993, $692,000; for fiscal year 1994, $494,000; and fiscal years 1995–1998, $644,000 each year. A total of $4,662,000 has been appropriated. Aggregated non-federal funds to support the Rural Policy Research Institute across the three universities involved include unrecovered indirect costs, salary support from university and other non-federal sources, and various other grants, contracts, and reimbursable agreements. They amounted to $316,458 for fiscal year 1991; $417,456 in fiscal year 1992; $605,302 in fiscal year 1993; $537,834 in fiscal year 1994; and $584,516 in fiscal year 1995, for fiscal year 1996, $576,782; and $186,859 in 1997. Total to date is $3,225,207.

The Institute's member universities are: the University of Missouri-Columbia; the University of Nebraska-Lincoln; and Iowa State University, Ames. Current funding will sustain activity through January 1999; however the original objectives were directed at building a permanent, on-going, policy analytical capability. We have conducted no formal evaluation, however, annual project proposals are carefully reviewed.

RUSSIAN WHEAT APHID, COLORADO

Funding will support two key areas of research that are needed to assure long-term and sustainable Russian wheat aphid management. These are: 1) Discovering new crop genes which provide resistance to the Russian wheat aphid and incorporating them into commercially acceptable wheat varieties, and 2) Integrating the available control tactics into the most effective, efficient, and environmentally sound production systems for the Great Plains.

The Russian wheat aphid is an exotic pest that entered the western United States without its normal complement of biological control agents. This insect was first discovered in North America in 1986 and rapidly became the most important insect pest of wheat in the western United States. From 1986–1991 the total economic impact was estimated to be in excess of $657 million. In the same period, some 17.5 million pounds of insecticides were used nationally for Russian wheat aphid control. The cost to American farmers of insecticide treatments was over $70 million. In addition, the intense use of insecticides on a crop that previously received little insecticide treatment raised concerns about the impact on water quality, human health, food safety, non-target organisms, and general environmental quality. Since the onset of the infestation, Colorado has lead all states in economic losses due to the pest. Direct losses in Colorado have been as high as $27 million in a single year with an average direct loss of above $11 million per year, since 1987. The goals of the research are to: (1) discover new crop genes which provide resistance to the Russian wheat aphid and incorporate them into commercially acceptable wheat varieties, and (2) integrate the available control tactics into the most effective, efficient, and environmentally sound production systems for the Great Plains.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $200,000. State appropriations and the Colorado Wheat Administrative Committee have demonstrated strong support for this effort. Research will be conducted on the campus of Colorado State University, at Colorado State University research stations, and on the farms of cooperators throughout Colorado. Outreach and extension activities will be focused on wheat growers in Colorado, Nebraska, Wyoming, Kansas, New Mexico, Texas, and Oklahoma. This is a new project and has not been evaluated by CSREES.

SEAFOOD HARVESTING, PROCESSING, AND MARKETING, MISSISSIPPI

Research related to seafood safety, quality and by-product utilization has been supported by this grant. Funds from the fiscal year 1997 grant are supporting re-

search through September 30, 1998. CSREES has requested the University to submit a proposal, which has not yet been received, in support of fiscal year 1998 funds. It is expected that funds from the fiscal year 1998 appropriation will support research to screen domestic and foreign aquaculture products for the presence of bacteria resistant to currently used antibiotics, to develop and evaluate a rapid method to detect histamine in seafood, to evaluate processes for the recovery of value-added flavor extracts from shrimp processing by-products, and to determine impact of implementation of HACCP regulations on microbial quality of seafood products.

The principal researcher believes that national needs reflected in the project include providing consumers with affordable alternative seafood products. Alternative sources of seafood protein are needed because of a drastic decline in natural harvests due to over exploitation. Other national needs addressed in this project include reducing pollution during seafood and aquaculture food processing by converting by-products into value-added food ingredients or materials. Regionally, much is unknown about the short and long-term effects of the new seafood HACCP regulations on the livelihood of Mississippi seafood and aquaculture food producers and processors who are typically small and lack sufficient resources to remain competitive. Continuation of this project will provide continued assistance to Gulf-Coast seafood processors in meeting new U.S. regulations as well as new international regulations that are important for Mississippi export products. Locally, catfish processors are a major employer of the severely economically depressed Delta region of Mississippi. By further enhancing the value of catfish products, this project seeks to improve the livelihood of individuals both on the Gulf coast and in the aquaculture region of the state. The original goals of the research were to improve the quality and safety of catfish and improve the utilization of catfish byproducts and underutilized marine species. Due to successes of the original project, subsequent efforts are focusing on additional uses of seafood and aquaculture foods by improving processing strategies and providing alternative products from waste materials. The project has thus expanded to include crab, shrimp, oysters, freshwater prawns, hybrid striped bass, and crawfish. FDA has passed rulings affecting the potential viability of Mississippi seafood and aquaculture harvesters and processors; emphasis is thus being placed on addressing possible adverse consequences resulting from these changes.

The work supported by this grant began in fiscal year 1990 when $368,000 was appropriated for this project. The appropriations for fiscal years 1991–1993 were $361,000 per year; fiscal year 1994, $339,000; and fiscal years 1995–1998, $305,000 each year. A total of $3,010,000 has been appropriated. The State of Mississippi contributed $1,949 to this project in fiscal year 1991; $41,286 in fiscal year 1992; $67,072 in fiscal year 1993; $91,215 in fiscal year 1994; $147,911 in fiscal year 1995; and $61,848 in fiscal year 1996. Product sales contributed $7,044 in 1991, $13,481 in 1992, $13,704 in 1993, and $5,901 in 1994. Industry grants contributed $14 in 1992 and $31,796 in 1993. Other non-federal funds contributed $80 in fiscal year 1991, $838 in 1992, and $17,823 in 1993. The total non-federal funds contributed to this project from 1991 through 1996 was $501,962.

Research is being conducted by scientists in the Departments of Food Science and Technology and Agricultural Economics of the Mississippi Agricultural and Forestry Experiment Station at Mississippi State University and at the Coastal Research and Extension Center, Seafood Processing Laboratory, in Pascagoula, Mississippi.

The principal investigators anticipate that research on the original objectives will be completed in 1999. Continuing needs by Mississippi seafood and aquaculture harvesters and processors related to improved quality, safety and utilization will require research and development of new technologies to expand this industry.

An agency science specialist conducts a merit review of the proposal submitted in support of the appropriation on an annual basis. Since the agency has not yet received the proposal in support of the fiscal year 1998 proposal, the last review of the proposal was conducted on March 7, 1997. At that time, the agency science specialist believed that the projects addressed needs and interests of the regional seafood and aquaculture industries.

SMALL FRUIT RESEARCH

Research carried out using funding for this Special Research Grant has been to enhance the production and quality of small fruits in the Pacific Northwest which includes Idaho, Oregon, and Washington. Research has been focused on cold hardiness, breeding and genetics, and pest management. Proposals are selected after examination of their relevance to priorities identified within the region.

The principal researchers believes Washington, Oregon, and Idaho are important states for growing, processing, and marketing small fruits such as strawberries, blackberries, raspberries, grapes and cranberries. Research is needed to help solve

the myriad of problems in order to remain competitive and expand markets. The original goal of this project was to improve the production and quality of small fruits in the Pacific Northwest through research on cold hardiness, breeding and genetics, and pest control. Research progress to date for Oregon is the evaluation of new strawberry germplasm from Chile and North America for resistance to fruit rot, aphids, spider mites, and weevils; virus indexing of small fruit germplasm; better color stability of processed strawberries; increasing cranberry production through better weed control; and improving wine quality. Work is continuing in Washington on fruit physiology; cold hardiness of strawberries, grapes, and red raspberries; pest management of cranberries; and breeding of pest resistant strawberries. Idaho work continues on postharvest research for better marketability and adapting small fruit crops to high elevation growing conditions. Oregon and Washington are jointly carrying out marketing studies to identify new market niches for berry crops and wines.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal year 1991 was $125,000. The fiscal years 1992 and 1993 appropriation was $187,000 per year, fiscal year 1994 was $235,000, and fiscal years 1995–1998 are $212,000 each year. A total of $1,582,000 has been appropriated. The nonfederal funds and sources provided for this grant were as follows: 1991, $1,562,078 state appropriations, $40,933 product sales, $62,993 industry, $357,266 other nonfederal; 1992, $1,465,969 state appropriations, $90,453 product sales, $119,164 industry, $287,976 other nonfederal; 1993, $1,539,255 state appropriations, $91,954 product sales, $161,141 industry, $416,712 other nonfederal; 1994, $368,375 state appropriations, $45,430 industry and $90,822 other nonfederal; and $1,185,249 for fiscal year 1995. A complete accounting of 1996 funds is not yet available from the states involved.

The research is being conducted at Oregon State University, Washington State University and the University of Idaho. Oregon State University is the lead university. The original objectives are still valid. Therefore, this is a continuing process with some priorities changing somewhat but still within the objectives. The project proposals are evaluated through a peer review mechanism and the adherence to the research priorities.

SOUTHWEST CONSORTIUM FOR PLANT GENETICS AND WATER RESOURCES

New Mexico State University, Los Alamos National Laboratory, Texas Tech University, the University of Arizona and the University of California at Riverside entered into a cooperative interdisciplinary research agreement constituted as the Southwest Consortium on Plant Genetics and Water Resources to facilitate research relevant to arid and semi-arid land adaptation. The overall goal of the Consortium is to bring together multi-disciplinary scientific teams to develop innovative advances in plant biotechnology and related areas to bear on agriculture and water use in arid and semi-arid regions. All grants made to the participating Institutions are awarded competitively by a scientific peer review process.

The Southwest Consortium for Plant Genetics and Water Resources is addressing the need for an integrated program that identifies specific problems of southwest agriculture, coordinates water and biotechnology research aimed at solving these problems, and facilitates the transfer of this information for commercialization. The specific research objectives of the Consortium include the development of crops with resistance to: drought and temperature extremes, adverse soil conditions, and pests and parasites. The Consortium is also identifying technologies for improved water and nutrient delivery. This research is highly significant to national, regional and local needs. The original goals of this Consortium remains to facilitate research to provide solutions for arid and semi-arid crop adaptation. Five participating institutions have developed research plans consistent with the Consortium's goals. Subgrants are awarded competitively following peer review to support research that would solve problems unique to southwest agriculture. Specific attention is given to interdisciplinary agricultural research. Since its inception in 1985, the Southwest Consortium has provided essential support for the establishment of baseline data on new, forward thinking research relevant to the improvement of arid lands agriculture. Several area of accomplishment are noted. One are is the identification of chromosome regions conferring water use and transpiration efficiency in wheat; another the impact of water stress on host plant resistance to aphids and whiteflies on melon; a third, the genetic variation for deposition and demobilization of stem water-soluble carbohydrates in spring wheat; and the biochemical and molecular mechanisms of salt-tolerance.

Grants have been awarded from funds appropriated as follows: fiscal year 1986, $285,000; fiscal years 1987–1989, $385,000 per year; fiscal year 1990, $380,000; fis-

cal years 1991–1993, $400,000 per year; fiscal year 1994, $376,000; and fiscal years 1995–1998 $338,000 each year. A total of $4,748,000 has been appropriated. The Consortium's host institution, New Mexico State University, reports matching nonfederal funds of $80,000 in state appropriations in 1992; $100,000 in 1993; $100,000 in 1994; $100,000 in 1995; and $100,000 estimated in state appropriations for each of the fiscal years of 1996 and 1997. These funds exist in the form of researchers' salaries, facilities, equipment maintenance and administrative support.

Research is being conducted by a consortium of institutions comprised of New Mexico State University, Los Alamos National Laboratory, Texas Tech University, University of Arizona, and University of California at Riverside. New Mexico State University is the lead institution. The project was initiated in 1986 and accomplished significant results in the first five years. Currently additional and related objectives have evolved and anticipated completion date for these is 2001. Many of the objectives of this research have been met. Each year the grant is peer reviewed and reviewed by CSREES's senior scientific staff. A summary of that review indicated progress in achieving the objectives. An external review is being planned for 1998.

SOYBEAN CYST NEMATODE, MISSOURI (BIOLOGY AND MANAGEMENT OF HETERODERA GLYCINES)

The research being funded by this grant is crucial to the development of effective management strategies to understand host parasite relationships of the pathosystems and each of its components. Work has dealt mainly with identifying Heterodera glycines-resistant genes and incorporating them into agronomically superior cultivars. Basic studies elucidate the fundamental biology of the cyst nematode in regard to new management strategies. Applied work dealt with evaluating production systems and to new management strategies. This project was not awarded competitively but has undergone peer review at the university level and merit review at CSREES. The principal researcher believes that although this research is focused on the soybean cyst nematodes in Missouri, the problems is of regional and national significance. The soybean cyst nematode, Heterodera glycines is the most serious pest of soybean in the United States. The problems continue to increase in the Midwest where 12 states have yield reductions in soybean because of this nematode. Due to the nematodes ability to adapt to resistant varieties over time, new varieties are continually needed. The original goal of this research was managing soybean cyst nematode through the development of new resistant soybean varieties and the use of biological and cultural management strategies. To date, several nematode resistant soybean line have been or will be released. The need for breeding soybean lines to develop resistant varieties with a broad spectrum of resistance continues. More fundamental research involves the utilization of new molecular technologies to identify genes responsible for resistance. Other aspects of the works relate to field management strategies for these nematodes including cultural and biological applications. Accomplishments in these areas include use of a fungal pathogen of nematode eggs and the use of trap crops to reduce nematodes and improved soil health.

Grants have been awarded from funds appropriated as follows: fiscal year 1979, $150,000; fiscal years 1980–1981, $250,000 per year; fiscal year 1982, $240,000; fiscal years 1983–1985, $300,000 per year; fiscal years 1986–1989, $285,000 per year; fiscal year 1990, $281,000, fiscal year 1991, $330,000; fiscal years 1992–1993, $359,000, fiscal year 1994, $337,000; fiscal years 1995–1997, $303,000 per year and fiscal year 1998, $450,000. A total of $5,955,000 has been appropriated. The nonfederal funds and sources provided for this grant were as follows: $105,012 state appropriations in 1991; $84,368 state appropriations in 1992; $168,017 state appropriations in 1993; $118,725 state appropriations in 1994; $33,498 in 1995 and 1996; $33,723 in state appropriations in 1997; and $37,445 in state appropriations in 1998.

This research is being conducted at the Missouri Agriculture Experiment Station and the University of Missouri. The anticipated completion date for the major objectives was 1996. Many objectives are being met but genetic interaction of the soybean cyst nematode/soybean is extremely complex. The anticipated completion date of the continuing research is in 1999. The last evaluation of this project was a merit review in December, 1996 and the renewal project will be evaluated in 1998. In summary, continued development of new management strategies for the soybean cyst nematode is extremely important. Progress in meeting the objectives in each goal continues with new varieties with nematode resistance being released yearly as well as excellent progress in other management strategies. Two new soybean strains were developed with resistance to soybean cyst nematodes and root-knot nematodes. A Plant Variety Protection has been applied for the cultivar Maverick that is nema-

tode and root rot resistant. A chitinase gene was successfully cloned in Rhizobium that may protect soybean plants from soybean cyst nematodes.

SPATIAL TECHNOLOGIES FOR AGRICULTURE, MISSISSIPPI

CSREES has requested the university to submit a grant proposal that has been received, and is being reviewed. This project will evaluate the Components of Advance Spatial Technology for Agriculture (ASTA), also known as site-specific farming as precision farming to improve the level of Crop Management and thereby improve farm income and while avoiding advise environmental impacts. Integration of ASTA Components included computers, Global Positioning, Geographic Information System and Yield Monitor will permit combining yield maps with agronomic data and variable rate technology for application of seed fertilizer and pesticides, as well as other management practices to specific sites as precisely the right amounts for optimum production with minimum inputs. The project is composed of sub projects representing the contribution disciplines. The sub projects are selected using a competitive peer review process from proposal from scientist within the institution.

The proposed research under this Special Research Grant will focus on evaluation of site specific technology evaluation and utilization for the major agronomic crops in Mississippi. In addition, the technology evaluation information would apply to many other crops where every site-specific or precision farming systems are used. The original goal of this project is to develop production management strategies utilizing site-specific technologies to enhance crop production efficiencies and environmental quality.

The work supported by this grant begins in fiscal year 1997, and the appropriation for fiscal year 1997 was $350,000, and fiscal year 1998 is $600,000. A total of $950,000 has been appropriated. The estimated state support for this project in 1997 was $297,000.

Research will be conducted at the Mississippi Agricultural Experiment Station. The principal investigators anticipate the completion date for these objectives to be in 2002. The project is evaluated by a coordinating committee at the end of each year in preparation for the next cycle of field work. To date research studies have been initiated for all of the objectives. These are designed as multi-year studies and definitive results are not yet available. These initial results are being used to refine and focus the research for subsequent cycles.

STEEP III—WATER QUALITY IN PACIFIC NORTHWEST

The STEEP III study was established in 1996 as the third phase of the tri-state STEEP Program entitled ''Solutions to Environmental and Economic Problems,'' to meet the needs of farmers and ranchers in the Pacific Northwest in solving severe problems with soil erosion and water quality, while maintaining economically and environmentally sustainable agricultural production. An open call for research proposals is held by each of the three states, Idaho, Oregon, and Washington. Awards are made competitively after both internal and external peer reviews within the states, and merit review by the agency. The principal researcher believes the Pacific Northwest wheat region is subject to severe wind and water erosion, which has taken a heavy toll of the topsoil in a little more than 100 years of farming. Due to the hilly terrain, water erosion has reduced potential soil productivity in the high rainfall areas of the region by about 50 percent. Wind erosion has reduced productivity on the sandy soils in the lower rainfall areas. Also, off-site environmental costs of water erosion are large. Although many of these are difficult to measure, they include damage from sediment to recreational areas, roadways, and other areas which costs taxpayers millions of dollars annually. Wind erosion, which occurs mostly in the spring and fall, also can be costly and environmentally damaging, and causes increasing concerns for human health and safety from blowing dusts. Water quality degradation is of increasing concern in the agricultural areas of this region, since sediment is a major pollutant of surface water runoff which may contain varying amounts of chemicals. The complex hydrology of the region's landscape has made it difficult to identify the sources of these chemicals in surface and ground waters.

The primary goals are: to obtain and integrate new technical/scientific information on soils, crop plants, pests, energy, and farm profitability into sustainable, management systems; to develop tools for assessing the impacts of farming practices on soil erosion and water quality; and to disseminate conservation technology to the farm.

The original STEEP and STEEP II projects for erosion control, and the successor STEEP III program for erosion and water quality control, have provided growers a steady flow of information and technologies that have helped them meet economic, environmental, and resource conservation goals. Through the adoption of these tech-

nologies, the researchers believe that growers of wheat, barley, and other alternative crops have been able to reduce soil erosion, improve water quality, and maintain or increase farm profitability. This has been accomplished through a tri-state, multi-disciplinary approach of basic and applied research and through technology transfer and on-farm testing to assist growers with applying these research findings on their farms. The on-farm testing program has been especially successful because growers are involved directly in the research and education effort. For example, the on-farm testing program has evaluated conservation options that growers can use to meet conservation compliance requirements in managing crop residues on agricultural lands for soil and water management purposes.

STEEP programs have helped position farmers with new conservation technologies, such as direct seeding management systems, well in advance of deadlines to meet current and anticipated policy requirements. This preparation protects farmers against potential penalties and loss of government program benefits.

The work supported by this grant began in fiscal year 1991, and the appropriations for fiscal years 1991–1993 were $980,000 per year; in fiscal year 1994, $921,000; in fiscal year 1995, $829,000; and in fiscal years 1996–1998, $500,000 per year. A total of $6,190,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $938,812 state appropriations, $63,954 product sales, $156,656 industry, and $16,994 miscellaneous in 1991; $1,025,534 state appropriations, $75,795 product sales, $124,919 industry, and $88,696 miscellaneous in 1992; $962,921 state appropriations, $62,776 product sales, $177,109 industry and $11,028 miscellaneous in 1993; $1,069,396 state appropriations, $46,582 product sales, $169,628 industry, and $22,697 miscellaneous in 1994; and $1,013,562 state appropriations, $31,314 industry, and $107,151 miscellaneous in 1995. In 1996, Washington received $231,724 state appropriations; Oregon passed Measure 5 which reduced revenues and imposed funding restrictions so they were unable to provide any non-federal cost-sharing or matching funds; and Idaho contributed $81,525 state support, and $86,242 in estimated non-federal grant support, for a total non-federal contribution of $167,767. In 1997, Washington received $197,234 state appropriations; Oregon continues to have Measure 5 as law and continues to be unable to provide non-federal cost-sharing or matching funds; and Idaho contributed $27,235 state support and $24,525 in estimated non-federal grant support for a total non-federal contribution of $51,760.

The work under STEEP III will be done at laboratories and field research sites at the University of Idaho, Oregon State University, and Washington State University. Cooperative on-farm testing will be conducted in cooperation with growers on their fields in Idaho, Oregon, and Washington. The STEEP II project was completed in 1995, and the results were compiled in a final, 5-year report in January 1997. The STEEP III project started in 1996 and will continue through the year 2000 as a 5-year project.

The agency's program manager annually reviews progress reports, proposes new research on the STEEP Program, and attends the annual meetings to assess progress. The program is evaluated within the states each year by three committees: grower, technical, and administrative. Annual progress is reported at an annual meeting and compiled into written reports. These reports and the meeting are reviewed annually. Grower and industry input is solicited at the annual meeting on research objectives and accomplishments. The most recent annual meeting held in January 1998, highlighted direct-seeding technology, and attracted over 950 attendees, of which 70 percent were growers from the tri-state region. Farmer surveys are distributed at each annual meeting, and results are compiled to assess the extent to which the objectives are being successfully achieved.

SUSTAINABLE AGRICULTURE, MICHIGAN

This project is intended to develop agricultural production systems that are productive and profitable as well as being environmentally sustainable. More specifically, this project will examine how to achieve a high nutrient flow from soil to crops and animals, and back to soil, with low loss to ground and surface waters. The grant is allocated, by the Michigan Agricultural Experiment Station, to priority areas within the general area of sustainable agriculture. Within each of those areas grants are awarded based on research merit and proposal submission. The projects and proposals undergo annual formal review within the Michigan system prior to submission to CSREES, and then review within CSREES.

The principal researcher believes there is a need to understand the biological processes occurring Michigan's high-nutrient-flow crop and animal systems. With high water tables, networks of lakes and slow-moving streams, and concern about

environmental standards, field contamination by agricultural production materials is a high priority.

The specific goals of this research are to develop an agroecological framework for decision-making, develop crop and cover crop rotations, develop water table management strategies, and develop rotational grazing systems. Accomplishments to date include an extension publication on agroecology, development of on-farm compost demonstration sites, collection of research data and computer software models on water table management, and completion of initial research trails on rotational grazing at three sites in Michigan.

The work supported by this grant began in fiscal year 1994 with an appropriation of $494,000; $445,000 were appropriated in fiscal years 1995 through 1998, bringing total appropriations to $2,274,000. Matching funds were provided at the state level for $511,900 in fiscal year 1994, $372,319 for fiscal year 1995, and $359,679 in fiscal year 1996. Matching funds provided for this research include state funds in the amount of $25,313 for fiscal year 1992, $26,384 for fiscal year 1993, $27,306 for fiscal year 1994, and $36,091 in fiscal year 1995.

This work is being carried out in Michigan at several locations by Michigan State University. Locations include the Kellogg Biological Station and the Upper Peninsula Experiment Station. This project is currently scheduled to go through March 31, 2000.

A formal evaluation of the Principal Investigator's program was concluded in 1997, commissioned by the C.S. Mott Foundation through an independent consultant. The project continues to have annual peer review.

SUSTAINABLE AGRICULTURE AND NATURAL RESOURCES, PENNSYLVANIA

This project studies the cycling of nutrients in soil and crops with special emphasis on the development of indices for measurement of soil health. This project is awarded on the basis of peer evaluation to scientists working in the Northeast U.S. on indices for soil health especially with regard to animal waste application to soil. The project undergoes regular internal evaluation and assessment as part of Penn State's major effort in soil quality and nutrient management research. Degradation of soil health/quality by excessive application of animal waste is a most serious problem for agriculture both in the mid-Atlantic region and throughout the nation. State governments both regionally and nationally are attempting to address the issue of soil and water degradation by intensive animal agriculture. Traditional soil test results are not providing the needed answers for effective nutrient—manure—management.

The original goal of this research was to understand the cycling of nutrients from animal agricultural production systems through soil and water into crops and back to food for animals or directly to humans in the case of vegetable production. Conventional science in the late 1980's and early 1990's held that if only all animal wastes were composted, the nutrient management problems would disappear. However, the results of this research to date show that this is a more complex problem. If farmers are to manage their farm lands properly, indicators of soil quality and health must be developed that can be used by agricultural producers and consultants. Efforts under this project have been devoted to this goal.

With continued growth in numbers and size of concentrated animal operations (CAO's) and the increasing number and severity of water related problems (Pfisteria) in the region, it is apparent that our understanding of nutrient cycling is not sufficient to prevent such outbreaks. Research in 1996 and 1997 has indicated that many factors not usually considered in manure management may influence the amount and kinds of soil organic matter (SOM) and associated microbial populations. SOM and its associated microbial biota plans a major role in nutrient accumulation and release from soils. This research has now elucidated at least one SOM indicator of soil health that will be useful in more effectively managing manure application to soils. It is hoped that in the next year others will be identified.

The work supported under this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was $100,000 and $94,000 was appropriated in each of the fiscal years 1994 through 1998 for a total of $570,000. A total of $369,574 in matching support from university, state and private industry sources was provided in fiscal year 1997.

Research is be conducted by the Pennsylvania State University with cooperators throughout the state. The anticipated completion date for the overall original project objectives is in June 30, 1999. The project is meeting the key objectives set forth in 1996. A significant indicator for soil health has been identified. Further work is continuing to determine if it will be useful as a guideline for manure management especially with regard to the high end soil loading problems associated with CAO's.

Interim evaluation of this project will be done prior to June 30, 1998. Criteria used to assess the quality of the science will be peer reviewed throughout the northeast region. There has not been a formal evaluation of this project, but progress reports have been submitted to the agency and reviewed by our scientific staff.

SUSTAINABLE AGRICULTURE SYSTEMS, NEBRASKA

This project is aimed at integration of field crops, animal production, agroforestry, livestock waste management, and diversified enterprises to meet production, economic, and environmental quality goals. The grant was awarded competitively within the University of Nebraska, and the integrated farm project has been reviewed annually for technical merit and progress toward goals by the internal review process of the university.

Farmers and ranchers in Nebraska and throughout the Midwest face increasing difficulties in maintaining profitable operations that are sustainable under increased production costs and more stringent environmental regulations. They continue to seek alternative production systems, integration of crop and animal enterprises, value-added products, including those from woody perennials, and new marketing approaches to secure more of the food dollar. Work on crop residue utilization is important to assess the loss of erosion mitigation when grazing occurs as well as the benefits of winter forage to production of lean beef. Erosion is still a major problem with monoculture cropping, and work with contour strips, residue management, and animal grazing is necessary to provide recommendations to farmers for how to manage fragile lands.

This project has involved several components, with a number of results to date. In improving erosion control through grazing, calves were fed cornstalks from October through March, and fed some supplements. The calves had lower costs of production and reduced need for grain feed. The researcher's work on integrative cropping and agroforestry has shown that diversifying rotations centered around soybeans has provided increased economic returns. In the objective dealing with compost utilization, compost has provided increased sources of nitrogen and improved soil quality. Reports from this project have been disseminated through extension and through a sustainable agriculture newsletter.

This project began in fiscal year 1992, with an appropriation of $70,000; subsequent appropriations are as follows: $70,000 in fiscal year 1993; $66,000 in fiscal year 1994; and $59,000 in fiscal years 1995 through 1998. Total appropriations to date are $442,000. Matching funds provided for this research include state funds in the amount of $25,313 for fiscal year 1992; $26,384 for fiscal year 1993; $27,306 for fiscal year 1994; $36,091 in fiscal year 1995 and fiscal year 1996 $24,267.

Research is being conducted by the University of Nebraska at several locations in Nebraska, with the major part of the project at the Agricultural Research and Development Center near Mead, Nebraska. The current project proposes work through March 31, 1998. It is expected that current objectives of the project will be met by this time period.

Findings from this project have shown that young cattle can be fed with lower costs it cornstalks are used as part of their rotation. This system also allowed for a cropping pattern that reduced erosion. The corn, soybean, and agroforestry system showed the highest net income of the systems tested.

SUSTAINABLE PEST MANAGEMENT FOR DRYLAND WHEAT, MONTANA

This research will address pest issues of the dryland wheat areas of eastern Montana. The proposed research is specifically designed to address pest issues of the dryland wheat area of eastern Montana. The proposal addresses pest management issues under cropping sequences and tillage practices utilized in the region for wheat production.

Objectives of the research are to evaluate the sustainability of pest management using four cropping sequences and two tillage systems on large experimental blocks representing different farming regions in Montana and to investigate the interaction of crop rotation, tillage systems, and pest management. In addition, the researchers will analyze physical and biological properties of soil as affected by cropping sequence and tillage systems and evaluate weed species composition as affected by cropping sequence, tillage system, and weed management decisions. Presence and impact of plant pathogens as affected by cropping sequence and tillage systems will be determined. Part of the study will also be to ascertain the arthropod community within each cropping system and determine the impact of tillage on species composition. Profitability, marketing, and environmental benefits of diversified cropping systems will be examined. Study results will be assimilated and transferred into practical solutions to farmers' problems relative to confines of dryland wheat pro-

duction. Study sites were surveyed in fall of 1997, baseline soil samples were taken, and replicates measured. Winter wheat was seeded in designated treatment rows in each replicate. To facilitate seeding under no-till conditions, a Conservation Pak air seeder was purchased with funds awarded in fiscal year 1997 to this project. The remaining crop treatments will be seeded in spring 1998.

This work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $200,000 and fiscal year 1998 is $400,000. A total of $600,000 has been appropriated. Non-federal funds of $42,000 from the Montana Wheat and Barley Committee were provided for project support during 1997.

Research will be conducted at Montana State University Experiment Station. The project is proposed for a duration of 3 years and therefore should be completed after fiscal year 1999. The expected completion date of the project is fiscal year 1999. Assessment of the precision of biological control organisms and estimates of profitability, marketability, and risk will be used to assess progress. Yearly progress reports will be used to track the effectiveness of the program of research.

SWINE WASTE MANAGEMENT, NORTH CAROLINA

The objectives of this project are: (1) to develop a prototype system for treatment of animal waste which will be used to study and optimize new and innovative swine waste management treatment process; (2) to provide funds for additional technical staff to perform the work under this project; (3) to purchase additional analytical equipment; and (4) to provide funding for operation of the prototype facility. The prototype facility will consist of a set of eight tanks which will be connected by piping or hoses to enable researchers to test a variety of different strategies for treatment of animal waste, including anaerobic or aerobic digestion, removal of nutrients such as nitrogen and phosphorus and alterations in the sequence of these various operations. This project was funded following merit review of the proposal by scientists within CSREES with expertise in animal waste research. The principal researcher has stated that North Carolina now ranks second in the US in both pork and poultry production. The problem of waste management has become critical because adequate land for application of waste is not available in some areas, water quality problems have been noted in both surface and ground waters, nutrients from several lagoon failures have created serious pollution problems in rivers and coastal areas, and communities have become less tolerant of odor problems.

The original goal of this research was to enhance the design, development, and implementation of alternative swine waste management strategies and treatment systems. The institution also is enhancing the capability of an Environmental Analysis Laboratory which supports this project as well as other projects on animal waste management. The work supported by this grant began in fiscal year 1997 and the appropriation for fiscal year 1997 was $215,000 and fiscal year 1998 is $300,000. A total of $515,000 has been appropriated.

During fiscal year 1997 there were $114,000 in state funds and $82,389 for in kind support from industry (donated equipment) that were provided from non-federal sources in support of this work. This research is being conducted at North Carolina State University in Raleigh, North Carolina.

The original anticipated completion date was October 1, 1997. Due to funding not starting until March 1, 1997, the original objectives are now approaching completion and should be done by March, 1998. Additional objectives have been proposed which will have a completion date of March, 1999. CSREES conducted an evaluation of the progress of this work during January 26–28, 1998.

TILLAGE, SILVICULTURE, AND WASTE MANAGEMENT, LOUISIANA

This research has five components: Rice and Cotton Tillage, Bald Cypress and Water Tupelo Silviculture, and Dairy and Poultry Waste Management. More specifically, the Rice Scientists are looking for ways to improve stand establishment; the Cotton Scientists are focusing on the use of tillage systems to combat harmful insect populations; the Waste Management Scientists are quantifying the environmental and economic effectiveness of approved dairy and poultry waste disposal systems; and the Silviculturists are conducting a problem analysis on factors affecting Bald Cypress and Water Tupelo regeneration. The project is annually subjected to the university's merit review process. The principal researchers hypothesize that since the crops, forests, and waste issues addressed by this project extend beyond the state borders this research has, at a minimum, multi-state to regional application.

The original goals were to: improve conservation tillage in rice and cotton farming, to determine the effectiveness of no-discharge dairy waste treatment facilities, to determine acceptable land treatment levels for poultry waste disposal, and to evaluate wetland forest regeneration processes. All components of the project have

established research studies and monitoring progress. Each year the principal investigator initiates a review of the sub-projects. In this fashion, he promotes good dialogue and cooperation among the sub-project investigators and their respective departments.

The work began in fiscal year 1994. The appropriation for fiscal year 1994 was $235,000. For fiscal years 1995–1998, the appropriation was $212,000 per year. This sums $1,083,000. State funding in support of these areas of research exceeds $750,000 annually.

Investigations are being conducted on the main campus at Louisiana State University as well as the Experiment Stations at Calhoun and Washington Parish, Louisiana. The original work was scheduled for completion in 1999. Early term objectives have been met. Most of the added experiments are scheduled for closure in 1999 as well.

The last field evaluation was completed on December 12, 1995. The evaluation summary complimented the scientists on the interdisciplinary components associated with this project, along with their investigative procedures, report writing, and external networking. A 1998 field review is tentatively scheduled for March 9–10.

TROPICAL AND SUBTROPICAL RESEARCH

The Tropical and Subtropical Research—T STAR—Program is operating in coordination with the T STAR Caribbean and the T STAR Pacific Administrative Groups. State Agricultural Experiment Stations that are members of the Caribbean group are Florida, Puerto Rico, and the Virgin Islands; members of the Pacific group are Hawaii and Guam. The proposals are peer reviewed and are then selected for funding by the administrative groups.

Non-member institutional interests are represented by the Executive Director of the Southern Region Agricultural Experiment Station Directors, who is a member of the Caribbean group, and the Executive Director of the Western Region Agricultural Experiment Station Directors, who is a member of the Pacific group. The Agricultural Research Service also has representation on the two groups, as does the CSREES scientist who manages the T STAR grant program. Funds for the program are divided equally between the two Basin Administrative Groups.

The research objective of the program developed by the principal is to improve the agricultural productivity of many of the subtropical and tropical parts of the United States. Special research grants have been awarded for research on controlling insect, disease and weed pests of crops; increasing the production and quality of tropical fruits, vegetables and agronomic crops; promoting increased beef production through development of superior pastures; detection of heartwater disease of cattle and the influence of heat stress on dairy cattle reproduction; better use of land and water resources; developing computer models for efficient crop production systems and animal feeding systems; developing computer models for land-use decisions; using biotechnology methodologies for improving plant resistance to viral and bacterial diseases; using biotechnology to develop non-chemical, or biological, strategies for controlling insect pests; and potential for growing new speciality crops. Fiscal year 1998 proposals have been requested. The principal researcher believes there is a need for the T STAR program to provide research-generated knowledge that enables informed choices in the responsible use of natural resources, facilitates the health and well being of American citizens through improved food safety and nutrition, provides frontline protection for the rest of the nation's farms and ranches from serious plant and animal diseases and pests, and enhances the ability of U.S. farmers to produce crops efficiently and economically and/or to introduce new crops and agricultural products with export potential to gain market share abroad. On a regional basis, the T STAR program addresses the unique challenges of practicing tropical agriculture, that is presence of pests year-round, heat stress, post-harvest processing to meet regulatory requirements for export, etc. The local need of Americans living in tropical regions of the nation for T STAR knowledge-based products to design and implement sustainable agricultural development within fragile tropical agroecosystems—particularly on tropical islands—and to develop new crops and niche markets.

The original goal of this research was to increase the production and quality of tropical crops; control pests and diseases of plants and animals; promote increased beef production and conserve land and water resources. In fiscal year 1996, grants were supported for research on control strategies for Melon thrips; the biochemical nature of resistance to rust in nutsedge; development of bioherbicides for nutsedges; development of tomato cultivars with resistance to the spotted wilt virus; development of pheromones for monitoring and controlling the citrus root weevil; reducing the effects of heat stress in dairy cattle; development of a decision support system

for vegetable production; finding cucurbits with resistance to silverleaf, developing a computer program for optimal supplementation strategies for beef and diary cattle on tropical pastures; characterizing new strains of citrus tristeza virus in the Caribbean basin; determining the economic threshold for the citrus leaf miner on limes; using viral replicase genes to engineer rapid detection methods for geminiviruses; developing makers of bacterial spot resistance genes in tomato; breeding snap and kidney beans for resistance to golden mosaic virus and for heat tolerance; searching for resistance to papaya bunchy top disease; developing weed controls for yam production; and bioengineering ringspot virus resistance in papaya.

The operation of the tropical and subtropical research program was transferred from ARS to CSREES, with CSREES funding being first provided in fiscal year 1983. Funds in the amount of $2,980,000 per year were appropriated in fiscal year 1983 and 1984. In fiscal year 1985, $3,250,000 was appropriated. In fiscal years 1986, 1987, and 1988, $3,091,000 was appropriated each year. $3,341,000 was appropriated in fiscal year 1989. The fiscal year 1990 appropriation was $3,299,000. The fiscal years 1991–1993 appropriations are $3,320,000 per year; $3,121,000 in fiscal year 1994; $2,809,000 in fiscal years 1995–1996; and $2,724,000 in fiscal years 1997 and 1998. A total of $49,270,000 has been appropriated.

For fiscal year 1997, more than $1 million of nonfederal funds were provided to the T STAR program from state appropriations. These state funds were in the form of faculty salary time commitments and indirect costs covered by the institutions.

This research is being conducted in Florida, Puerto Rico, Virgin Islands, Hawaii, and Guam. Work is also being done in other Pacific and Caribbean countries through agreements between institutions but not using federal funds.

Research on tropical crop and animal agriculture to increase productivity, net profits, decrease harmful environmental impacts, conserve water, and natural resources. The need to continue with this project has been expressed by producers in the area, importers in the U.S. mainland and the institutions involved.

The projects that are funded by the T STAR Special Research Grant have been peer reviewed by panels of scientists in the U.S. to assure that good science is undertaken. Also, as part of the grant renewal process, progress reports are reviewed by the two Administrative Groups and by the grant manager at the national level. Workshops in which research results and their application for agricultural production are developed every two years. Research papers are published in the appropriate regional, national, and international forums available.

The development in 1995 of the Strategic Plan for T STAR provided a mechanism to define priorities, examine program direction, and recommend operational changes. One of the principal points considered was to bring the Caribbean and Pacific Basin components closer and better coordinated. T STAR and the coordination which it implies was an outcome that will make this program better.

URBAN PESTS, GEORGIA

This research is focused on urban pests with specific emphasis on termites and ants This project has been evaluated annually by CSREES. The principal researcher believes subterranean termites and ants are significant economic pests in the Southeastern United States. Damage and control costs for termites in Georgia were estimated at $44.5 million in 1993. It is estimated that professional pest control operators apply over 23 million pounds of active ingredients in and around homes each year. Chemicals currently registered for controlling these pests are less efficacious than desired and applied at an intensity that exceeds most agricultural settings.

The goal of the termite research is to better understand the foraging activities of subterranean termites and their responses to selected environmental cues in order to tailor monitoring and predictive strategies with efficacious conventional and alternative methods of control. Additionally, an objective is to improve the management of subterranean termites through studies of the termite genome, cuticular chemistry, morphometric characteristics and termite behavior. Specific accomplishments in the termite research are as follows: Collection of three full years of data on over 80 different subterranean termite colonies in four of the major soil provinces in Georgia was completed in early 1997. Research with conventional termiticide chemistry has demonstrated the interaction between soil type and termite tunneling activity and the potential role these interactions play in the incidence of reported termite treatment failures using these currently registered materials. The past years research also involved investigations of a naturally occurring fungus as a potential control agent. Research on the concept of baits as a termite control tactic have raised concerns about the practical application of this recently registered technology.

This work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991–1993 was $76,000 per year. In fiscal year 1994 the appropriation was $71,000 and in fiscal years 1995 through 1998 the appropriation was $64,000 each year. A total of $555,000 has been appropriated. The non-federal funds and sources provided for this grant by fiscal year were as follows: 1991—none, 1992—$26,000, 1993—$18,000, 1994—$59,530, 1995—$59,539, 1996—$30,000, 1997—$80,000.

This research and technology transfer program is being conducted at the University of Georgia, Department of Entomology, Athens, Georgia. The grants have been processed on a year to year basis pending the availability of funds, however, the original objectives were essentially a five to eight year plan of work. CSREES entomologists judge that excellent progress has been made on foraging behavior and the identification and development of termite baits.

This project has been evaluated on an annual basis by CSREES through the progress reports. This year a site visit by CSREES has been scheduled by CSREES on February 10. This is a new project and has not been evaluated by CSREES. The project will be evaluated by review of the proposal and the annual project reports.

VIDALIA ONIONS

This is the first year that the research on Vidalia onions is funded. CSREES has requested the university to submit a grant proposal that has not yet been received. This research is important to the State of Georgia and is directed to improving the quality of Vidalia onions. The proposed goal of this research is to investigate production practices to improve Vidalia onion culture. The specific objective is to improve onion quality and enhance competitiveness of the product.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $84,000. Since this is the first year funding was provided for this project, non-federal funding information is not available. Research will be conducted in Georgia and the anticipated completion date for the original objectives is five years based on objectives reachable within a year time frame. As this is the first year of funding for this project, an evaluation has not yet been done.

VITICULTURE CONSORTIUM, NY AND CA

The University of California and Cornell University in New York conducted research on varietal responses of grapes, modeling of water requirements, management of diseases including phyloxera and other cultural aspects of grape production. Funds were used by the lead institutions to fund projects in the various grape producing states within their region. Grants were made based on peer reviewed proposals and selected competitively by regional groups based on priorities developed by researchers, extension, and industry personnel.

The research being carried out is designed to help the viticulture and wine industries remain competitive in the U.S. and in the global market. Both these industries have a positive effect on the U.S. balance of payments. The original goal of this research is to maintain or enhance the competitiveness of the U.S. viticulture and wine industry in the global market.

Grants have been awarded from funds appropriated as follows: fiscal year 1996, $500,000; fiscal year 1997, $500,000; and fiscal year 1998, $800,000. A total of $1,800,000 has been appropriated. In 1997, the viticulture industry provided $500,000 for projects following the same criteria and priorities as in the federally funded ones. In effect, this is an industry match of funds. Research is being conducted in various states which include California, Washington, New York, and Pennsylvania.

The research priorities set by the guidance group were not all addressed nor will they be in the near future. No evaluation has been made yet. However, proposals for continued funding are evaluated for progress by a guidance group made up of research, extension, and industry persons.

WATER CONSERVATION, KANSAS

This research program is designed to develop and disseminate technical and economic information on the efficient use of water for irrigated crop production in western Kansas. The following objectives comprise this program for the sixth year of the project:

1. Develop regression models to estimate the longevity of subsurface drip irrigation systems using calculations of annual system performance deterioration based on 13 years of operating pressures and flow rates;

2. Evaluate utilization of livestock effluent with subsurface drip irrigation and its effect on water redistribution and corn water use patterns;

3. Develop best management practices for nitrogen fertigation using subsurface drip irrigation systems for corn;

4. Estimate the long run economic impacts of irrigation efficiency improvements for irrigated corn, wheat, and grain sorghum in the farm sector and affiliated sectors of the High Plains economy;

5. Disseminate irrigation research information and best management practice recommendations to Kansas irrigators through a series of extension bulletins and updates based on research-based information.

Results from a 4-year study were summarized into a Best Management Practice for nitrogen fertigation for corn using subsurface drip irrigation on deep, well-drained, loessial silt loams in western Kansas. Corn yield, crop nitrogen uptake, and water use efficiency all plateaued at the same level of total applied nitrogen, 160 pound per acre nitrogen fertigation rate, with an average yield of 213 bushels per acre. The results emphasize that high-yielding corn production also can be efficient in nutrient and water use. Using earlier studies as a guide, a new study was initiated in 1997 to use the best management practice of daily subsurface drip irrigation with periodic additions of nitrogen fertigation. Results from 1997 showed that reducing the irrigation capacity from full irrigation to 50 percent irrigation did not reduce yields. Corn yields averaged an extremely high 277 bushels per acre for these treatments. This sub-study was initiated as a result of the changes in the Federal farm program which allow greater planting flexibility. These changes removed the need of irrigators to protect base acreages, so economic efficiency will be a strong determinant in water/land allocation strategies. This sub-study along with economic and system longevity analyses will be continued in 1998.

The principal researcher indicates that corn is the principal irrigated crop in Kansas and throughout the Great Plains. The principal researcher believes any realistic attempt to address overdraft of the High Plains Aquifer must address improvements in irrigation efficiency in corn production. The most common irrigation methods are furrow and sprinkler irrigation. The need to conserve water has focused attention on more efficient alternatives such as subsurface drip irrigation. This research will be of particular significance within the state and region. However, it also has national and international applications as advanced irrigation systems, such as subsurface drip irrigation, will be needed to improve irrigation water use efficiency in the next century.

The research goal is to determine the feasibility of subsurface drip irrigation and other alternative irrigation systems in western Kansas to sustain irrigated corn production to support the beef feedlot industry. The project also supports an educational effort through collection and dissemination of information on efficient irrigation methods. Subsurface drip irrigation acreage is increasing in Kansas and farmers are obtaining results on their own farms.

The work supported by this grant began in fiscal year 1993 with an appropriation of $94,000; $88,000 in fiscal year 1994; and $79,000 in fiscal years 1995–1998 each year. The total funds appropriated are $498,000. The non-federal funds and sources provided for this grant were as follows: $781,232 state appropriations, $55,205 product sales, $60,907 industry and miscellaneous in 1991; $868,408 state appropriations, $37,543 product sales, $35,484 industry and miscellaneous in 1992; $833,324 state appropriations, $54,964 product sales, $144,225 industry and miscellaneous in 1993. Amounts for other fiscal years are not available.

The research is being conducted at Kansas State University. The field portion of the research is being conducted on Research Centers at Colby and Garden City, Kansas. Additional work is being carried out on campus at the Departments of Agronomy and Agricultural Economics in Manhattan, Kansas.

The original anticipated completion date for the project was May 31, 1998. The original objectives of the project appear to be on track for completion by that date. One of the most important objectives of the study is to evaluate longevity of the subsurface drip irrigation systems. These sites are unique to the region and very little information is available on system longevity. Pressing water quality problems of a regional and national scope has necessitated a change in the objectives to developing nutrient management practices under subsurface drip irrigation and utilization of livestock wastewater with subsurface drip irrigation. Additionally, changes in the federal farm program which allow greater planting flexibility has an effect on how irrigators make water/land allocation decisions. Field and economic studies related to allocation strategies, nutrient management and wastewater utilization should be completed in 3 years. The project has been peer reviewed. The reviewers felt the project concept to be valid and the timetable for accomplishments to be on target.

WATER QUALITY

The agency continues support of the national, competitively-awarded grants program as part of the Department's Water Quality Initiative. This program supports research to investigate the impacts of non-point source pollution from agriculture on water quality, and to develop improved, sustainable agricultural practices and systems that protect the environment and are economically profitable. Also, this program supports research on five Management Systems Evaluation Area projects as part of the Midwest Initiative on Water Quality to develop new farming systems that protect water quality, with research located at ten sites throughout the Corn Belt. This program is conducted jointly with the State Agricultural Experiment Stations, the U.S. Department of Agriculture's Agricultural Research Service and Natural Resources Conservation Service, the U.S. Environmental Protection Agency, the U.S. Geological Survey, extension specialists, and other Federal, State, and local agencies. The water quality grants have supported more than 300 research projects across the country. In fiscal years 1996 and 1997, funds were awarded to the five Management Systems Evaluation Areas projects in the Midwest to continue the water quality systems research started in 1990. In 1996, new projects were initiated as Agricultural Systems for Environmental Quality. The new projects focus on watershed-scale agriculture production systems that reduce pollution of soil and water while maintaining productivity and profitability.

The public is concerned about the possible risks to the environment, to soil quality, and to water quality resulting from the use of agricultural chemicals. Improved methods of detection of very minor amounts of chemicals in water have made the public, farmers, and policymakers more concerned about the use and management of these agricultural chemicals and wastes, while meeting the challenge of maintaining the efficiency and productivity of agricultural production systems. Water quality continues to be of high priority at local, regional and national levels. Results from the research are providing technologies to reduce pollutants, guidelines for site-specific farming and improved farming systems.

The original goals of the program were to determine the extent to which agriculture has impacted groundwater quality, and to develop new and improved, cost effective agricultural systems that enhance ground water quality. During the past 3 years, focus and allocation of resources have increased for surface water quality. Major progress has already been made on these goals. Examples of some of the results of recently completed research include the following:

1. Ohio's Management System Evaluation Area project has identified agricultural systems components that maintain profitability and minimize groundwater impact of farming on the bottomlands of the Scioto Valley.
2. Nebraska's Management System Evaluation Area indicates that irrigated corn can be produced profitability with less water and nitrogen than most farmers apply.
3. Ohio's Lake Erie Agricultural Systems for Environmental Quality project, along with other State and Federal projects, is making excellent progress in reducing phosphorus loading in two major watersheds that discharge into Lake Erie. Watershed phosphorus budgets indicate that the net annual accumulation of phosphorus in the Maumee watershed has dropped from 23,000 metric tons to 2,600 metric tons. Farmers are no longer applying "buildup" levels of phosphorus to their fields—a major cultural change.
4. In Indiana, the Indian Creek and the Little Pine Creek Agricultural Systems for Environmental Quality watersheds, located near West Lafayette, are providing data from 22 stations to test and calibrate models for water quality management.
5. In North Carolina, a 7-acre wetland is effectively removing nitrates from the runoff and drainage of a 950-acre watershed during the warm season; a Site-Specific Farming workshop was held at Greensboro, North Carolina, and attracted some 200 participants and several industrial and educational displays have been developed for the Agricultural Systems for Environmental Quality project.

The work under the Water Quality Program began in fiscal year 1990 with an appropriation of $6,615,000. The subsequent appropriations were as follows: $8,000,000 in fiscal year 1991; $9,000,000 in fiscal year 1992; $8,950,000 in fiscal year 1993; $4,230,000 in fiscal year 1994; and $2,757,000 in fiscal years 1995–1997; and $2,461,000 in 1998. A total of $47,527,000 has been appropriated for the Special Research Grants Water Quality Program. The non-federal funds in support of the Water Quality program, provided by state appropriations, industry, product sales, and other local sources, have averaged approximately $1,000,000 per year since the program began in 1990.

Funds provided under the Water Quality Program have been awarded to institutions in virtually every state, so work is being carried out in all parts of the country. The Management System Evaluation Area projects of the Midwest Initiative on

Water Quality areheadquartered in Iowa, Minnesota, Missouri, Nebraska, and Ohio, with satellite locations in North Dakota, South Dakota, and Wisconsin. Three new projects located in Indiana, North Carolina and Ohio were initiated in fiscal year 1995.

The original goals of the Department's Water Quality Research Plan were to: (1) assess the seriousness and extent of agriculture's impact on groundwater quality, and (2) develop new and improved agricultural systems that are cost effective and enhance ground water quality. These original goals have been met; however, water quality programs need to have a long-term focus. The physical processes that link production practices to water quality, and the socioeconomic processes that characterize adoption can both be of long duration. The adoption process, from first learning about a practice through implementation, can take years. While assistance is designed to speed up this process, overall progress can still be slow. Therefore, adequate resources must be made available for an extended period of time to ensure successful completion of the project.

The original project was developed for 5 years with the expectation that it would be reviewed and possibly extended beyond the 5-year period if warranted. The 1995 review of the program identified a need for increased attention to surface water quality problems. In 1996 and 1997, new water quality problems emerged—hypoxia, pfiesteria, etc.—which required renewed efforts. The research funded under the Special Research Grants Program has produced significant progress in understanding the impacts of agricultural practices on surface and groundwater pollution, and in developing improved agricultural systems that are economically and environmentally sustainable. Implementation of some of these improved agricultural systems is already underway in a number of states. The focus over the next 5 years will be on developing and implementing agricultural systems that reduce the nutrient and contaminant loadings in the waters and watersheds.

An external review team evaluated the Management System Evaluation Areas and associated component projects in 1995. All Management System Evaluation Area projects have an impressive record of successfully implemented interdisciplinary teams to study water quality problems. A major conference on Management System Evaluation Area and Agricultural Systems for Environmental Quality results is being planned for 1999.

WEED CONTROL, NORTH DAKOTA

The project is designed to reduce the environmental pollution caused by the extensive usage of herbicides for weed control and provide growers with environmentally safe weed control systems. The present project addresses crop production practices; weed biology and herbicide resistance; and efficient herbicide usage. In crop production practices, systems experiments have been established at three locations that include crop rotation, tillage, seeding method and timing. These variables are incorporated into sustainable, reduced tillage and conventional systems. Results being monitored include the effect of weed control intensity on long-term weed infestations and economic returns. The emphasis in weed biology research is with kochia, wild oat, and green foxtail that are herbicide resistant. In efficient herbicide usage, several factors are being studied such as application methods to improve weed retention of herbicides and weed-detecting sprayers to treat only areas where weeds are present.

The research addresses new methods to control weeds using systems control with multi-year, multi-crop rotations, reduced pesticide applications, that better simulate a typical on-farm sequence than short-term grants. Some variables included in the research are reduced pesticide applications and techniques to enhance herbicide efficacy. The original goal was to develop new, efficient weed control methods. To accomplish this, long-term field experiments have been initiated to obtain basic crop-weed biology and production system information. The first three years of the rotation experiments have been completed in 1993 through 1995. Changes in weed populations were beginning to occur in 1995 and the environmental conditions were atypically wet during these three years; these observations support the need to complete at least two cycles of the rotation for a total of at least eight years to obtain reliable scientific information. The improved efficiency of weed control method has developed adjuvants to overcome the antagonism of salts, which naturally occur in water and reduce the efficacy of some herbicides. Another approach is adjuvants to reduce the herbicide rate required and/or to improve their performance consistency. Kochia genetic lines have been developed that are homozygous for resistance to various studies to determine inheritance and possible spread of herbicide resistance. Fields are being monitored for the development of kochia resistance to dicamba. A better understanding of how herbicide resistant weeds occur in a population should

be useful to developing methods to prevent herbicide resistance from becoming an unmanageable problem.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was $500,000 per year; $470,000 in fiscal year 1994; and $423,000 per year in fiscal years 1995 through 1998. A total of $3,162,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: no matching in 1991; $27,030 state appropriations in 1992; $48,472 state appropriations in 1993; $41,969 state appropriations in 1994; $71,847 state appropriations in 1995; and an estimated $70,000 state appropriation in each of the fiscal years of 1996 and 1997.

Research is being conducted at North Dakota State University. The original anticipated completion date was a minimum of 5 years, with an additional 5 years currently being projected. The original objectives have been satisfactorily met, but the research with biological traits of herbicide-resistant weeds require more time, depending upon whether the traits prove to be simply inherited or involve multiple genes with a complex inheritance. The anticipated completion date of the additional and related objectives is 2001. Each year the grant is peer reviewed and reviewed by CSREES's senior scientific staff. The review indicated progress in achieving the objectives.

WHEAT GENETICS, KANSAS

This project provides partial support for the Wheat Genetics Resource Center at the University of Kansas, which focuses on collection, evaluation, maintenance and distribution of exotic wheat related germplasm needed to develop new wheat cultivar resistant to disease, insects and environmental stress. The principal researcher believes most cultivated varieties of wheat are derived from common sources. They lack the rich genetic diversity needed to develop resistance to diseases, insects and environmental stress. The replacement of genetically rich primitive cultivar and land races by modern, more uniform cultivars all over the world is causing erosion of wheat germplasm resources. New pests or those that have overcome varietal resistance pose a constant threat to the Nation's wheat production. Genetic resistance often resides in wild relatives of wheat. The researchers believe this program, which was established in Kansas, is providing service to wheat breeders nationwide.

The original goal of this research was to enhance the genetic diversity available to wheat breeders nationally and internationally by collecting, evaluating, maintaining and distributing germplasm derived from wild relatives of wheat. To date 25 germplasm releases have been made containing new genes for resistance to such pests as Hessian fly, greenbug, leaf rust, soilborne mosaic virus and Russian wheat aphid. Germplasm stocks with resistance to leaf rust and powdery mildew are under development. Evaluation of germplasm for important resistance genes was carried out by Center scientists and cooperating institutions. The Center filled 30 requests from U.S. wheat breeders for seed from the germplasm collection and 57 requests for seed of germplasm releases, as well as large numbers from international breeders.

Work supported by this grant began in fiscal year 1989. Appropriations were for fiscal year 1989, $100,000; fiscal year 1990, $99,000; fiscal year 1991, $149,000; fiscal years 1992–1993, $159,000 per year; fiscal year 1994, $196,000; fiscal years 1995–1997, $176,000 each year, and $261,000 in fiscal year 1998. A total of $1,651,000 has been appropriated. The nonfederal funds provided for this grant were as follows: $493,285 state appropriations, $31,414 product sales, and $84,610, other non-federal in 1991; $414,822 state appropriations, $14,259 product sales, and $102,086 other non-federal in 1992; and $533,848 state appropriations, $32,297 product sales, and $163,937 non-federal in 1993, $468,960 in 1994; $563,671, nonfederal funding for 1995, $457,840 of non-federal support for 1996 and $495,820 in 1997.

This research is being conducted at Kansas State University by the Wheat Genetics Resource Center. The collection, evaluation and enhancement of Wheat germplasm is a continual process. Therefore this project does not have a defined completion date. This Special Grant has not been subjected to a comprehensive review. However, each annual proposal is peer reviewed at the institution and reviewed by CSREES scientists.

WOOD UTILIZATION RESEARCH

The research includes: meeting environmental objectives in timber harvesting and forest products manufacturing; exploiting pesticides developed from forest trees; wood machining; reduced chemical needs for pulping and bleaching of paper; helping

small and mid-sized wood products companies remain or become competitive in the global economy; assessing the impact of international standards adoption on the demand for certified wood products; and developing new products from wood and recycled materials. Each Center has a somewhat different procedure for awarding grant monies to individual projects.

Four research centers conduct research to improve the utilization of species that grow in their regions; i.e., western conifers, southern pines, Lake States hardwoods, and northeastern forests. The other two research centers conduct research in machining of wood and incubator technology transfer. Wood industry incubator work contributes to rural development of local economies. The forest products industry ranks among the top ten manufacturing employers in 46 of the 50 States. Many local economies are dependent on these jobs.

The goal is to generate new knowledge that will benefit the forest industry. Additional emphasis has been placed on environmental stewardship, resource extension, technology transfer, and scientist education. Extending the resource benefits forest ecosystems and increases the competitiveness of the forest products industry. Consumers benefit from more efficient production. Hand-held calculator programs developed by this research have resulted in savings of nearly $1,000,000 to woodworkers. Research has reduced the cost of cleanup of superfund sites by tenfold due to the use of biodeterioration technology. Systems analysis of woodworking operations has allowed managers to improve the efficiencies of operation. Improvements in membrane pressing of cabinet doors has improved production and product quality. The research developed a dielectric wood defect detection system to improve automated production systems. Research developed control of emission of volatile organic compounds into the atmosphere during drying and pressing of lumber through microbial degradation of contaminants in an air stream. Research has found ways to recycle used treated wood into usable commodities.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, $3,000,000; fiscal years 1986 through 1989, $2,852,000 per year; fiscal year 1990, $2,816,000; fiscal years 1991 and 1992, $2,852,000 per year; fiscal year 1993, $4,153,000; fiscal year 1994, $4,176,000; fiscal years 1995 and 1996, $3,758,000 per year; and fiscal years 1997 and 1998, $3,536,000 per year. A total of $45,845,000 has been appropriated.

Mississippi State University non-federal funds were: State appropriations, $2,498,800, $2,178,725, $2,353,225, $2,331,691, $2,650,230, $2,778,535, and $2,582,617 for 1991, 1992, 1993, 1994, 1995, 1996, and 1997, respectively. In addition, industrial funds averaged $667,700 for the 5 years from 1993 to 1997 in support of the Mississippi Forest Products Laboratory. Oregon State University state appropriations were: $1,337,962, $1,394,304, $1,256,750, $1,252,750, $1,417,755, $1,117,000, and $1,100,000 for 1991, 1992, 1993, 1994, 1995, 1996, and 1997, respectively. Estimated non-public support averages $500,000 per year. Michigan State University non-federal contributions for 1997 totaled $580,500. Three new locations were added in 1994: University of Minnesota-Duluth non-federal match was $590,000, $550,000, $560,000, and $371,930 for 1994, 1995, 1996, and 1997; North Carolina State University was $126,000, $165,000, $135,000, and $163,216 for 1994, 1995, 1996, and 1997; University of Maine was $600,000, $445,723, $459,100, and $477,464 for 1994, 1995, 1996, and 1997.

There are six locations. The initial three—Oregon State University, Mississippi State University, and Michigan State University—were joined by the University of Minnesota-Duluth, North Carolina State University, and the University of Maine in fiscal year 1994. The original objective was to build and maintain three strong regional centers of wood utilization research. These centers have been established and three more centers have been added. Projects begun in 1998 will be completed by 2002.

On site reviews of centers are conducted on a rotating basis. Each center's plans are reviewed yearly or more frequently. Progress reports are reviewed yearly. Center directors last met together for joint planning in June 1996. Centers all have advisory committees or research committees which meet periodically. We conduct informal on-site reviews periodically. The Minnesota and Oregon sites were visited in 1996. The North Carolina site was visited in 1997. A Departmental panel reviewed the original three centers in 1992 and 1993. At that time, the original objectives were broadened to include more consideration for environmental concerns. The centers have increased their focus on helping industry meet environmental objectives by conducting research leading to sustained timber production; extending the timber supply through improved processing; developing new structural applications for wood; and developing wood extractives to substitute for pesticides, preservatives, and adhesives.

WOOL RESEARCH

The overall goals for this research are to develop objective measures of wool, mohair, cashmere and other animal fibers to improve the quality of wool products while enhancing the profitability of the U.S. sheep and Angora goat industries. Specific objectives include: develop and evaluate measurement techniques for rapid objective evaluation of wool, mohair, cashmere and other animal fibers; increase the use of objective measurements to increase fiber production, quality and income to producers; and increase consumer acceptance of fabrics made from these fibers.

Collaboration exists among researchers in Texas, Wyoming, and Montana associated with this grant and other federal, university and industry scientists to assure responsiveness to the needs of those involved in wool and mohair production, marketing, and processing. The sheep and goat industries and the principal researchers believe that this research to be of national, regional and local need. The research on wool, conducted by means of this grant, represents the only research efforts in the U.S. focused on improving the efficiency of measuring and assuring wool, mohair and cashmere quality for garments made from these fibers.

The overall goal for this research is to develop objective measures of wool, mohair, cashmere and other animal fibers with a focus on improving the efficiency of determining the quality of products made from these fibers while enhancing the profitability of the sheep and Angora goat industries. Computer software programs have been developed to provide an automatic image analysis system to make rapid and inexpensive measurements of the average diameter and distribution of animal fibers as well as other fiber properties including fiber length and color. Each of these properties are used for grading and processing to determine ultimate softness, durability, dye characteristics, comfort, and garment price.

Grants have been awarded from appropriated funds in the amount of $150,000 for fiscal years 1984–1985; $142,000 per year for fiscal years 1986–1989; $144,000 for fiscal year 1990; $198,000 for fiscal year 1991; and $250,000 per year for fiscal years 1992–1993; $235,000 for fiscal year 1994;, $212,000 per year for fiscal years 1995–1997, and $300,000 for fiscal year 1998. A total of $2,881,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $150,913 state appropriations, $11,800 product sales, $5,817 industry, and $3,556 miscellaneous in 1991; $111,394 state appropriations, $25,451 product sales, $41,442 industry, $3,068 miscellaneous in 1992; and $152,699 state appropriations, $39,443 product sales, $40,804 industry and $3,556 miscellaneous in 1993; $150,094 state appropriations, $35,284 product sales, $36,484 industry and $3,556 miscellaneous in 1994; and $67,345 state appropriations, $10,000 product sales; $34,325 industry contributions in 1995; $39,033 non-federal support in 1996, and $174,486 non-federal support in 1997.

The research is in progress at the Texas A&M University, Texas Agricultural Experiment Station at San Angelo, the University of Wyoming at Laramie, and Montana State University at Bozeman. The original objectives to improve the efficiency and profitability of wool, mohair and cashmere production and marketing are still valid. Specific objectives for individual laboratories and experiments are continually revised to reflect the changing research priorities for the wool, mohair, and cashmere industries and to satisfy consumer demands for products from these fibers. It is anticipated that five years will be required to complete the current research.

Each year grant proposals are peer reviewed. The principal investigators meet annually to evaluate progress and re-evaluate research priorities according to industry needs. Because the research encompassed in this grant is a component of a regional research project, accomplishments are reported annually to scientific peers and representatives from the sheep, goat, wool, mohair, and cashmere industries. In addition, the overall regional research project is peer reviewed every third year. Annually, an agency representative reviews grant proposals and periodically visits the research facilities and assesses progress. The most recent visit was in May of 1994 whereby it was determined that the stated objectives were being addressed and that they were consistent with industry needs. An external review of the overall program is being planned by the agency for May of 1998. Program effectiveness and relevance to industry needs will be assessed by experts representing the sheep and goat industries and peers from the scientific community.

AGRICULTURAL DEVELOPMENT IN THE AMERICAN PACIFIC

The Agricultural Development in the American Pacific (ADAP) project is a primary means for Land Grant research, extension, and instruction programs of the five participating institutions—American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam and University of Hawaii—to collaborate and cooperate to enhance their impact on Pacific tropical agri-

culture and communities. ADAP is a mechanism to address common regional client-based issues while maintaining cultural, rural, economic and environmental integrity. This special research grant is awarded noncompetitively to a program planned and approved by the five involved land grant institutions.

The principal researcher believes the five participating institutions are geographically dispersed yet facing many similar issues which can be served through extensive networking and communication. In addition to a capacity building degree studies program for bachelors, masters and doctoral students, ADAP in 1996 opened a new area in faculty/staff development to improve institutional capability and credibility. In 1997, each ADAP institution self-determined their best means for electronic communications. ADAP brings together the five Deans/Directors to discuss agriculture and human resources issues facing isolated, tropical ecosystems in the Pacific, and to plan and implement activities to address those issues. Priorities are categorized in three areas: sustainable systems, collaborations/partnerships, communication systems. Activities range from joint/collaboration efforts to overcome taro leaf blight in the Pacific, to seeking recognition of Pacific tropical agriculture by NASULGC.

ADAP's original goals are to develop human resources within the institutions, to more effectively manage agricultural programs within and among the institutions, and to focus resources available on agricultural issues of the Pacific. Projects include: animal health survey, livestock waste management, dietary guidelines for Pacific foods, youth-at-risk assessment, and market information collaboration with "state" Departments of Agriculture.

This work has been underway for seven years with an annual appropriation of $650,000 to the former Extension Service. In fiscal year 1994, an appropriation of $608,000 was made to CSREES to continue the ADAP program. The fiscal year 1996, 1997, and 1998 were $564,000 each year. The appropriation total to CSREES is $2,300,000. Non-federal funds are not provided. Unspecified in-kind support, such as facilities, equipment and administrative support, are provided by each institution and, in some specific projects, by non-ADAP collaborating institutions.

This work is being carried out by American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and the University of Hawaii. The ADAP program has been gradually achieving original program objectives, particularly in the areas of improvement in institutional capacity and communications.

A formal review of the ADAP program was conducted July 1–10, 1997, and included visits by review team members to American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam and University of Hawaii. The review focused on the degree of achievement of goals set forth in the five-year 1992 strategic plan. Recommendations were made to improve the structure and effectiveness of delivery of programs to address Pacific tropical agriculture issues for island communities. At the conclusion of the review, ADAP incorporated review recommendations, and prepared and adopted the new, five year 1997 strategic plan.

AGRICULTURAL WASTE UTILIZATION, WEST VIRGINIA

The Poultry Waste and Energy Recovery Project, commonly referred to as the POWER Project, applies American technology to a traditional European waste treatment technology. It is a documented demonstration of a high-rate resource recovery system that converts municipal and agricultural waste into valuable energy and odorless, pathogen-free products. The projects main research goal is to reduce the nutrient run-off to the Potomac River. The research will also assess the biological and environmental value of the fertilizer produced.

The current need for this technology is local, national, and international. The beneficiaries of this technology will be both the people and the environment anywhere in the world where problems of food, fertilizer, and energy shortages are currently in conflict with the preservation of environmental quality. The direct benefits include enhanced and expanded waste water treatment capacity and municipal solid waste capacity, creation of new jobs, and revenue from by-products and water quality improvement.

The research goal will go beyond the testing of waste materials in the digester and proceed with a program to compare the microbiological loading of rivers, where known environmental pollution is measurable, and where the total viable counts of the rivers could be determined in real-time with a bioprobe. Specific microbial analysis may be able to correlate specific microbial counts with either inorganic nutrient pollution or organic pollution from farming activities.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $360,000. This is a new project in fiscal year 1998 and specific information on the source and amount of non-federal funding for this project is not yet available.

Research will be conducted at Moorefield, West Virginia. The anticipated completion date of the original objectives is approximately two years. Since this is a new project in fiscal year 1998, the agency will conduct the initial review of this project when the proposal is submitted to CSREES for funding.

NATIONAL ALTERNATIVE FUELS LABORATORY

Research addressed the effects on fuel economy and power output of ethanol addition to petroleum blendstocks, environmental effects of ethanol addition to conventional and reformulated gasoline, and development and demonstration of an economical, ethanol-based, biodiesel-containing alternative to leaded aviation gasoline. Information dissemination activities included promoting ethanol fuels in the Red River Valley and the upper Midwest through speeches, presentations, and published articles.

The researchers believe it is crucial to U.S. energy security that renewable domestic fuels are represented accurately in the marketplace by easily accessible unbiased scientific data on their performance and environmental effects. These data are generated and publicized through partnerships developed between the research organization and both public and private sectors. The regional need for the research is derived from recent and ongoing disease problems and world market demand trends with barley and wheat, in which North Dakota ranks first and second, respectively, in U.S. production. Current effort is focused on implementing a cooperative project to build a biomass-to-ethanol plant that would spur market-driven crop diversification based on the need for regionally-optimized feedstocks.

The original goal was to develop a database of at-the-pump-sampled conventional, reformulated, and alternative transportation fuels sold in the upper Midwest and throughout the United States to enable current and historic comparisons of different gasolines. The database provides a means of diagnosing and tracking fuel performance and environmental effects resulting from different fuel formulations, additives, and contamination problems. The database is used in conjunction with another primary objective, which is to provide consumers and potential alternative fuels marketers with information on conversion of crop residues, agriculture processing wastes, high-cellulose-content municipal wastes, and other biomass materials to alternative fuels.

The work began in fiscal year 1991 and was, in part, sponsored by this grant. Appropriations in fiscal years 1991–1993 were $250,000 per year. In fiscal year 1994, it was $235,000; $204,000 in fiscal year 1995; and $218,000 per year in fiscal years 1996, 1997, and 1998. A total of $1,843,000 has been appropriated. In fiscal year 1997, approximately $140,000 in non-federal collaborative research funding was secured by project personnel. A total of $985,000 in non-federal funds have been allocated toward performance of program objectives over the duration of this grant. For fiscal year 1994, non-federal funding was $105,000. Fiscal year 1995 and 1996 totals were $50,000 and $60,000, respectively. Over fiscal years 1991–1993, non-federal funding was $630,000.

The University of North Dakota Energy and Environmental Research Center located in Grand Forks conducts the work. The completion date for the original objectives was April 30, 1992. That work was completed, and its results published. In 1995, the program scope was expanded and industry collaborations increased. Development of an ethanol-from-biomass production facility and commercialization of bio-based vehicle and aviation fuels could be completed within five years, by fiscal year 2003.

In July 1996, the U.S. Department of Agriculture conducted an on-site evaluation. Based on its ability to collaborate with industry and its performance of much needed biofuels development work, the program was given a favorable review. Research objectives, including those involving dissemination of research results to the public and performance of unbiased scientific research on energy and environmental issues impacting alternative fuel development and use, are being met. A summer 1998 evaluation is planned.

ANIMAL WASTE MANAGEMENT, OKLAHOMA

This research project is designed to develop sustainable, environmentally-safe, and ecologically-sound best management principles and practices for beneficial animal waste applications for "High Plains Agriculture" in support of rural economic development through a Federal-state-local partnership. Emphasis will be placed on

the rapidly expanding hog industry in the semiarid region, but information gained will also be applicable to the beef and dairy industries.

The Oklahoma Panhandle is the most productive agricultural region in the state with agricultural receipts in excess of $800 million. Nationally, Texas County in the Panhandle ranks number one in the state and in the top 15 of all counties in the U.S. relative to cash receipts. The rapid expansion of the hog industry in this semiarid region will only strengthen that position. The rapidly expanding swine industry was projected to add $650 million in pork and value added products in Oklahoma in 1997 with the slaughter and processing of over 4 million hogs per year. Information gained from this study will provide the data base to develop best management practices to maximize beneficial nutrient use and minimize nuisance odor in semiarid soil/cropping and rangeland production systems. Practices developed will have significant implications regionally, nationally, and internationally. The semiarid agro-ecosystem is unique with climatic conditions consisting of low rainfall that promotes both dryland and irrigated agricultural practices; extremes in high and low temperatures; soils characterized with alkaline pH, low in organic matter, and high in calcium carbonate. This unique agro-ecosystem makes information gained from more humid environments inapplicable.

The original goal of this research is to develop best management practices that will: protect ground water supplies from pollution of nutrients, salts, and pathogens; maintain air quality; and minimize odors derived from the entire hog-house, lagoon, land-application, soil-cropping and or rangeland production system, thus maintaining the quality of life in the rural sector.

The work supported by this grant begins in fiscal year 1998 and the appropriation for the fiscal year 1998 is $250,000. Specific information on the source and amount of non-federal funding for this project is not yet available.

Research will be conducted at The Oklahoma Panhandle Research and Extension Center located in Goodwell, Oklahoma. The Center will provide the land area and a portion of the facilities and equipment necessary to conduct the major portion of the study. Other study sites will be developed on private land in cooperation with hog operations in the panhandle region. This is a new project and an application has not yet been submitted. The agency will conduct the initial review of this project when the proposal is submitted to CSREES for funding.

CENTER FOR AGRICULTURE AND RURAL DEVELOPMENT

The research provides current economic information on international trade in agriculture and analyses of the implications of trade policy alternatives on the agricultural sector of the United States and other countries.

According to the proposal, trade negotiations and agreements are of national concern to policymakers, farmers, and agribusiness industries because of the implications for maintaining or opening markets and establishing improved terms of trade and prices. Typical agreements are extremely complex, requiring analysis by specialists to determine outcomes and to provide objective and accurate information to those impacted by such agreements. The goal is to assess and evaluate various proposals affecting agricultural trade, to provide analytical support to the Office of the U.S. Trade Representative, and to provide information to farmers and agribusiness firms on the competitive implications of such agreements. Theoretical studies and empirical and descriptive analyses of policy issues and technical problems pertaining to the Uruguay Round of negotiations were completed and provided to negotiators and the agribusiness community. Studies included the development of international trade models and assessments of trade options for meat, dairy, feed and cereal grains, oilseeds, and other commodities; impacts of the agreement upon selected countries; and reforms needed for compliance. Analyses included determination of the value and implications of export subsidies, import protection, and internal support mechanism and levels. Knowledge developed in this phase is now being used to monitor the effects of the Uruguay Round Agricultural Agreement (URAA).

This grant supports six projects focusing on URAA and World Trade Organization (WTO) monitoring and implementation problems; implications of the URAA and WTO for Eastern Europe, Baltic, and the Newly Independent States; development of a model to assess the North American Free Trade Agreement and its linkages with the General Agreement on Tariffs and Trade; trade implications of U.S. food and development aid in developing countries; integration of China into world agricultural markets; and special projects as requested for the U.S. Trade Representative's office.

This research program was initiated in fiscal year 1989. Grants have been awarded from funds appropriated as follows: fiscal year 1989, $750,000; fiscal years 1990 and 1991, $74l,000 per year; fiscal years 1992–1993, $750,000 per year; fiscal year

1994, $705,000; fiscal year 1995, $612,000; fiscal year 1996, $655,000; and, for fiscal years 1997 and 1998, $355,000 each year. A total of $6,414,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: $111,210 State appropriations and $175,616 miscellaneous for a total of $286,826 in 1991; $113,779 State appropriations and $173,117 miscellaneous for a total of $286,896 in 1992; $120,138 State appropriations and $164,707 miscellaneous for a total of $284,845 in 1993; $161,673 State appropriations and $32,000 miscellaneous for a total of $193,673 in 1994; and $161,000 State and $30,000 miscellaneous for a total of $191,000 in 1995; $70,000 State appropriations and $44,000 for a total of $114,000 in 1996; and $60,325 in State appropriations and $61,500 in miscellaneous funds for a total of $121,825 in 1997. Information is not yet available on non-federal funding in 1998.

The research program is carried out by the Center for Agriculture and Rural Development at Iowa State University and university researchers anticipate that the work should be completed in 1998 with analysis of the final agreement of the Uruguay Round and related trade agreements and dissemination of these results. An informal evaluation of this project takes place as a part of each annual project review and approval process.

CENTER FOR HUMAN NUTRITION, MARYLAND

This research aims to assess the severity and causes of obesity among inner city, suburban, and rural school children in the state of Maryland. Specifically, the research will provide information on the role of food and physical activity as factors potentially leading to excess weight in children and adolescents. According to the latest national surveys, there are over 90 million overweight adults in the U.S. It is believed that weight gained during childhood and adolescence poses the greatest risk for an adult to become permanently overweight. Obesity, in turn, contributes to important chronic conditions such as diabetes, hypertension, and heart disease. It is acknowledged that the prevalence and causes of obesity vary in different social and geographic settings. Understanding this information is essential for the implementation of nutrition education programs and prevention activities.

The goal of this research will be to determine the prevalence of obesity, and will attempt to identify risk factors in children attending public schools in Baltimore City, Baltimore County, and Washington County in Maryland. The study will provide information on dietary energy intake, food preferences, and physical activity in children and adolescents.

The work supported by this grant began in fiscal year 1998 with an appropriation of $150,000. The projected non-federal funds and sources provided for this grant are as follows: $56,000 university, $23,000 industry, and $7,000 miscellaneous.

Research will be conducted at the Center for Human Nutrition, John Hopkins School of Public Health, in Baltimore, Maryland and the anticipated completion date is 2000. The grant proposal for fiscal year 1998 will be subject to extensive peer review.

CENTER FOR NORTH AMERICAN STUDIES, TEXAS

The purpose of this grant is to develop linkages with educational and other institutions in Mexico and Canada to share data and faculty, conduct research identifying trade opportunities and marketing problems, conduct policy analysis, and develop a broad range of training programs preparing agricultural/agribusiness firms for international marketing opportunities. The research proposal received a merit review at the university prior to submission to CSREES. The program director believes that citizens of the United States, Mexico and Canada have some similar concerns about the impact of the North American Free Trade Agreement (NAFTA), and that new, innovative approaches involving international cooperation are needed to assess and evaluate these issues. Research and training are needed to provide information to evaluate alternatives for expanding U.S. exports and to resolve potential social, economic, and environmental conflicts.

The goal is to promote strong agricultural ties among the three North American countries, ensure the continued competitiveness of U.S. agriculture, and foster greater cooperation among the three countries in resolving critical agricultural issues of common interest. As a result of this project, cooperative study, research, policy analysis, and training programs have been developed and presented to U.S. producers and agribusiness managers, reaching over 2,600 people regarding trade opportunities in Mexico, impacts of expanded trade on selected agricultural sectors, and the procedures of international marketing. The Center recently co-sponsored the Tri-National Research Symposium, "NAFTA and Agriculture: Is the Experiment

Working?" in San Antonio with 215 participants, of which 100 were from Mexico. The proceedings are available electronically through the Symposium Web page on the Internet. Research comparing the competitiveness of major agricultural production sectors is focused on Mexico's dairy, livestock, meat, feed grain, and fresh vegetable industries. Information databases on North American agriculture are being built to support the Center programs and are accessible on the Web. The electronic database on NAFTA currently contains over 2,400 articles from major U.S., Canadian, and Mexican publications. A study of trans-boundary trade and environmental linkages found that existing institutions in both countries do not adequately address environmental losses or gains.

Work supported by this grant began with an appropriation of $94,000 in fiscal year 1994; $81,000 in 1995; and $87,000 per year for 1996 through 1998. A total of $436,000 has been appropriated. The non-federal funds and sources provided for this grant are as follows: $39,000 State appropriations in fiscal year 1994; $54,000 in 1995; $60,000 in 1996 and 1997; and $84,500 in 1998.

The program is being carried out at Texas A&M University through the Texas Agricultural Experiment Station in collaboration with other segments of the Texas A&M University System and Louisiana State University Agricultural Center. The original proposal in 1994 was for a period of 12 months. The current phase of the program will be completed in the year 2001.

CSREES performed a merit review of the project in July 1997, as it evaluated the 1997 project proposal, and concluded that progress on all four objectives continued to be good: U.S.-Mexican linkages resulted in a successful conference on NAFTA and some new research projects; potential markets for U.S. dairy and other products in Mexico were completed; impact of eliminating the Canadian Grains Transportation Act was studied; and several training programs were conducted.

DATA INFORMATION SYSTEM QUESTIONS

Cooperative State Research, Education, and Extension Service—CSREES—has funded two major activities, both currently underway, that underlie the design and development of the Research, Education, and Economics Information System—REEIS. A cooperative agreement with the University of Arkansas has been funded to provide national leadership in coordinating the efforts of our university partners in helping us determine appropriate content for REEIS. The University of Arkansas is also providing essential services in managing and coordinating a national Steering Committee responsible for overseeing the overall design, development, testing, and implementation of the Research, Education, and Economics Information System—REEIS. The Steering Committee had its first meeting in June of 1997. It held its second meeting in February 1998 to review progress on REEIS developments to date and to formulate action plans and strategies for future tasks. In addition, work under a contract with a major private sector information technology firm is in progress. The contract calls for conducting a strategic information audit of databases and information practices within the Research, Education, and Economics mission agencies and State partner institutions. Deliverables from the first phase of the audit include an inventory of existing databases currently targeted for inclusion in REEIS, specifications for a comprehensive needs assessment that will identify gaps between current user needs for information, and the ability of exiting databases to satisfy those needs, and specifications for a retrieval language that will assist users in accessing and searching REEIS databases.

USDA's Research, Education, and Economics—REE—mission agencies and their university partners lack a central, integrated, user-friendly electronic information system capable of providing access to thousands of programs and projects for which they are responsible that focus on food, agriculture, natural resources, and rural development. Such an information system is increasingly needed to enable the Department and its partners to readily conduct both comprehensive baseline and ongoing assessments as well as evaluations of research, education, extension, and economic programs and projects. In recent years, this need has become more urgent for several reasons. First, the United States needs a visionary public funded research and development program to produce essential knowledge and innovations for meeting growing competition in a global market—which is largely attributable to the expanding research and development efforts of foreign nations. Second, a comprehensive information system is needed to serve as a primary reference source for development of new research and education projects on such diverse issues as increasing productivity in agriculture and processing, improving the safety and quality of food, and enhancing the sustainability of the environment and rural communities. Third, Federal/State policy makers and administrators are requiring empirical analyses to account for historical, current, and future use of public funds to provide a basis for

redirecting funds to higher priority problems. Fourth, the Government Performance and Results Act (GPRA) has imposed reporting demands which current, decentralized information systems are not prepared to adequately satisfy.

The original goal of this initiative was to develop an information system that can provide real-time tracking of research, extension and education projects and programs; has the capability to communicate vertically between field, State and Federal locations; will enable the REE agencies and their partners to conduct rapid and comprehensive policy assessments and program evaluation analysis; facilitates assessment of technologies and practices employed in extension, education, economics, and research activities at the field and/or regional levels; provides clear and transparent public access to relevant parts of the information; and provides information management tools to enhance the timeliness and accuracy of REE-wide responses to inquiries about program objectives and expenditures.

The first phase of a strategic information audit is underway. To date, a total of 36 REE mission area databases have been targeted as candidates for inclusion in REEIS. Detailed descriptions of each of the databases are the main components of a prototype REEIS database catalog that has been developed and which is intended to serve as an inventory and descriptive, interactive tool for locating information about databases in REEIS. World Wide Web access to the database catalog via the Internet has been demonstrated, and this feature is currently undergoing review and evaluation within the agency, by partner institutions, and by an outside expert as an appropriate, publicly-accessible user interface to REEIS. In addition, specifications for a comprehensive needs assessment as well as specifications for a controlled vocabulary for use in searching databases in REEIS have been prepared and are being submitted to the REEIS National Steering Committee, the REE mission agencies, and State partner institutions for review and comment.

Congress first appropriated $0.4 million for REEIS in fiscal year 1997 to begin planning its design and development. An additional $800,000 was appropriated in fiscal year 1998, for a total of $1.2 million. In fiscal year 1997 the REEIS National Steering Committee was established to provide advice and guidance throughout the development and implementation process. Since its inception, the Committee has met twice, first recommending a plan of action and work specifications for conducting a strategic information audit and comprehensive needs assessment, and second to review and evaluate contract deliverables. The Committee is comprised of both users and producers of Research, Education, and Economics agencies' data and includes program officials, program leaders, and information system managers from USDA and other Federal agencies, and program/project leaders representing partner institutions. Also in fiscal year 1997 a private sector firm was engaged to conduct the first phase of a strategic information audit which is in progress. Specifications are being developed for conducting a comprehensive needs assessment in fiscal year 1998. Results of the needs assessment are expected to form the base of data on which detailed design specifications for a REEIS prototype are to be developed. Nonfederal funding does not apply at this time.

Leadership responsibility for REEIS resides within the CSREES's Science and Education Resources Development division. This provides for effective linkage within the REEIS platform of the Current Research Information System, the Food and Agricultural Education Information System, and appropriate extension databases. CSREES is working closely with all REE mission agencies and with the university system via a cooperative agreement with the University of Arkansas. We hope also to use the Intergovernmental Personnel Act to secure an IPA from another university to carry out REEIS essential management responsibilities. A sizeable effort is currently underway through a contract with a major private sector information technology firm to design, develop, test, and implement REEIS. The first phase of a strategic information audit is presently being conducted by the firm and is expected to form the basis for system design specifications for REEIS. One staff person has been assigned full time to manage and coordinate agency contracting activities and serves as the REEIS technical information program manager.

It is anticipated that REEIS can become operational during the year 2000. The fiscal year 1997 appropriation of $400,000 covered start-up costs such as establishment of a National Steering Committee, preparation and specifications for contracting with an outside firm, contractor selection, pre-award negotiation and, subsequently, pre-design system analyses currently conducted under contract by a major private sector information technology firm. Contract efforts include preparation of an inventory and prototype catalog of REE mission agency databases, a World Wide Web user interface to the catalog, specifications for a comprehensive needs assessment, and specifications for a controlled vocabulary to assist user access to REEIS databases. The $800,000 increase for fiscal year 1998 will allow for implementing, testing, refining, and maintaining the catalog prototype and its World Wide Web

interface, the conduct of the needs assessment, creation and maintenance of a comprehensive data dictionary, and development of detailed specifications for designing and developing the system, including recommendations for in-house hardware, operating system, and platform.

The requested increase for fiscal year 1999 will allow for the development, testing, and refining of the REEIS prototype, and cover operating costs associated with updating and maintaining the REEIS database catalog and data dictionary. Based on the recommendations of the REEIS National Steering Committee, the first year effort included the objective of conducting a strategic information audit as a prerequisite for the development of design specifications. The first phase of the audit is nearing completion, as planned. The conduct of the comprehensive needs assessment comprises the second phase of the audit and is targeted to begin in April, 1998. Results of the assessment are to form the basis for the development of detailed design specifications.

The Research, Education, and Economics Information System meets a high priority national need for an operational, up-to-date and continually responsive national information system. REEIS is being designed to meet the data information needs of all REE agencies and their university and private sector cooperators. It will link data systems on research, education, extension, and economics. To achieve effective response for its users, annual maintenance costs will be ongoing.

Products generated from the first phase of the strategic information audit are currently undergoing review and evaluation by the REE mission agencies, the REEIS National Steering Committee, our State partner institutions, and outside sources. In August, 1997, prior to start of the information audit, a project management plan for conducting the first phase of the audit and specifications for the REEIS database catalog were reviewed internally by a REEIS team of information professionals and program leaders representing each of the four REE mission agencies. The Web-accessible interactive catalog prototype is being demonstrated this week for review and evaluation by the REEIS National Steering Committee, and action plans are being formulated by the Steering Committee to review drafts of additional contract deliverables. The most recent evaluations involved independent reviews by both the REEIS team and the National Steering Committee of draft specifications for a comprehensive needs assessment and a critique of the REEIS catalog prototype by a well-known and highly regarded information technology expert. At the REEIS National Steering Committee (February 25–26, 1998), these reviews will be reported. Evaluations of final specifications of the needs assessment, the REEIS database catalog, and specifications for a controlled vocabulary are scheduled to be completed by March 16, April 15, and May 15, 1998, respectively.

GEOGRAPHIC INFORMATION SYSTEM

The program is designed to transfer evolving geographic information systems technologies to state and local governments and others in the public and private sectors. The current program is being carried out by a non-profit corporation, The National Center for Resource Innovations. The directors and participants of the Center are the sub-contractors who are carrying out the program by working on agro-environmental problems at the national, regional, state and neighborhood levels. They represent a wide spectrum of site-based expertise including four academic institutions, one regional development authority, and one non-profit corporation. A new site at the Southwest Indian Polytechnic Institute has been added by Congress this year. This institutional arrangement has helped fill a role in linking some of the otherwise disparate efforts of agencies and academic institutions to apply them in the now seven regions of the country. This project is needed to transfer relevant technology to state and local governments whose limited training budgets and, sometimes, isolated location make it difficult to use the latest technology. This is particularly true for Native American communities.

The technology developed in the Center program is useful in improving the management of natural resources. While concentrating on issues related to agriculture, the independent, non-profit nature of the National Center for Resource Innovations facilitates linkages across disciplinary and institutional barriers, and makes it possible to use analyses at the state and local levels which were initiated at the federal level. While the early phases of the geographic information system concentrated on building information systems related to rural physical and natural resources, the current challenge is to integrate human economic, social and demographic information in order to better understand the relationship of human communities to the landscape. At the other end of the spatial scale, the role of the public sector in geographic information system-based precision farming technologies, data capture, and information synthesis is the subject of a current study group.

The original goal of this work was to serve as a pilot project for the transfer of geographic information systems technology related to natural resources to local governments. The Center has carried out this function. Economic and biological data are being presented in maps and tabular formats to state and local governments and individuals. The Chesapeake Watershed project has linked national and regional programs with seven state conservation entities in an effort to develop better watershed models and decision support systems. This year, the Center will reach Native American communities using their own distance-learning networks originating at the Southwestern Indian Polytechnic Institute. It is anticipated that the fiscal year 1998 grant will support work under this program through March 1999.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, $494,000; fiscal year 1991, $747,000; fiscal years 1992 and 1993, $1,000,000 per year; fiscal year 1994, $1,011,000; fiscal year 1995, $877,000; fiscal year 1996, $939,000; and fiscal years 1997 and 1998, $844,000 per year. A total of $7,756,000 has been appropriated since the beginning of the program.

For fiscal year 1990 through fiscal year 1997, to date, the work in this program had $5,009,834 in non-federal support. In fiscal year 1990, non-federal support was $714,940 consisting of equipment, databases, and other miscellaneous contributions from foundations, city, and state governments. In fiscal year 1991, non-federal support was $25,000 from county government. In fiscal year 1992, non-federal support was $366,016 from county government, computer companies, and state governments consisting of equipment, software, facilities, and miscellaneous support. In fiscal year 1993, non-Federal support was $713,900 consisting of financial and miscellaneous support from foundations, county and state governments. In fiscal year 1994, the non-Federal support was $713,643. In fiscal year 1995, the non-Federal support was $987,000. In fiscal year 1996, it was $567,173. It was $456,582 in fiscal year 1997. In 1998, it is anticipated that non-federal dollars will exceed $1,000,000.

The National Center for Resource Innovation-Chesapeake Bay is located in Rosslyn, Virginia. This group is working under a cooperative agreement with the U.S. Department of Agriculture's Natural Resources Conservation Service to work with 13 northeastern states. The southeastern center in Valdosta, Georgia, in affiliation with the South Georgia Regional Development Center, has developed a comprehensive plan of the City of Adel as a model for other urban centers in the 10-county region. The southwestern center, in Fayetteville, Arkansas, serves several local governments through its training facilities at the University of Arkansas, basing its technical approach on expertise and past experiences with the Federally-developed system known as GRASS. They have developed pilot projects for some local jurisdictions and state level databases which they have provided online. Central Washington University focuses on training for state planning and on three local governments and the Yakima Nation in the Yakima watershed. The north central center in Grand Forks, North Dakota, in affiliation with the University of North Dakota, focuses on relating real time weather data to other spatial attributes. The University of Wisconsin-Madison, functioning as the Great Lakes center, continues a long history of involvement in the application of this technology at the local level with strong focus on soils/land-use and the institutional aspects of the integration of a new technology. Native American communities will be reached through the Southwestern Indian Polytechnic Institute facilities in Albuquerque, New Mexico.

The original objectives to build institutional frameworks for developing and disseminating geographic and related information to local decisionmakers is constantly evolving. Each site has developed approaches to addressing regional needs for modern technologies, and many innovative applications have been implemented. Technologies, including Internet-based educational and information exchange, have been developed to respond to the Center's customers. The Center has been asked to include these new technologies in order to bring its primarily rural users into new eras of public education and information management.

Proposals have been internally reviewed by Departmental personnel in different agencies. Over the last 3 years, the program has also been externally reviewed by local advisory committees and qualified professionals inside and outside of government. Their various comments and suggestions are sent to the agency for the merit review.

GULF COAST SHRIMP AQUACULTURE

Work under this program has addressed research needs necessary for the development of a U.S. marine shrimp farming industry. Studies have been conducted on growout intensification, prevention and detection of diseases, seed production, and the development of high health and genetically-improved stocks. Performance trials on selected stocks in various production systems have been conducted. Seed produc-

tion systems have reached commercial feasibility. Protocols for viral detection have been improved and have led to the development of specific pathogen free stocks of commercial importance. A number of important viral pathogens of marine shrimp have been identified. Researchers have responded to viral infections that have impacted the U.S. shrimp farming industry. Researchers will intensify efforts aimed at preventing new introductions of exotic viral pathogens. In fiscal year 1998, emphasis will be placed on the industry seed supply, disease control, biosecurity in production systems and the evaluation of shrimp viruses moving through processing and commodity channels.

The principal researcher indicates that there is potential to enhance domestic production of marine shrimp through aquaculture in order to reduce the annual trade deficit in marine shrimp, which is approximately $2 billion. Research could improve the supply of high quality seed, improve shrimp health management, and enhance production efficiency in shrimp culture systems. The U.S. has the opportunity to become a major exporter of shrimp seed and broodstock, and disease control technologies, products and services.

The original goal was to increase domestic production of marine shrimp through aquaculture. Studies have been conducted on growout intensification, prevention and detection of diseases, seed production, and the development of specific pathogen free stocks. Commercially-viable shrimp seed production systems have been developed. Diagnostic techniques for a number of important viral pathogens have been developed. High health genetically-improved stocks are being developed and evaluated under commercial production conditions. Researchers have responded to severe disease outbreaks caused by the introduction of exotic viral pathogens into U.S. shrimp farms. In addition, scientists are currently developing biosecurity protocols to prevent additional introductions of viral disease agents.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, $1,050,000; fiscal year 1986, $1,236,000; fiscal year 1987, $2,026,000; fiscal year 1988, $2,236,000; fiscal year 1989, $2,736,000; fiscal year 1990, $3,195,000; fiscal year 1991, $3,365,000; and fiscal years 1992–1993, $3,500,000 per year; fiscal year 1994, $3,290,000; and fiscal year 1995, $2,852,000; fiscal year 1996, $3,054,000; and fiscal years 1997 and 1998, $3,354,000 per year. A total of $38,748,000 has been appropriated.

The U.S. Marine Shrimp Farming Consortium estimates that non-federal funding for this program approaches 50 percent of the Federal funding for fiscal years 1991–1997. The source of non-federal funding is primarily from state and miscellaneous sources. In-kind contributions from the industry were not included in this estimate, but are substantial as the program is dependent upon industry cooperation to carry out large scale commercial trials.

The work is being carried out through grants awarded to the Oceanic Institute, Hawaii and the Gulf Coast Research Laboratory in Mississippi. In addition, research is conducted through subcontracts at the University of Southern Mississippi, Tufts University, the Waddell Mariculture Center in South Carolina, the Texas Agricultural Experiment Station, and the University of Arizona. The anticipated completion date for the original specific research objectives was 1987. The original specific objectives have been met, however, broader research goals have not been met. Researchers anticipate that the specific research outlined in the current proposal will be completed in fiscal year 1999.

The agency evaluates the progress of this program on an annual basis. The institutions involved in this program submit a detailed accomplishment report each year prior to the submission of the new grant proposal. In addition, the agency conducts an in-depth on site review of the program every three years. The 1998 review of the program indicates that the progress during the last twelve months has been well documented; the proposal is well written; the proposed research is consistent with the NSTC Strategic Plan for Aquaculture Research and Development; close linkage between the research and the U.S. shrimp farming industry has greatly enhanced the commercialization of research findings; and facilities and expertise are very good. The CSREES Program Manager met with the technical committee of the consortium during the proposal development for the fiscal year 1998 proposal.

MARICULTURE, NORTH CAROLINA

CSREES has requested the university to submit a grant proposal that has not yet been received. The proposal is reviewed by the university's peer review process and is reviewed by the CSREES Program Manager. Since this is the first year of this project, CSREES will send the proposal out for external peer review. The researchers indicate that there is a regional and national need to develop aquacultural production systems for a variety of marine finfish. The researchers also indicate that

the proposed research is consistent with the NSTC's Strategic Plan for Aquaculture Research and Development. The goals of this research program is to develop sustainable aquaculture production systems for marine finfish. The researchers will develop culture technologies and evaluate marine finfish species that have some potential for commercial aquaculture production. Research is likely to focus on reproduction, growth and nutrition, and system design. Technologies developed may also have some application to stock enhancement programs to support restoration of depleted commercial stocks of fish.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $150,000. The university estimates a minimum of $90,000 of non-federal funding in fiscal year 1998 primarily from state sources. As the program develops, additional non-federal funding is expected.

The research will be conducted at the Center for Marine Science Research at the University of North Carolina at Wilmington. The anticipated completion date for the original objectives is fiscal year 1999. The project will be initiated in fiscal year 1998.

The agency will evaluate the progress of this project on an annual basis. The university will be required to submit an accomplishment report each year when the new proposal is submitted to CSREES for funding. Since this is the first year of the program, CSREES will conduct an external peer review of the proposal. The researchers have been asked to the develop a research proposal consistent with the NSTC's Strategic Plans for Aquaculture Research and Development.

MISSISSIPPI VALLEY STATE UNIVERSITY

Funds were used for curriculum development, and to generally strengthen academic programs, including accreditation and re-accreditation. Of the ten programs eligible for accreditation, nine have been accredited. Assessment of the criteria has begun for the remaining eligible program. Academic programs have been broadened to include more agriculture-related courses consistent with the needs of students from the Mississippi Delta, students from other parts of the State, as well as out-of-state students. Curriculum additions have had a positive impact on student enrollment. Courses continue to be modified to reflect the needs of graduates as well as employers in the Mississippi Delta, with particular emphasis on those areas that employers have the greatest need. The funds continue to provide enhancements related to other program and administrative support areas that positively impact program delivery and administration at Mississippi Valley State University. The project has been merit reviewed.

The primary need for this project is to satisfy a local need. The need is for strengthening university capacity and curriculum development at Mississippi Valley State University. Degree programs in Accounting, Mass Communications, Music and Public Administration have been added since the 1988 plan was developed. The Criminal Justice program has been developed into a departmental unit with social work in order to provide for improved administration and academic counseling. A master's program in Criminal Justice is now offered. The baccalaureate major in chemistry and master's program in Elementary Education have been reinstated.

The original goal was to provide funding to strengthen the academic programs of the university. The academic programs have been strengthened as evidence by student recruitment, which has improved to show a positive ratio between applications received and students admitted. Approximately one half of the applicants are enrolled. Increased quality of instruction and programs have benefitted students. This is reflected in the higher graduation rate, increased student enrollment, enriched faculty and improved community relationship.

This program was initiated in fiscal year 1987. Grants have been awarded from funds appropriated as follows: fiscal year 1987, $750,000; fiscal years 1988 and 1989, $625,000 per year; fiscal year 1990, $617,000; fiscal year 1991, $642,000; fiscal years 1992 and 1993, $668,000 per year; fiscal year 1994, $593,000; fiscal year 1995, $544,000; and fiscal years 1996—1998, $583,000 per year. A total of $7,481,000 was appropriated.

Mississippi Valley State University received State and private funding during the period of this grant. The State figures provided here are for enhancement funds gained above the University's standard formula generated funds. The sources and amounts are as listed:

Fiscal year	State	Private	Total
1987		$168,640	$168,640
1988		186,036	186,036

Fiscal year	State	Private	Total
1989	$68,658	190,258	258,916
1990	207,879	369,358	577,237
1991	333,263	337,700	670,963
1992	349,427	470,220	819,647
1993	35,750	358,680	394,430
1994	590,890	568,970	1,159,860
1995	841,654	530,300	1,371,954
1996	1,197,917	590,824	1,788,741
1997	309,717	755,629	1,065,346

These funds are intended to strengthen programs at Mississippi Valley State University. The program has been carried out on the campus at Itta Bena and at off-campus sites in Anguilla and Greenville and the Greenwood Center since the Spring Semester of 1996. The objectives of the current grant will be completed by September 30, 1998.

The program has been evaluated on an annual basis by the agency. The annual progress report for fiscal year 1997 revealed progress in the academic programs. For example, the Social Work Department had significant positive changes in the quantity and quality of the faculty. The Business Department offered a component dealing with Agricultural land lease in the business law classes and the other classes had topics on input and output analysis, agricultural stimulations and initial farm planning. The major objectives of this project have been met. The funds are now used to maintain the level attained since receiving these funds. The fiscal year 1998 proposal will be peer reviewed.

NATIONAL CENTER FOR PEANUT COMPETITIVENESS

This is a new research project initiated by the Congress in fiscal year 1998. CSREES has not received the grant proposal which was recently requested from the University of Georgia. The goal is to conduct economic, genetic, and biotechnological research to develop globally competitive production systems. The work supported by this grant begins in fiscal year 1998 and the appropriation is $150,000. This research is being conducted at the Griffin, Georgia research station of the University of Georgia. The anticipated completion date is September 2000. CSREES will review the project proposal when it is received and later evaluate the results of the research.

PM–10 STUDY, CALIFORNIA AND WASHINGTON

The research on the effect of PM–10 particulate emissions from agricultural land on air quality is being conducted by scientists at the University of California-Davis and Washington State University. Also cooperating in these studies are: the Department of Agriculture's Agricultural Research Service and Natural Resources Conservation Service; State Cooperative Extension Services; U.S. Environmental Protection Agency; California Air Resources Board and Washington Air Quality Control District; Washington Department of Ecology; and farm and agricultural organizations; and private farmers, ranchers, and growers in both states. The California program has focused on developing and refining methods to accurately measure and detect the sources of PM–10 emissions from various agricultural practices, and to investigate alternative practices for reducing potential air pollution on susceptible California crops and soils. In addition, the California project is also measuring PM–2.5 and even more refined size distributions, as well as identifying the constituents in all emissions samples in order to better characterize the size distribution and possible sources of the emissions. The California research has been expanded beyond the harvesting of crops to include emissions from cattle feedlots, dairies, and the poultry industry. This is in direct response to the monitoring data that shows that peak emissions occur in November through January, which do not coincide with crop production activities. The Washington State University scientists are using refined instruments on field sites to measure and predict the effects of wind erosion and agricultural practices in the Columbia River Basin region on PM–10 emissions, with the assistance of a portable wind tunnel. Alternative cropping systems, tillage practices, rotations, and weed control practices are being developed and compared for control of PM–10 emission pollution under Columbia River Basin conditions.

The principal researcher believes there has been growing national concern over the potential health and safety aspects of air pollution from dusts and suspended particulate matter, resulting in passage of the 1990 Clean Air Act which requires

the monitoring and control of such pollution. Because of particular problems from PM–10 emission in the arid regions of the Western U.S., research on the role of agricultural operations in intensively cultivated soils in California and the Columbia River Basin, as sources of PM–10 pollution, will assist growers to develop alternative agricultural management practices to control PM–10 emissions.

The original goals of this research were to measure the PM–10 emission rates from significant crop and tillage practices, to determine the source of PM–10 emissions on soils in agricultural regions of southern California and the Columbia River Basin in the Pacific Northwest, and to explore cost-effective alternative agricultural practices to control these emissions. The third year of field measurements are being completed on PM–10 emissions on production practices on almonds, figs, walnuts, wheat, and from dairy farms and feedlots in California, and on a number of agricultural practices in the rainfed and dryland croplands in the Columbia River Basin. Susceptible climatic and soil conditions and tillage and cropping practices have been identified and are being used to develop prediction tools to assist growers to adopt alternative practices to reduce potential air pollution by PM–10 particulate emissions. Measurements continue to be taken in these areas. Plans have also been developed to study the impacts of land preparation techniques on emissions.

A Light Detection and Ranging system has been developed at the University of California at Davis. This instrument allows a snapshot of the shape of an emission plume from a source such as a harvester. It will allow estimates on the amount of material emitted into the atmosphere and its subsequent transport.

The work supported by this grant began in March 1994. The appropriation for fiscal year 1994 was $940,000; fiscal year 1995, $815,000; and for fiscal years 1996, 1997, and 1998, $873,000 per year. A total of $4,374,000 has been appropriated. In California, the program is matched by State funds in the form of salaries, benefits, and operating costs. In Washington, there were no state or non-Federal funds in support of the PM–10 project in 1994 and 1995. In 1996, state support was $22,566, and in 1997, state support was $102,364.

This work is being directed by participating scientists at the University of California-Davis, and at the Washington State University and the anticipated completion date of the original objectives of this project is 2000. The first four objectives of the project on soil particle characterization are anticipated to be completed in 1999. The objectives on field control will continue. A manual of control practices is being developed for use by growers to reduce wind erosion on agricultural land. Implementation and development of these management practices will be a major role of this project in the future. Quarterly and annual reports on the entire project to date are available.

The agency's program manager annually reviews the research progress reports and proposed new research, and attends the annual meetings of the program to assess progress. The program is also evaluated each year by technical, administrative, and agency personnel. Progress is reported at research review meetings three times a year. Grower and public advisory committees are consulted for input on research progress and objectives. A formal on-site review by a panel of experts was conducted of the Washington program in November 1997, and a formal review report was prepared.

WATER QUALITY—ILLINOIS

The Illinois Groundwater Consortium grew out of a fiscal year 1990 appropriation of $500,000 to Southern Illinois University at Carbondale to focus on the short-and long-term effects of agricultural chemical contamination on the environment, the groundwater, and ultimately, human health, and welfare. As a result of this appropriation, the University joined forces with the Illinois State Geological Survey, Illinois State Water Survey, University of Illinois Cooperative Extension Service, and the University of Illinois Agricultural Experiment Station to create the Illinois Groundwater Consortium. The Consortium's primary mission is to work toward providing a scientifically-valid basis upon which agricultural chemical management and regulatory decisions can be based. The Consortium has worked to address the concerns of the agricultural and agrichemical industries as well as the concerns of the agencies charged with protection of environmental quality. Projects supported with Consortium funding are peer reviewed by researchers at 35 different universities and agencies from across the Nation, and results are presented and critiqued annually at the Consortium's Research Planning Conference. Examples of projects currently under study supported with Consortium funding include:

1. The Role of Flooding and Land Use Practices on Erosion Rates and Agrichemical Loadings in the Southwestern Illinois Sinkhole Plain;

2. Mechanism of Transport of Nutrients in Alluvial Aquifers During Normal and Flood Conditions;

3. Dynamic Modeling of Sediment, Nutrient, and Pesticide Transport in Agricultural Watersheds During Severe Storm Events;

4. A Community Based Sampling Program for Evaluating Long-Term Flood Impacts on Rural Well Water Quality;

5. Management Strategies for Riparian Water Supply Wells;

6. An Investigation of Temporal Changes in Soil Permeability Within the Vadose Zone of Areas Inundated by Floods;

7. Effects of Flooding on Salamanders in the Horseshoe Lake Conservation Area;

8. Developing a Geographic Information System Database to Monitor Plant Population Dynamics in the Floodplain: A Model Based on Boltonia Decurrens, a Threatened Species;

9. Modeling Flood Flows in Flat, Tile Drained Watersheds; and

10. The Effect of Flood Dynamics on Chemical Fate and Transport: Implications for Agricultural Management.

The fiscal year 1998 appropriation is targeted to research pertaining to the impacts, recovery, and remediation of the Midwestern region after flooding. The 1993 and 1995 flooding of the Mississippi, Missouri, and Illinois Rivers, and their tributaries, created devastating effects on the farm lands, communities, and natural resources of the area. These effects have major implications for agricultural practices, water quality, and public policy decisions. This natural catastrophe has resulted in a need for further studies examining the impact of the flooding on surface/groundwater, soils and their rehabilitation, biodiversity, and on economic and public policy in the region. In addition, there is the need to disseminate results to the public to enable the Consortium findings to be beneficial in the near term to those needing the information. To facilitate this work, the Consortium expanded its participant institutions to include Southern Illinois University at Edwardsville. Southern Illinois University at Edwardsville's strategic location in the heart of the flood damage area, as well as its qualified research scientists who work in the Consortium's high priority research areas, strengthen the capabilities of the Consortium. The priorities of the Consortium are: (1) the funding of research upon which public policymakers working on land use or groundwater protection issues in flood plain areas can base decisions and (2) the broad dissemination of this information. The projects funded by the Consortium are providing researchers opportunities to obtain data upon which larger projects can be built. Without this initial data, funding from other competitive sources would be difficult to obtain.

The Illinois Groundwater Consortium was established to coordinate and support research on agricultural chemicals in Illinois groundwater. The recent Midwest flood of the Mississippi, Missouri, and Illinois Rivers, and their tributaries, created devastating effects on farm lands that have major implications for agricultural practices and water quality in the region as well as effects in other states in the Midwest. The Consortium provides information to facilitate short-term and long-term systems studies of the effects of flooding on groundwater and surface water upon which to base policy management decisions. Research areas characterizing short-term and long-term projects completed, underway, or proposed for each research area include:

Short-Term

—Effect of extended inundation on soil productivity
—Movement of chemicals (pesticides, herbicides, heavy metal, other chemicals) from flooded soils into surface and groundwater
—Impacts on soil fertility and nutrient balance caused by flooding
—Changes in nitrogen-fixing bacteria or pesticide microbic activity due to flooding
—Impacts of flooding on plant and aquatic life, including endangered and dangerous species, and microbial communities
—Effectiveness of riparian buffer strips under flooded conditions
—Groundwater quality changes resulting from flood related land-use developments in both the bottomlands where farming practices change and in the uplands where new communities are being developed

Long-Term

—Effectiveness of methods of remediation for flooded soils
—Changes in surface and groundwater quality over time with changes in flooding conditions
—Changes in soil chemistry and productivity over time
—Long-term effects and recovery of microbic activity
—Effects of time on recovery (and eradication) of plant and aquatic life

—Recommendations for long-term, systems-based planning and management for watershed and bottomland management
—Examination of public policy decisions with implications for agriculture and water quality in light of flooding effects and recovery
—Long-term implication for public policy decisions and management of the river systems

Research grants have been awarded from funds appropriated as follows: fiscal year 1990, $494,000; fiscal year 1991, $600,000; and fiscal years 1992–1993, $750,000 per year; fiscal year 1994, $666,000; fiscal year 1995, $460,000; fiscal year 1996, $468,000; and fiscal years 1997 and 1998, $492,000 per year. A total of $5,172,000 has been appropriated. The non-federal funds and sources provided for this grant were as follows: $255,891 state appropriations in 1991; $447,237 state appropriations in 1992; $644,054 state appropriations in 1993; and $623,124 state appropriations in 1994. Non-federal and state funds for 1995–1997 have exceeded the federal funds.

The work is being carried out by the Illinois Groundwater Consortium and coordinated by the Carbondale campus of Southern Illinois University. The research is being conducted by staff at the University of Illinois, Southern Illinois University-Carbondale, the Southern Illinois University-Edwardsville, the Illinois State Geological Society and the Illinois State Water Survey at locations across the State of Illinois and in Missouri.

This project was planned as a 5-year study of the impacts and recovery of flooding in the Midwest. In the original proposal and subsequent proposals, we identified both short-term objectives which are project goals that could be accomplished within 1–2 years and long-term objectives which are project goals that could be accomplished within 2–5 years. In calendar year 1997, we completed 3 years of studies involving 26 projects, and in calendar year 1998, we will begin 4 new projects and continue 12 projects. These projects are spread across areas identified as high priority, including studies of flood impacts on soil productivity and remediation, movement of chemicals in water and soils, bacteria and microbial life, plants and aquatic life, and on public policy impact. Results of projects completed in previous year and progress reports on projects underway are published each year as part of the Proceedings of the annual conference of the Illinois Groundwater Consortium and in the Illinois Groundwater Consortium's Groundwater Bulletin. Dissemination of both of these publications is broad-based, utilizing mailing lists to public and private institutions and individuals kept by the University of Illinois Cooperative Extension Service, the Illinois Groundwater Consortium, as well as dissemination through related conferences and workshops. Progress in meeting short-term and long-term objectives has been excellent. The most complex task is coordinating research projects on flood issues involving multiple issues, such as biological, social, economic and political issues, where effective solutions await the expansion of research databases. Due to waterborne contaminant problems within the Mississippi River Basin and sub-basins, it is anticipated that the projects will continue beyond the year 2000.

From its beginning, the projects funded through the Illinois Groundwater Consortium involve reviews by at least three faculty/researchers drawn from 35 different universities, state, and federal labs and surveys, U.S. Department of Agriculture's research laboratories, and other research centers. The reviewers rate proposals on criteria pertaining to scientific merit, quality of the research team, likelihood of the work resulting in publications and grant support from other sources, and relatedness of the project to the key objectives of the Illinois Groundwater Consortium. This peer review system enables the Consortium's Advisory Committee to select projects with high scientific merit from the group of proposals submitted for funding consideration. The titles, principal investigators' names and affiliations, and budgets are submitted to the U.S. Department of Agriculture for review along with the Consortium's proposal for funding.

WATER QUALITY—NORTH DAKOTA

The original goal of this research was to develop an understanding of the occurrence, transport, and fate of agricultural chemicals found in representative field settings in the Northern Great Plains region of the United States. In 1996, the scope of the program was expanded to include additional water management issues in the Red River of the North drainage basin. The Red River Water Management Consortium, a partnership between public and private sectors, was established to address critical water quality and quantity issues in an area where agriculture is the predominant industry. A major objective of the Red River Water Management Consortium is to use results from the initial phases of this research program to find economical, practical, and timely technological solutions to water problems of the re-

gion. By providing cofunding for the program, Red River Water Management Consortium members become active stakeholders in the research and ensure the practicality of the work performed.

The focus of current work is on: (1) the assessment, development, and implementation of new technologies for addressing water quality and quantity concerns within the basin; (2) water resource assessment and analysis, including the development of mechanisms for providing easy access to water-related information so proper water management decisions can be made; (3) the determination of agricultural, industrial, municipal, and recreational impacts on water resources, both current and potential, and the identification of potential solutions to water quality and quantity problems and needs; (4) water quality monitoring and coordination of monitoring activities; (5) education and information dissemination on water issues facing this region of the United States; and (6) the development of a watershed management strategy for the Red River of the North Basin focusing on water quality and quantity to ensure continued economic development of the area.

The original focus of the work was on agricultural chemicals in groundwater which potentially presents both a public health and an environmental quality problem of significant short-and long-term importance. The goal of this work was to provide a scientifically valid basis upon which meaningful agricultural chemical management and regulatory decisions could be made. The establishment of the Red River Water Management Consortium provided a mechanism for transferring results of the initial research to vested stakeholders of the region and for addressing water quality and quantity issues resulting from agricultural practices and development. The overall goal of the Red River Water Management Consortium is the development of a long-term watershed management strategy focusing on water quality and quantity which can be used as a model for watershed management in other agricultural regions in the United States.

The original goal of the research program was to understand the occurrence, transport, and fate of agricultural chemicals in representative field settings in the northern Great Plains region so scientifically valid decisions could be made for their management and regulation. Work on five of the seven sites originally instrumented under this program has been completed. Research at the two remaining sites is directed toward answering questions that have arisen during the course of this research program, specifically to determine the long-term trends in nitrate concentrations in surficial aquifers under irrigated agriculture and to determine the source and trends for sulfate.

Researchers have established the Red River Water Management Consortium as a mechanism for transferring the results of the initial research to vested stakeholders in the region and to the general public in order to address water quality and quantity problems resulting from agricultural practices and agricultural development.

In 1989, $1.0 million was appropriated under the groundwater research program. Beginning in 1990, funds have been earmarked under the Direct Federal Administration program. Work supported by this grant was initiated in fiscal year 1990 with an appropriation of $987,000. Subsequent appropriations have been $750,000 in fiscal year 1991, $500,000 per year in fiscal years 1992–1993; $470,000 in 1994; $407,000 in fiscal year 1995; and $436,000 in fiscal years 1996–1998. A total of $5,922,000 has been appropriated for this water quality research program.

Red River Water Management Consortium members provide co-funding to support their participation in the program. Co-funding provided by Red River Water Management Consortium members for fiscal year 1996 totaled $59,700 and for fiscal year 1997 totaled $80,000. Interest in this program continues to grow, and it is expected that at least $100,000 in cost-share will be obtained during fiscal year 1998 through membership fees. These funds are provided directly to the program and do not include in-kind costs incurred by the participants which are estimated to be several hundred thousand dollars.

Field activities to determine the long-term trends of nitrate and sulfate and to determine the source of sulfate are being conducted in cooperation with the North Dakota State Water Commission, which is providing an estimated cash equivalent funding in the amount of $33,660 for sample analysis and approximately $12,000 for field instrumentation. Instrumentation of sites occurred in fiscal year 1997, and sampling and analysis will continue through fiscal year 1999.

Consortium members' dues are also used to provide in-kind services for match in other projects being performed by the Red River Water Management Consortium. A major project sponsored by the U.S. Environmental Protection Agency and local contributors to restore riparian areas in the Red River of the North Basin has been funded and will provide $175,000 for consortium activities over the next 4 years.

The amount of in-kind services provided from Consortium member fees is $9,000 per year.

The U.S. Corps of Engineers has contracted through the Red River Water Management Consortium a $100,000 6-month effort to improve the decision-making capability regarding ongoing flooding within the Devils Lake Basin, a sub-basin of the Red River of the North Basin. This work is intended to produce decision support tools, forecasts, data, and forums that can be continued to be used by the Corps St. Paul district, the states of North Dakota and Minnesota, the International Joint Commission, and the people of the Devils Lake region after the project has been completed.

Research is being conducted at the University of North Dakota through its Energy and Environmental Research Center and at field sites and agricultural product-processing facilities in North Dakota, Minnesota, and Montana. In addition, a portion of the pesticide research was conducted at North Dakota State University. Cooperative efforts have resulted in work also being performed at cooperative institution locations such as the University of Waterloo, Victoria University, University of Montana, the Red River Resource Conservation and Development Council offices, and the North Dakota State Water Commission.

The anticipated completion date for the original objectives of the project, specifically the field-related research, was fall 1995. This research has been completed; and the sites have been decommissioned, with the exception of those relating to long-term nitrate and sulfate monitoring and analysis. Work on nitrate and sulfate trends and occurrence is scheduled for completion in 1999. The Red River Water Management Consortium was established in 1996 as a mechanism for transferring the information derived from this research program to the technical community and to the public for use in addressing water quality and quantity issues relating to agriculture and agricultural development. It is anticipated that Red River Water Management Consortium activities will continue for several years in order to meet the objectives as defined by the non-federal sponsors and the agency.

The last agency evaluation of this project was conducted in September 1996. The U.S. Department of Agriculture Technical Project Officer attended a meeting of the Red River Water Management Consortium to evaluate and determine the status of this effort, which is currently the focus of research program activities. All project objectives were met for the first-year Consortium activities. A meeting of this group will occur in March 1998.

BEEF IMPROVEMENT, ARKANSAS

The Arkansas Beef Improvement Program utilizes beef cattle farms to demonstrate cost-effective management practices. An Arkansas Beef Improvement Program Executive Committee provides overall direction for the program. A second approach the Arkansas Beef Improvement Program is taking is conducting workshops presented at the county level. The Arkansas Beef Improvement Workshops are usually scheduled for three evenings for two hours each evening and teach producers techniques learned in the Arkansas Beef Improvement Program to enhance efficiency and profitability. Other than an annual CSREES review, the project has not undergone a merit review.

Although local problems and situations are addressed, the decision-making process used to solve those problems is universal. Goal setting, evaluation of resources, and selection of management practices that complement those goals are foundations for the decision-making process. It is this process that is the backbone of the Arkansas Beef Improvement Program and Workshops.

The original goal of the Arkansas Beef Improvement Program was to enhance the profitability and efficiency of Arkansas cattle producers. Accomplishments to date include the establishment of demonstration farms, collection of benchmark data including soil tests, production information, forage analyses and budgets, and renovation of pastures to increase grazing capacity. Identification of mineral deficiencies in beef cattle have been detected and corrected through proper supplementation and ration balancing. The average production cost per farm decreased 35.4 percent from 1993 to 1996. Various management changes including parasite control and forage/pasture management have been instituted. Use of a cow-calf enterprise budget has helped the producers identify both efficient and inefficient management practices and take corrective actions. Additional accomplishments for the Beef Improvement Program:

—The break-even cost/pound of beef sold decreased from $0.54 to $0.37 ($0.17/pound).

—Net calf crop percentage increased from 85.6 to 92.3 percent—an increase of 6.7 percent.

—Total pounds of beef sold per animal unit had a net increase of 46 lb., 451 to 507 lb.
—Cow cost decreased from $246.70 to $159.36.
—Supplemental feed costs decreased by $16.73 per animal unit resulting in a total farm saving of approximately $2,100.
—Return over specified cost increased from $100.37 to $213.37 per cow—a 113 percent increase (based upon 1993 price per pound received).

The sum of $200,000 per year has been devoted to this project from fiscal year 1993 through 1995. In fiscal year 1996 through 1998, $197,000 was appropriated per year for a total appropriated amount of $1,191,000. Non-federal state funds of $95,000 have been provided annually, from 1993 to 1997, for a total of $475,000.

Six Arkansas demonstration farms were selected the first year of the Arkansas Beef Improvement Program, and four more were selected the second year. The first six farms have completed their fifth and final year of the program. Five new farms were added to the Arkansas Beef Improvement Program. Therefore, the program has used 15 farms—one in each of 15 counties to reflect the different types of cattle operations cattle producers in the area. Farm sizes ranged from 140 to 920 acres with an average of 360 and herd sizes ranged from 20 to 170 head, averaging 66 head per farm.

The Arkansas project started with 6 demonstration farms in 1992 and added 4 more farms in 1993. When the farms were selected, it was agreed the Extension team would work with the Arkansas cattle producer for 5 years. Therefore, the first 6 demonstration farms completed the program at the end of 1996, and the remaining 4 farms will complete the program at the end of 1997. Data from the final year as well as an Arkansas Beef Improvement Program Producer Survey and County Agent Survey will be collected and summarized for evaluation. Arkansas Beef Improvement Program Workshops were developed and have been implemented at the county level. The next phase of the program is to introduce Arkansas Beef Improvement Projects. These projects—stocker cattle, cow herd performance, calving and breeding season, pasture renovation, and hay quality and supplementation—are designed to increase the number of county Extension agents and producers involved with the Arkansas Beef Improvement Program and to evaluate on a more in-depth level these important management situations. A CSREES review of the project is conducted annually. The 1996 review noted the project is taking a sound approach to improving beef production efficiency and profitability in Arkansas.

DELTA TEACHERS ACADEMY

The Delta Teachers Academy project is provides approximately 525 teachers at 35 sites throughout the seven Lower Mississippi Delta states with development opportunities by teaming them with university scholars in on-site sessions and residential summer institutes. It is also supports the professional development of over 650 Academy graduates throughout the region. The subjects focused on during these training opportunities are English, geography, history, mathematics, and science. The Delta Teachers Academy grant is not awarded competitively; however, we require annual applications reporting the previous year's accomplishments and describing activities and expenditures planned for the upcoming year. These applications undergo merit review by at least three of our Ph.D. level staff before grant awards are made.

According to the grant recipient, the 219-county area comprising the Lower Mississippi Delta region has been cited in reports by the Educational Testing Service and the National Center for Education Statistics as notably lagging in student performance in core academic areas. In 1989, Volunteers in Service to America characterized the area as the poorest region in the country. According to the Southern Regional Education Board, at least five of the Delta states have 20 percent or more of their school-age populations in poverty, with Mississippi topping the list at 34 percent. In its report to Congress in 1990, the Delta Development Commission cited serious educational problems including poor student performance in core content areas, demoralized teachers with little or no opportunity for academic development, and region-wide difficulty in recruiting and retaining qualified teachers. The Commission also stressed the links between these problems and the pervasive poverty and depressed economic conditions that characterize much of the seven-state Delta region. The Commission's report also cited that 75 percent of the region's workforce lacks the basic reading skills necessary for technical training and specifically cites the need for improved teacher training as one means for breaking the cycle of poverty and economic non-competitiveness.

The original and continuing goal of the project is to address the problem of insufficient professional development opportunities for the elementary and secondary

teachers of the seven-state region. The Academy project has focused on the core subjects of English, geography, history, mathematics, and science. Humanities, language arts, social studies, reading, civics, and interdisciplinary subjects are also covered by some sites. The Delta Teachers Academy began by offering educational development activities for 100 teachers from approximately 50 rural districts at 10 sites. Training has now been expanded to include 525 teachers at 35 new sites across the entire seven-state region. In addition, there are over 650 graduates of the program whose professional development is sustained through the Academy's Fellows Program and who are leading teacher in-service training back at their home schools.

A total of $17.161 million dollars has been appropriated to the Department of Agriculture for this project, including $2 million dollars in fiscal year 1994, $3.935 million dollars in fiscal year 1995, $3.876 million dollars in fiscal year 1996, $3.850 million dollars in fiscal year 1997, and $3.500 million dollars in fiscal year 1998. There are no non-federal funds identified for this project.

The Delta Teachers Academy project is coordinated out of The National Faculty's Southern Region office in New Orleans, Louisiana. The project is being conducted at 35 sites selected from within the seven-state Lower Mississippi Delta region including the states of Arkansas, Kentucky, Illinois, Louisiana, Mississippi, Missouri, and Tennessee.

The original objective was to provide three full years of training to each faculty team established by the Delta Teachers Academy program. Training consists of four two-day academic sessions and one two-week summer institute for each team. This objective has been met for the original 24 faculty teams first funded under the fiscal year 1994 Department of Agriculture grant and for the 15 additional teams established in 1995. One new team established in fiscal year 1996 has received two years of training, and 19 new teams established in fiscal year 1997 have received one year of training. As of the end of the fiscal year 1997 grant, 39 of the 40 faculty teams established by the Delta Teachers Academy will have met the original objective of the program. Objectives for the fiscal year 1998 grant include providing training activities to 300 teachers at the 20 continuing sites, sustaining the professional development of the project's 650 graduates through the Academy's Fellows Program, and expanding professional development activities to 225 teachers at 15 new sites throughout the seven-state Delta region. The anticipated project completion date for the 20 current sites is September 30, 2000, while the completion for any new program sites established in fiscal year 1998 would be in the year 2001.

A site visit of the Delta Teachers Academy offices in New Orleans, Louisiana and of the National Faculty's Summer Institute at Tulane University was conducted by the Cooperative State Research, Education, and Extension Service's National Program Leader for Higher Education and Evaluation, during July 1996. The site visit confirmed that participating teachers are enthusiastic about the Delta Teachers Academy program, that the instruction provided by The National Faculty's university scholars is on target and appropriate to the K–12 teachers' needs, and that the facilities are suited to program requirements. The site visit further confirmed that the Delta Teachers Academy has strengthened the participating teachers' ability to teach by improving their content knowledge base, helped them become leaders of other teachers by requiring them to conduct staff development back at their home schools, and had a positive impact on student learning. School superintendents report greater student enthusiasm, more homework, and higher test scores for students whose teachers were in the Delta Teachers Academy program.

EXTENSION SPECIALIST, ARKANSAS

This program develops, refines and validates technology for family farm production systems that enhance biological and economic efficiencies and product qualities of the Ozark Highlands in the south central United States. The applied research and extension programs help small farmers in the region to improve their production efficiency, minimize risk when no risk capital is available, combine enterprises on limited acres to make more efficient use of labor and equipment, and improve family record-keeping systems. The program promotes sustainability of small family farms in a whole farm context including land resources, labor resources and capital.

The program addresses research and educational needs of limited resource hillland family farmers producing forages, ruminant animals and horticultural crops. In many cases, technologies applicable to small farms have not been assembled into systems that these farmers can adopt with confidence and limited risk. The regional center conducts research to develop profitable systems and through the Extension programs, extends these systems to people who wish to improve productivity while remaining in rural areas. With the small/family farm focus, there is need to evalu-

ate the economic applicability of various research projects; and to transfer research information that can be used by these farmers to evaluate alternative enterprises, improve efficiency for conventional and value-added products, and enhance their incomes.

The goal of the project was to develop a small/family farm management and marketing education program for the area serviced by the South Central Family Farm Research Center located at Booneville, Arkansas. Currently, the general objective is to further develop and extend an educational program that transfers useful technology developed by the Center to small/family farmers in the Center's ten-State service area. This program provides support in alternative agriculture and marketing to county and state Extension personnel who assist local producers in evaluating these technologies and adopting those which are economically feasible. Within the past two years, a computerized farm management record keeping system has been developed and disseminated to assist producers in the region and nationwide to enchanted their profits. Scientifically-based data on enterprise planning, production and marketing of alternative crops and livestock has been provided directly to clientele in 15 states and two foreign countries to assist them with their operations. Sound credible information has been provided to over 10,250 stakeholders through direct contacts, meetings, mailings and telephone conversations. Program personnel have worked with commodity organizations and other groups to form a network that delivers comprehensive programs on sustainable agriculture to end-users.

The project has been underway since 1992. Appropriations of $100,000 have been made in each of the fiscal years 1992 through 1995. Appropriations in fiscal year 1996 and fiscal year 1997 were $99,000 for each year. The same amount, $99,000, has been appropriated for fiscal year 1998 bringing the total to $697,000. State matching funds have been provided through the Arkansas Cooperative Extension Service in fiscal year 1992 through fiscal year 1997. The amounts are $59,040 in fiscal year 1992, $55,680 in fiscal year 1993, $54,250 in fiscal year 1994, $54,446 in fiscal year 1995, $54,446 in fiscal year 1996 and $46,346 in fiscal year 1997. The total is $324,200.

The work is headquartered at the South Central Family Farm Research Center located at Booneville, Arkansas. It is being carried out primarily in Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee and Texas, the 10-state area served by the Center. The original proposal in 1992 was for a 12-month period. However, the program emphasis has changed over time with the educational needs of the target audience and as the research program of the Center has evolved. During the current year, the emphasis is on development, management and dissemination of whole-farm systems consistent with the farm enterprise mix that exists within the region. Current program objectives are to be met by February 1998.

CSREES conducted a merit review of the program in January 1997 when the proposal for the current year was received. An Executive Summary of the previous year's activities indicated the objectives of developing and disseminating a computerized recordkeeping system had been met; and that direct assistance had been provided to clientele within 15 states and two foreign countries. Publications on alternative farming systems have been completed and educational materials were made available to county Extension agents, agency personnel and producers. Evaluation efforts during the current year include documentation of requests and the compilation of address lists that will be used by Extension agents in follow-up activities.

EXTENSION SPECIALIST, MISSISSIPPI

The Basic Weather Service and Extension project is designed to fill a void in weather data due to closure of the Ag Weather Service facility in Stoneville, Mississippi. The funding will be used to gather and disseminate critical agricultural weather data for producers and researchers in Mississippi and surrounding states to use to make management decisions and formulate research projects. The funds are not awarded competitively.

The grant proposal states that the Ag Weather Service facility was closed recently at Stoneville, Mississippi. This action has created a void in the availability of and access to critical weather data that producers and researchers use to make management decisions and formulate research projects, respectively. The goal of the project is to collect, maintain, and disseminate weather information for producers and researchers in Mississippi and surrounding states. Electronic weather stations and links with other web sites to deliver weather data are being installed and developed.

The funding for fiscal years 1997 and 1998 is $50,000 each year, for a total of $100,000. The State of Mississippi through the Mississippi Cooperative Extension Service and Delta Research and Extension Center is providing $41,350 in state ap-

propriated funds to support this project in 1997 and 1998. The project will be conducted at the Delta Research and Extension Center in Stoneville, Mississippi, is expected to continue into a Phase II program It will be evaluated in Phase II.

INCOME ENHANCEMENT DEMONSTRATION, OHIO

CSREES funds support the Agricultural Business Enhancement Center which plays a role in the development of the agricultural sector of Northwest Ohio. The Center provides a variety of management training programs, helps farmers and other agribusinesses develop comprehensive business plans, and facilitates business networking. CSREES performs an annual merit review of this project.

The Center seeks to enhance economic opportunity and agricultural competitiveness Northwest Ohio. To be successful in business, farmers and other agribusiness firms must be able to adapt to a large number of major changes affecting the entire food system from the farmer to the consumer. These include changes in farm programs, globalization of markets, new technologies, information systems, consumers' concerns for food safety and nutrition, and society's concern for protecting the environment. Individuals, families, firms and communities in Northwest Ohio need to understand the changes, develop and implement effective strategies for dealing with change.

The original goal of the project was to help people develop new businesses and restructure and expand existing businesses in order to enhance incomes in Northwest Ohio. Recent accomplishments include workshops to improve the management and marketing capacity of local farms and agribusiness firms. Business planning has been a major topic at workshops and several firms have been assisted in completing plans. The Center completed its tomato processing plant feasibility study and accompanying business plan but was unsuccessful in finding a sufficient number of producers to invest in a cooperative or to find a private investor. At the close of the fourth annual workshop for women in agriculture, 65 percent said their participation would improve management of the family farm. A new study is underway to determine the feasibility of farmers markets at Ohio Turnpike plazas.

The project began in 1991. Appropriations have been as follows: $145,000 in fiscal year 1991; $250,000 in fiscal years 1992 through 1995; and $246,000 in fiscal years 1996 through 1998. Appropriations to date total $1,883,000. The State of Ohio has appropriated the following funds: $35,100 in fiscal year 1991; $72,368 in 1992; $56,930 in 1993; $30,547 in 1994; $49,935 in 1995; $51,432 in 1996; $48,664 in 1997; and $50,500 in 1998. Non-federal funding provided to date totals $395,476.

The Agricultural Business Enhancement Center is located in Bowling Green, Ohio and serves eight counties in the Toledo Metropolitan Area. Project leadership and some data analysis is being provided by the Department of Agricultural Economics, Ohio State University, Columbus, Ohio. The original proposal in 1991 was for a period of 12 months, however, the ongoing needs of producers and agribusinesses to adjust to major changes in the agricultural sector continues to provide the Center with many challenges. The current phase of the program will be completed in September 1998.

CSREES performed a merit review of the project in January 1997 as it evaluated the proposal for that year, and concluded that the project plays a role in enhancing the competitiveness of the agricultural sector in eight counties of Northwest Ohio and that it has been effective in stimulating economic development in the area.

INTEGRATED COW/CALF MANAGEMENT—IOWA

The CHIPS program is an integrated cow-calf resource management (IRM) program that originally targeted an eleven county area in southeast Iowa. The intent of the program is to improve the area's rural economy by maximizing the profit potential of individual livestock operations. The CHIPS concept was also initiated to promote the development of forage systems that utilize highly erodible land (HEL), including land to be released in the CRP program. The geographical area where CHIPS services are offered has systematically expanded from the original target area, with services extended to over 36 Iowa counties in 1997. Further expansion of the CHIPS program in area covered, services offered, and cooperators served is currently underway, with technical support being extended to an additional 14 counties in central and northwest Iowa in 1998.

The majority of Iowa's beef cow operations utilize extensive areas of marginal land that is highly erosive (HEL) and should not be intensively farmed with row crops. These rolling hills are capable of producing high quality forages and are supportive to the cattle industry. Fiscal year 1996 marked the beginning of the release of Conservation Reserve Program (CRP) contracts—with thousands of these acres categorized as HEL. The CHIPS program assists producers in making management

decisions regarding these CRP acres. CHIPS's supports cow-calf production on this marginal ground and provides one-on-one assistance as economic and production decisions are made.

The overall goal of CHIPS is to have a positive effect on the area's economy by improving the long-term profit potential of the local cattle industry. To address this broad project goal, CHIPS has set forth the following objectives:

—Improve profit potential of cooperator farms. Identify issues and trends in management data.

—Raise the awareness and understanding of over 2,000 agricultural producers in Iowa about cow-calf production on highly erosive land and the IRM concept.

—Provide CHIPS cooperators with intensive technical assistance to develop goals and individualized farm recommendations, including management areas such as pasture and forage production, rations, utilization of resources, record systems, and government farm program compliance. It is anticipated that 200 cow-calf operations will be involved in this technical assistance program during 1998.

—Help producers develop management skills to improve efficiency and reduce costs of production as CHIPS recommendations are implemented.

During 1997, over 130 cooperators, involving approximately 11,000 beef cows, participated in the CHIPS program. Four full-time technicians have conducted over 600 farm/office consultations during fiscal year 1997 to develop specific on-the-farm recommendations and to assist with the problem solving and decision-making process. These contacts involved a wide variety of technical assistance, with primary emphasis on nutrition, cost-effective ration development, genetic evaluation, value-added practices, and cow production concerns. Over 80 cooperators have incorporated the Cow Herd Appraisal of Performance Software (CHAPS) and Standardized Performance Analysis (SPA) programs in their operations. During fiscal year 1997, 3,300 head of beef animals were permanently identified to facilitate record and data collection. More than 13,000 cattle were weighed and monitored to evaluate performance and production levels. Approximately 400 forage samples were collected and analyzed, with the information being utilized in over 200 individualized ration recommendations. CHIPS technicians on a monthly basis highlight selected management recommendations. These financial and/or performance impacts are summarized and reported to personnel associated with the program.

'Networking' projects have been developed and initiated through the efforts of the staff involved with the CHIPS program. A CHIPS Heifer Development Program was initiated in November, 1996, coordinating the management of over 200 breeding heifers from ten CHIPS cooperators. The goal of this project was (1) to incorporate technological advances in the area of heifer development, and (2) to improve the genetic base of these ten operations through the use of artificial insemination, EPD use, and nutritional management. Over 95 percent of the enrolled heifers were diagnosed pregnant at the end of the project, with approximately 65 percent bred by artificial insemination. These results are both above industry averages. A CHIPS Feedlot Program has also been developed and reviewed. The purpose of this effort would be to provide cooperators, regardless of the size of the operation, an opportunity to retain ownership of their animals from birth to market. This value-added approach will expand the marketing opportunities for individual cow-calf operations and improve the profit potential for cooperators with genetically superior animals. Survey results indicate that cooperation with existing feedlot operations may be necessary to make this proposed program successful. Further review will occur at a later date. CHIPS personnel in conjunction with the Iowa Cattlemen's Association are also monitoring a statewide bull test evaluation.

For fiscal years 1992 and 1993, $138,000 was approved; $276,000 for fiscal year 1994; $350,000 for fiscal year 1995; $345,000 for fiscal year 1996; $345,000 for fiscal year 1997; and $300,000 in fiscal year 1998. Federal funding through fiscal year 1998 totals $1,892,000. CHIPS participants pay client fees of approximately $3.00 per cow. This fee structure is on a sliding scale which adjusts for cow herd size. To date, approximately $75,000 have been collected from CHIPS cooperators.

The CHIPS program is currently being operated in 16 counties in southeast Iowa, 7 counties in the south central area, and 14 counties in east central and southwest Iowa. The expansion effort currently underway will extend the CHIPS IRM concept to an additional 14 counties in Iowa, offering program services to northwest and central Iowa.

The initial CHIPS program had a three year time period. Objectives and goals of the CHIPS program will continue to be modified and adapted to meet the needs of the cooperators and to adjust to the rapidly changing cattle industry. The level of technical assistance and method of program delivery will require adaptation to meet 'new' emerging objectives. These industry challenges strongly support the need for the CHIPS program. An example is the closing of the Monfort beef packing plant

in Des Moines, Iowa. This closure depressed market prices and the profit potential of beef producers. To address this issue, CHIPS is expanding value-added services to its cooperators. A retained ownership demonstration in cooperation with Iowa State University and agribusiness partners is currently being finalized. This would support value-added ownership, incorporate the latest technologies, and provide birth-to-market information to the producer. A new projections program is also being incorporated into the CHIPS program that will utilize past production and financial records to analyze available resources and develop a systems approach to the operation's future direction. Discussions with representatives from Precision Beef Alliance, a value-added pasture-to-plate program, have also been initiated. These innovative program services combined with the one-on-one technical support, record systems, and available networking opportunities will assist CHIPS cooperators in being flexible and adaptive to the ever changing economic conditions which exist in today's cattle industry.

A 'Think Tank' of beef industry representatives will be assembled in 1998 to review the CHIPS program. The objective of this group will be to make recommendations regarding the focus, direction, and future of this IRM program. This is the initial step in determining how the program will be funded in the future, where CHIPS fits in the industry's service area, and what industry groups will be involved. The 'Think Tank' process will help determine the services, technical assistance, and administrative structure of the CHIPS program in the future. This process should also improve the efficiency, flexibility, and impact potential of the services offered to participants. These recommendations will be incorporated with funding requests as other potential funding sources are investigated.

Evaluation of the CHIPS program is currently underway. The intent of the evaluation process is to (1) determine the production and financial impact of the program to participating producers, (2) analyze the services and technical assistance being offered, and (3) determine which programs should continue to be supported. This evaluation effort was initiated in December, 1997 with an anticipated completion date of April, 1998. To determine if the project's key objectives are being met, three areas of the program are being reviewed. (1) The reproductive (CHAPS) and financial (SPA) records are currently being analyzed to evaluate both short-and long-term operation impacts, (2) a questionnaire is being prepared to determine the production changes that have been incorporated by cooperators, and (3) the future needs of the cooperators will be surveyed. Three Iowa State University Extension personnel are conducting the study with the assistance of the CHIPS technicians.

The record evaluation process will analyze the production changes realized by incorporating the record keeping programs. This will compare production trends reflected by the record analyses, actual productivity changes, and financial impact. The questionnaire will summarize managerial changes that have occurred during the producer's involvement with the CHIPS program. If possible, economic impact associated with these changes will be reported.

NATIONAL CENTER FOR AGRICULTURAL SAFETY

Fiscal year 1998 is the first year for funding this project. CSREES has requested the university to submit a grant proposal that has not yet been received. The project director believes this training center to be of national, regional and local need. Farming continues to be one of the most dangerous occupations in our nation. An estimated 800 farmers, family members and farm employees die in work incidents annually. Most of these incidents are preventable if safe procedures are adopted while performing farm chores. The adoption of safe work habits is dependent upon the relevance of safety education to the at-risk agricultural audiences.

The original goal of this center is to provide practical, hands-on training methods for reducing the level of preventable injuries, illnesses and deaths among farmers and ranchers in the United States. It has been surmised that trainees and students will respond more positively to real life scenarios and actual simulations of farming hazards. The National Education Center for Agricultural Safety (NECAS) is offering practical training initiatives concentrating on the hazards that negatively impact farm work, including hazardous work: with equipment and chemicals; around livestock; in confinement facilities; and while harvesting grain and forage crops.

The work supported by this grant begins in fiscal year 1998 and the appropriation for fiscal year 1998 is $195,000. Specific information on the source and amount of non-federal funding for this project is not yet available.

Training under this grant will be conducted at the National Education Center for Agricultural Safety, located on the campus of Northeast Iowa Community College in Peosta, Iowa. The anticipated completion date of the original objectives is ap-

proximately March 31, 1999. The agency will conduct the initial review of this project when the proposal is submitted to CSREES for funding.

PILOT TECHNOLOGY PROJECT, WISCONSIN

Primary industrial extension activity of the Manufacturing Technology Transfer program is the delivery of technical assistance to manufacturing companies. Executive direction in determining the assistance required will be provided by the University of Wisconsin—Stout's Northwest Wisconsin Manufacturing Outreach Center (NWMOC) with direct consultation and long-term in-plant assistance delivered primarily through the efforts of university Project Managers and Co-op students. Direct assistance may be delivered through staff of the University of Wisconsin System—both two-and four-year institutions, and Extension services—the Wisconsin Technical college System; secondary schools; the private sector—professional societies, and private consultants, or attendance at state or national seminars. The project also draws on many other state resources to add expertise and capacity to network facilitation and in-plant extension activities. The project has undergone a merit review.

America's manufacturers continue to face tremendous global competition. There are enormous pressures to improve the quality of products; reduce the time consumed to bring new products to market; and there remains an ever increasing demand to reduce the costs of products. Currently there is a strong movement in manufacturing to use speed-to-market combined with new product introduction as a tool to obtain a competitive advantage. While high quality and cost efficiencies continue to be mandatory commitments for today's manufacturers, great value is now being placed on speed-to-market. Large companies are not the only ones influenced by these trends. Small and medium-size manufacturers often supply larger firms. Hence, they must be able to quickly process large amounts of information and solve complex problems.

The Manufacturing Technology Transfer program's principal objective is the development of a competitive, secure manufacturing base through the mechanism of industrial extension. The program principally targets small and medium size manufacturers in rural Wisconsin. This funding will: (1) continue to provide valuable industrial extension service to the target audience; (2) support the continued empirical development of an industrial extension model, and (3) investigate the use of new manufacturing technologies to support global competitiveness of manufacturers. Productivity improvements were reported by the companies showing economic impact to the region through implementation of:

a. Client operations assessment/plant evaluation and strategy development.
b. Opportunities for productivity improvements.
c. Implement new organizational and operational methods.
d. Investigate new manufacturing technologies.
e. Establish quality assurance/total quality systems.
f. Establish ongoing training programs.
g. Deliver on-site instruction in new technologies, improved methods and processes.

This project has been underway since fiscal year 1992 and was funded for $165,000 in fiscal year 1992, fiscal year 1993, fiscal year 1994, fiscal year 1995, and for $163,000 in fiscal year 1996, fiscal year 1997, and fiscal year 1998 for a total of $1,149,000. No non-federal funds have been provided for this project.

The work will be carried out by the University of Wisconsin-Stout and the original proposal in 1992 was for a period of 12 months. However, the Manufacturing Technology Transfer Program was developed as a continuously evolving industrial extension strategy for serving the needs of the manufacturing community. The Manufacturing Technology Transfer Program is measured by success in meeting the objectives of the past five years' proposals, including the delivery of modernization assistance and development of an industrial extension model. The current phase of the program will be completed in 1998.

To measure the success of the project, a client evaluation process has been developed which includes an evaluation questionnaire. Evaluations indicate forward strides in job creation, new businesses, expanded productivity, and enhanced international competitiveness.

RANGE POLICY DEVELOPMENT, NEW MEXICO

The Range Policy Development project has collected local economic data throughout the State. Local data have been used to develop an economic model to help explain the relationships among local economies and primary industries. The model is intended to enable policymakers to better understand how local and State econo-

mies are tied to primary industries, especially those industries that use public lands. The initial focus of the project has been on the livestock grazing industry.

In New Mexico and throughout the western states, many local economies are dependent on the use and management of public range and forest lands. However, there exists a great deal of disagreement about the true level of dependence of individual communities on these public land-based industries and, consequently, disagreement about the local, statewide, and regional impacts of public policies that alter the use and management of these lands. Through better understanding of how public lands impact local and regional economies, we may be better able to predict the outcomes of potential legislation or amended land use policies, resulting in policies that enhance, rather that detract from, local economies. Early results from this project have been encouraging and have spawned a six-state collaboration to design a regional economic model, based on the New Mexico prototype.

New Mexico is in the process of developing detailed input-output models for each county, from local and state tax revenue data. Economists are following up with workshops across the state to present information from economic forecasts to local decisionmakers. Further, the project calls for increasing the utility of the models by expanding the scope of the database to include industries in addition to the grazing enterprises.

This project was initiated in December 1994. In fiscal years 1994 through 1998, $142,560 was appropriated each year for a total of $767,240. The $197,000 appropriated for fiscal year 1998 has yet to be awarded, as we have to receive and review a request from the institution. The project budget does not indicate any non-federal support. However, Agricultural Research Stations in five other States have economists currently working to expand upon the New Mexico project, ultimately to build a regional model.

According to the project director, most of the original objectives have been accomplished. In this second phase of the project, the investigators are collecting data to allow incorporation of other industry and government sectors into the model. Objectives for this phase should be completed near the end of 1998.

The proposal for continued funding underwent merit review by an agency team of National Program Staff in May 1997, and a review of progress to date was conducted by the project liaison in September 1997. The reviews focused on criteria including the relevance of the project goals, the suitability of the proposed research methods, and the extent of progress made toward addressing the goals of the project. Both reviews found that phase one objectives had been met, and progress had been made toward the objectives of the second phase of the project.

RURAL DEVELOPMENT, OKLAHOMA

This program provides financial and technical assistance to small business to create and retain jobs in rural Oklahoma and to stimulate the local economies. The program is carried out through financial services, business incubators, problem-solving assistance to small and medium-sized manufacturers and technical assistance to rural small businesses. The program is expanding to include assistance to rural small businesses to enter international trade. The program continues to evaluate new products and processes that may result in new industries or be applied to improve existing manufacturing processes. The project has undergone a merit review.

The increased demand for small business financing and technical assistance verifies the need for the program. Each year financing secured for small businesses has significantly increased. The demand for business incubators is also on the rise. Last year, Rural Enterprises (REI) agreed to manage two more business incubators bringing the total REI-managed facilities to thirteen. Also small businesses continue to need access to technical and business management assistance, worker training, and international trade assistance in order to stay competitive in domestic and world markets.

The original goal of the program was to create jobs in rural Oklahoma by providing a systematic access to improved technology, training, financial and business management assistance. Many accomplishments have resulted included financial assistance. REI is a Certified Development Corporation for the Small Business Administration as well as a designated Certified Development Financial Institution. As a result, REI has been successful in obtaining financing for entrepreneurs and rural small businesses totaling $119,060,129. Special technical assistance efforts have included 1) problem-solving assistance to small manufacturers; 2) training and dissemination of information on ISO9000 to assist rural businesses compete with a global market; 3) providing manufacturers with a "Quick View Assessment" program which enables manufacturers to compare their facilities and operations with other companies across the United States and 4) working one-one-one with small

businesses providing on-site assistance with inventory control, cash flow management and marketing.

Appropriations to date are as follows: $433,000 in fiscal years 1988 and 1989; $430,000 in fiscal year 1990; $431,000 in fiscal year 1991; $300,000 in fiscal years 1992 through 1995; and $296,000 in fiscal years 1996 and 1997; $150,000 in 1998. Appropriations total $3,669,000. No non-federal funds have been provided for this project.

The work is being carried out at Rural Enterprises, Inc., in Durant, Oklahoma and the original proposal in 1988 was for a period of 12 months. However, the objectives of Rural Enterprises, Inc., are on-going because of the nature of the activity. The clientele is diverse and decentralized. The engineering and management consultation model being pursued with individual clients results in a situation where hundreds of problems are being pursued simultaneously and when solved are replaced by new issues resulting from international competition, regulations, training needs, and changeover costs. The next phase of the program will be completed in 1998.

REI itself conducts an on-going evaluation process to measure the organization's effectiveness and efficiency in accomplishing its objectives and this is documented on a quarterly basis through our reporting system. Over 6,000 jobs have been created and retained for new and expanding businesses as a result of this program. The program has met its key objective of job creation in rural Oklahoma.

RURAL DEVELOPMENT THROUGH TOURISM, NEW MEXICO

The Rural Economic Development Through Tourism Project involves applied research and outreach focused on locally-based tourism development strategies to enhance economic opportunity in small and rural communities in New Mexico. Components of the agenda support training of local leadership and tourism professionals, strategic planning and market development, and technical assistance to communities. The proposals submitted are submitted for internal review and evaluation within the agency. Recommendations are presented to enhance impact on regional and national agendas. This is an on-going pilot to demonstrate the effective development and implementation of applied research, training, education, and technical assistance related to rural tourism as a development strategy.

The applied research and outreach project was designed by the State Cooperative Extension Organization to increase the ability of the public sector to enhance economic opportunity for rural communities through tourism development. A regional task force composed of Extension professionals and community leaders from business, industry, education, and local, state, and Federal government was developed to guide and advise the development and implementation of locally-based programming and research. The results include video training materials, a public relations package, image studies and profiles, regional tourism guides, development of tourism bus packages, festival planning workshops, development of regional tours, and a mini-grants program for tourism development.

In fiscal years 1992 through 1996 the amount of $230,000 was appropriated per year. The fiscal year 1997 appropriation was $227,000 and $247,000 was provided in 1998. Total appropriated funds to date are $1,624,000. Fiscal year 1992 included $38,764 in state matching funds. Fiscal years 1993,1994, 1995, and 1996 included $39,360 of state matching funds. Fiscal years 1997 and 1998 include $39,040 state matching funds.

Applied research and outreach is being carried out through New Mexico State University. The original completion date was September 30, 1993 and the original objectives of this research have been met. The additional objectives being presented for the current year will be completed by March 31, 1999.

The agency evaluates the merit of research proposals as they are submitted. No formal evaluation of this project has been conducted. The principal investigators and project managers submit annual reports to the agency to document impact of the project. Impacts include increases in attendance of local festivals, increase in number of tour bus visits to New Mexico, training to over 700 tourism employees in the region, and establishment of a number of new businesses. Agency evaluation of the project includes peer review of accomplishments and proposal objectives and targeted outcomes.

RURAL REHABILITATION, GEORGIA

The program has tested the feasibility of providing satellite-based adult literacy education, in association with vocational rehabilitation services, to handicapped adults in rural Georgia. The program has developed curriculum, tested and adapted

technology, established student recruitment and retention strategies, expanded to Statewide coverage, and provided successful adult literacy education.

A state task force has estimated that 25 percent of Georgia's adult population is functionally illiterate. Functional illiteracy is regarded in Georgia as a form of disability. The extent of adult functional illiteracy is similar throughout much of rural America. The original goal of this program was to prove that distance learning can be an effective tool for reaching and teaching functionally illiterate adults in rural areas. This program has demonstrated that satellite-based literacy training, in cooperation with vocational rehabilitation services, can successfully provide adult literacy education designed to improve critical reading, writing, and thinking skills, for handicapped rural adults. Over the past nine years, test scores and attendance and completion rates of students in the satellite-based program have shown that distance learning is an effective delivery system for instructing low-level readers and non-readers. Test scores and attendance rates of students in this program have been comparable to those of students in traditional, urban classes.

Funding for this program was initially appropriated in fiscal year 1989, and the program has been in operation since March 1989. Through fiscal year 1998, appropriations for this program have been as follows: $129,000 in fiscal year 1989; $256,000 in fiscal years 1990, 1991, and 1992; $250,000 in fiscal years 1993, 1994, and 1995; and $246,000 in fiscal years 1996, 1997, and 1998. Funds appropriated to date total $2,385,000. These Federal funds are typically used for program innovation and quality improvement.

The fiscal year 1998 source of non-federal funds provided for this program are state appropriated funds from the Georgia Department of Adult Education. Prior years sources also included private contributions from the Woodruff Foundation and other local foundations. Through fiscal year 1998, the total amount of non-federal funds provided for the project has been $8,006,901. The breakdown by fiscal year is: $164,000 in fiscal year 1988; $270,500 in fiscal year 1989; $809,675 in fiscal year 1990; $656,765 in fiscal year 1991; $65,000 in fiscal year 1992; $1,019,821 in fiscal year 1993; $20,000 in fiscal year 1994; $872,500 in fiscal year 1995; $1,500,000 in fiscal year 1996; $1,319,320 in fiscal year 1997; and $1,309,320 in fiscal year 1998.

The Georgia Tech Satellite Literacy Project is sponsored and operated by four organizations: Georgia Institute of Technology's Center for Rehabilitation Technology, The Center for Rehabilita-tion Technology, Inc., Literacy Action, Inc., and the Georgia Department of Technical and Adult Education. The program grantee is CRT, Inc., a private, not-for-profit business advisory board to the Center for Rehabilitation Technology, College of Architecture, Georgia Institute of Technology, from which the literacy instruction has been provided.

It was anticipated that it would take three years to demonstrate that distance learning can be an effective tool for reaching and teaching functionally illiterate adults in rural areas. That original objective was met in fiscal year 1991. Additional objectives since fiscal year 1991 have been to expand the outreach of the satellite based adult literacy program to enough additional sites throughout the state of Georgia so that all potential participants have reasonable access to the program, and to continually upgrade the quality of class programming and the technical capacities of the system. The fiscal year 1997 technological upgrades expanded the capacity of the program more than twenty-five-fold, from seventy-seven to over 2,000 downlink sites, and a six-fold increase in broadcast hours, and made materials available as supplemental tools to all Georgia literacy classes. As of December 1997, the Georgia Tech Satellite Literacy Program is in a period of transition from that of providing literacy instruction via direct television broadcasts to classrooms to that of development and dissemination of technology-based instructional aids. The project has been renamed the Lifelong Learning Network, or LNN. This change is being made based upon the request of the major sponsor, The Georgia Department of Technical and Adult Education, Office of Adult Literacy. The LNN will develop and produce video-based instructional supplements, technology-based curriculum and training for adult literacy practitioners, and multi-media projects for literacy students.

The agency receives annual reports on the project that are used, together with agency merit review, to assess its progress. Based on these reports, the agency has found that the project has made progress in demonstrating the feasibility of utilizing distance learning technology and teaching methods to provide adult literacy education programs to handicapped adults throughout the state of Georgia. The project has applied distance education technology to both control the program cost per participant and, most recently, to expand the availability of the program.

TECHNOLOGY TRANSFER PROJECTS, OKLAHOMA AND MISSISSIPPI

The original work involved the transfer of uncommercialized technologies from Federal laboratories and universities to rural businesses and communities. The objectives have evolved to providing more one-on-one assistance to small manufacturers. This type of assistance responds to the stated needs of the small manufacturing community and fills a recognized gap in the existing service provider community. This project has undergone a merit review.

Manufacturing extension programs throughout the country have identified one-on-one engineering technology assistance as a need for small manufacturers as they attempt to become more competitive and profitable. The primary goal of these programs is to contribute to an increase in business productivity, employment opportunities and per capita income by utilizing technology and information from Federal laboratories; Rural Enterprises Development Corporation and Industrial Technology Research and Development Center in Durant, Oklahoma; Mississippi State Food and Fiber Center; Vocational-Technical Education System; Center for Local Government Technology; Cooperative Extension Service; and other university departments and non-campus agencies. Specific program objectives are to:

—Develop greater profitability of existing enterprises.

—Aid in the acquisition, creation or expansion of business and industry in the area.

—Establish and effective response process for technological and industrial related inquires.

—Devise effective communication procedures regarding the program for the relevant audiences.

Funding appropriated to date is as follows: $350,000 in fiscal years 1984 and 1985; $335,000 in fiscal year 1986; $333,000 in fiscal years 1987 through 1990; $331,000 in fiscal years 1991 through 1995; and $326,000 in fiscal years 1996, 1997 and 1998. Appropriations to date total $5,000,000. Oklahoma State University and Mississippi State University have provided considerable amounts of matching support from state funds over the life of the project. Over the past four years, support has included a significant portion of engineering faculty salaries as well as the administrative support of county and district extension staff.

The work is being carried out at Mississippi State University and Oklahoma Sate University. The original proposal in 1984 was for 12 months. The original objectives have been, and continue to be met. Although individual client projects have a beginning and end, the technology transfer process is continuous. Over the past years, specific and measurable annual objectives and the achievement of objectives have been documented in annual reports. The objectives of both programs have been to: (1) continue the delivery of high-quality engineering assistance and technology transfer services to small manufactures: (2) conduct joint workshops, client referral, and joint research and application projects; and (3) demonstrate a value of service to clients many times project operating costs. The current phase of the program will be completed in 1998.

Site visits and merit reviews have been conducted annually on these projects as well as client surveys by project staff themselves. Survey results have documented job creation, productivity enhancement, and local community economic activity. The Technology Transfer program has impacted the integration of emerging technologies that are benefitting the citizens, ranging from assisting small businesses and industries in integrating new computer hardware and software for conducting electronic commerce to providing extensive online information resources. The Technology Transfer Funds have served as a catalyst for the development of a long range telecommunications network plan for the total Extension Service to link all county extension offices and research centers directly to the Mississippi date/video backbone and provide access to the Internet.

WOOD BIOMASS, NEW YORK

The objective of this project is to expand, implement, and gain acceptance of wood biomass as a sustainable, renewable, and environmentally-affable fuel source. In addition, the project is deemed to support the promotion of alternative forest products for the Nation's Central and Northern Hardwood forests regions.

The principal researchers hypothesize that the project is of national interest. Biomass research studies through the U.S. Departments of Agriculture and Energy span 20 or more years. Henceforth, the Nation is in a position to scientifically produce environmentally-affable fuels for power generation systems. Complementing the planned fuel supply are many sidebar benefits including carbon sequestration, rural economic development, wildlife habitat, and soil erosion and sedimentation associated with conventional agriculture.

The goal of this project is to promote, through applied research and technology transfer, wood biomass as a sustainable wood supply for (1) power generation, (2) alternative farm products, (3) wise stewardship of land resources, and (4) enhanced farm profitability. To accommodate these goals, scientists at the State University of New York are planting willow trials on several sites and under several conditions. Site preparation and planting has occurred on several locations, and more are planned. Cornell University, a partner institution in the project, has hired a technology transfer specialist to coordinate educational activities resulting from this work. Common events include field days, news articles, videos, and exhibits.

The original program began with an appropriation of $200,000 in fiscal year 1995. An additional $197,000 was appropriated by the Congress for fiscal years 1996, 1997, and 1998 for a total of $791,000. Four state partners and approximately 18 private partners contribute resources at a ratio of nearly 1.5 to 1 nonfederal funds for this project.

The field work is being conducted on private and state land near Syracuse, New York. Electronic and print media allows Cornell University's technology transfer activities to extend far beyond that point. The completion date for the original objectives of the project, willow cultivar planting, was September 30, 1996.

With the addition of some new dimensions to the project, the completion date is now March 31, 1999. Because of the timing of one of the fiscal awards, some weather-related problems, and some land-contract problems, all of the original objectives have not been met. Most of the unmet objectives should be completed by early spring 1999.

A field review of the project was conducted on August 20–21, 1997. Excerpts from the review report include (1) positive accolades for their quarterly progress reports, (2) positive accolades for the outreach program being conducted by Cornell University, (3) praise for the scientific outreach by the principal investigators, (4) praise for connecting the willow biomass program to the poultry waste and riparian issues in New York State, and (5) praise for gaining the acceptance of willow biomass as an agricultural crop for state property tax purposes. On the concern side, the Agency's project administrator flagged the delay in establishing the demonstration farm and requested diligence in bringing this aspect of the project to fruition. This is a new project which will not begin until Spring 1998; therefore, no evaluation has been conducted.

CSREES BUILDINGS AND FACILITIES

Question. Please provide the Committee with a summary report on each of the facilities funded through CSREES' Buildings and Facilities Program, including the federal funds provided, the total estimated cost of the project, the current status of the project, and the available non-federal project match.

Answer. This information is provided below.

CSREES BUILDINGS AND FACILITIES PROGRAM—STATUS OF PROJECTS

[Dollars in thousands]

Name and locationof facility	Total cost of project	Total Federal funds appropriated [1]	Match obtained [2]	Funds needed to complete project	Plan to complete facility and source of funding [3]	Status of facility
Poultry Science Facility, Auburn University (Auburn, AL).	$15,000	$6,000	$2,652	$6,348	Total funds needed to complete the facility will come from the State and private sources.	Design work is underway.
Alternative Pest Control Containment/Quarantine Facility, University of California (Davis/Riverside).	38,118	10,921	265	26,932	Total funds needed to complete the facility will come from the State and private sources. As an option, they would reduce the size of the facility to meet the total amount raised.	Design work has been completed at the Riverside campus; some construction has been approved. There has been no activity approved at the Davis campus.
Agricultural Biotechnology Laboratory, University of Connecticut (Storrs).	20,000	3,915	10,000	6,085	Matching funds in the amount of $10M were obtained from the State. Plans include building the facility in 3 phases as funds become available. Funds needed to complete project will be sought from private sources.	Programming and design work has been completed.
Center for Applied Aquaculture, Oceanic Institute (Waimanolo, HI) [1a].	11,450	6,375	1,350	100	Remaining funds needed will be coming from private sources.	Design and construction work underway at multiple sites.
Agricultural Biotechnology Facilities, University of Idaho (Moscow).	13,479	5,900	5,500	2,079	Funds needed to complete the facility will be sought from a combination of State and private sources.	Design work is underway.
Holmes Hall Renovation, University of Maine (Orono) ...	1,105,220	561,000	.....	544,220	Funds needed to complete the facility will be sought from the State.	Efforts have been focused on obtaining the required matching funds.
Institute for Natural Resources and Environmental Sciences, University of Maryland (Multiple locations).	20,000	10,000	3,415	6,584	Funds needed to complete the facility will be sought from the State. Plan includes reducing the number of project components from 6 to 3.	Design work is underway.

CSREES BUILDINGS AND FACILITIES PROGRAM—STATUS OF PROJECTS—Continued

[Dollars in thousands]

Name and locationof facility	Total cost of project	Total Federal funds appropriated [1]	Match obtained [2]	Funds needed to complete project	Plan to complete facility and source of funding [3]	Status of facility
Center on Hunger, Poverty and Nutrition Policy, Tufts University (Boston, MA) [1b].	15,850	7,350	7,924	.....	Not applicable. This project was included on this chart to show information in footnote 1b.	Design work is underway.
Center for Molecular Biology, Rutgers University (New Brunswick, NJ).	47,200	17,836	27,200	2,164	Funds needed to complete the project will be sought from public and private sources.	Phase I has been completed. Design work is underway for Phase II.
Center for Research on Human Nutritionand Chronic Disease Prevention, Wake Forest University (Winston-Salem, NC).	108,607	18,108	50,607	39,892	Funds needed to complete the facility are being sought from private donors. Plan includes an option to change the scope of the facility if the campaign is unsuccessful.	Construction ongoing.
Animal Care Facility, North Dakota State University (Fargo, ND).	10,058	1,918	5,000	3,140	Facility will be completed in two phases. Funds in hand will build Phase I (Livestock Care Research Facility). Phase II will build a Laboratory Animal Care Research Facility. No plan has been offered to obtain funds needed to complete Phase II.	Design work is underway.
Food Processing Pilot Plant, North Dakota State University (Fargo, ND).	1,478	750	15	713	Funds needed to complete the facility will be sought from a combination of in-kind contributions and contributions from private sources.	Efforts have been focused on obtaining the matching funds needed.
Grain Storage Research and Extension Center, Oklahoma State University (Stillwater).	975	495	240	240	Funds needed to complete the facility will be sought from private sources. Plan to complete the facility are unchanged.	Would like to begin the design phase of the project.

Coastal Institute on Narragansett Bay, University of Rhode Island (Kingston).	41,194	12,500	1,990	26,704	Costs incurred for match purposes are under review by CSREES. Plans to complete the project include reducing the number of the buildings to be built from six to four.	Design work is underway.
Agricultural, Biological, and Environmental Research Complex, University of Tennessee (Knoxville).	38,500	10,434	5,468	22,598	Funds needed to complete the facility are being sought from the State.	Efforts have been focused on obtaining the required matching funds.

[1] All funds have been obligated except for the following:
a. Oceanic Institute—Funds from fiscal years 1994 and 1995 in the amount of $3,581,000 pending receipt and approval of a proposal.
b. Tufts University—Funds from fiscal year 1997 in the amount of $820,000 pending receipt and approval of a revised proposal.

[2] Matching funds are required equivalent to the total Federal funds appropriated less the 3 percent administration fee.

[3] All plans were submitted within the required time frame. Plans are under review but have not been approved by CSREES.

FUND FOR RURAL AMERICA

Question. Of the fiscal year 1997 funds made available from the Fund for Rural America for research, please provide a list of the projects approved, including a description of the project, where the center will be located/or research will be carried out, and the amount of the award.

Answer. Fund awards have been made from fiscal year 1997 funds as part of two programs—the Planning Grant Program with awards made in September, 1997 and the Standard Grant Program with awards made in February and March, 1998. The Planning Grant awards totaled $881,000 and are summarized in Table 1. Standard Grant awards are being made as the administrative work is completed. Awards totaling $19.2 million were made February 27, 1997 and the remaining standard grants will be made over the following 2–3 weeks. Standard Grants will ultimately total $32 million and exhaust fiscal year 1997 funds. Table 2 summarizes the Standard Grant awards made as of March 2, l998.

TABLE 1.—*Planning Grant Awards*

Principal investigator/institution/State/title	*Amount*
Jonhannes, J., Montana State University, MT, Planning Grant: Rural Development System	$25,000
Simon, M., Kentucky State University, KY, Small Farm Center	25,000
Blasé, M., University of Missouri, MO, Diversifying U.S. Cropping System	24,800
Young, R., University of Missouri, MO, Farm/Environmental Policy Support System	24,000
Skees, J, University of Kentucky Research Center, KY, Managing Catastrophic Risks in the Farm and Food System and Rural Communities	24,900
Barrick, R., University of Illinois, IL, Virtual Center for Rural Community Development Planning Grant	25,000
Downing, J., Iowa State University of Science and Technology, IA, Agro-Oceanic Nutrient Flux Center	25,000
McKean, J., Iowa State University of Science and Technology, IA, National Corsortium for Pork Technology and Education	25,000
Olson, D., Iowa State University of Science and Technology, IA, Center for Sanitary Barriers to U.S. Meat Exports	25,000
Smith, W., Louisiana State University of Agricultural Center, LA, FRA Gulf-States Forest Production International Trade Center	24,500
Legg, L., University of Minnesota, MN, A Consortium for Site Specific Resource Management	25,000
Schoeneberger, M., USDA/FS-Colorado, CO, Acceptability for Conservation Buffers	25,000
Lemenager, R., Purdue University, IN, "Center for Innovative, Coordinated Beef System in the Eastern Corn Belt"	25,000
Baughman, M., University of Minnesota, MN, Center for Nonindustrial Private Forestry Education	25,000
Hoover, M., North Carolina State University, NC, International Center for Decentralized Wastewater Treatment Planning Grant	25,000
Harris, T., University of Nevada-Reno, NV, Policy for Western Public Lands	25,000
Cropp, R., University of Wisconsin-Madison, WI, Center for Cooperative Enterprise	25,000
Rosson, C., Texas Agricultural and Experimental Station, TX, International Trade Extension to Rural Communities of the Mid-Continent	25,000
Carey, H., Forest Trust, NM, "Developing the Research Capacity of Rural, Forest Dependent Communities"	25,000
Shelton, A., Cornell University, NY, Center for Biologically-Based Pest Management: Identifying Opportuntites for Rural Agriculture	24,100
Cannell, R., Virginia Polytechnical Institute, VA, Planning Grant for Establishing a Recirculating Aquaculture Center	25,000
Gilbert, J., University of Wisconsin-Madison, WI, Maintaining Land and Community: Planning Grant Proposal for a FRA Center on Minority Land Loss and Recovery	25,000
Hamilton, T., USDA/Madison, WI, Value-Added Wood Products Consortium for Rural Economics	25,000
Endter-Wada, J., Utah State University, UT, Proposal for An Intermountain West Center for Sustainable Agriculture and Environmental Stewardship	24,600

Principal investigator/institution/State/title	*Amount*
Beasley, D., North Carolina State University, NC, National Center for Manure and Animal Waste Management	25,000
Desjarlais, J., Turtle Mountain Community College (1), ND, Planning for a Rural Development Center for the Turtle Mountain Band of Chippewa	5,000
McLellan, M., Cornell University, NY, Planning Grant: Food Venture and Process Technology Center	25,000
Rochin, R., Michigan State University, MI, Latino Population and Agro-Industrial Expansion: Implications for Community Development	25,000
Andre, P., National Agricultural Library (1), MD, Increasing the Availability for Electronic Information in Rural America	25,000
Jojola, M., Southwestern Indian Polytechnical Institute (1), NM, Southwest Indian Virtual Extension Center (SIVEC)	25,000
Nault, L., Ohio State University, OH, Cereal and Oilseed Quality Center	25,000
Berg, M., Little Hoop Community College, ND, Land Grant Relationships Between LHCC and North Dakota State University	5,000
Hoffman, M., Cornell University, NY, Center for Land Stewardship Focusing on Vegetable Production in the NE U.S.	25,000
Carlson, C., "Fort Kelnap College, MT (1)", MT, Fort Kelnap College FRA Center Planning Proposal	5,000
Maier, D., Purdue University (1), IN, Center for Value-Adding Rural Enterprise (CARE)	5,000
Seronde, J., "Navajo Community College, AZ (1)", AZ, Planning for Native American Rural Development	5,000
Godfrey, G., Haskell Foundation/Haskell Indian Nations University (1), "International Extension, Education, and Research Center"	25,000
Lee, J., Mississippi State University, MS, Center for Policy Devolution and the Rural South	25,000
Wissman, D., "Grain Industry Alliance, KS (1)", KS, Planning Grant for Center Grain-Based Rural Enterprise	5,000
Bonsi, W., Tuskegee University, AL, Planning Grant for Integrated Study of Food Animal and Plant Systems (CISFAPS)	25,000

TABLE 2.—*Standard Grants Made as of March 2, 1998*

Proposal No./PI last name/institution/State/title	*Amount awarded*
9704746, Jones, University of Arizona, AZ, Food Losses from the Farm to the Consumer	$540,000
9704750, Glenn, USDA-ARS, MD, Integrated Manure Management on Dairy Farms for Conservation of Natural Resources and Profitability	380,000
9704752, Krissoff, U.S. Department of Agriculture Economic Research Service, DC, Market Development for Organic Agricultural Products	200,000
9704763, Peeples, "Peeples Consulting Associates, Inc.", VA, "Premium Diesel"—Evaluating U.S. Market Opportunities for Biodiesel as a Motor Fuel Additive"	31,000
9704765, Daniel, "Boehringer Ingelheim/NOBL Laboratories, Inc.", IA, Implementation of a Food Safety Improvement System For Sustaining the Competitiveness of the Independent Pork Producer and Packer	340,000
9704777, Rochin, Michigan State University, MI, Latinos in the Rural Midwest: Community Development Implications	185,000
9704783, Swallow, University of Rhode Island, RI, Decision Information and Support Structures to Sustain Farm Forest and Open Space in Rural Communities of Southern New England	400,000
9704785, Paustian, Colorado State University, CO, Developing Soil C Sequestration as a Commodity for Co2 Emission Mitigation in U.S. Agriculture	400,000
9704796, Humenik, North Carolina State University, NC, Advanced Waste Treatment for Environmentally Sound and Sustainable Swine Production	350,000
9704808, Rice, Kansas State University, KS, Implementation of Best Management Practices in the Blue River Basin of KS and NE	400,000
9704812, Moser, Michigan State University, MI, "Enhancing Rural Economies Through Comprehensive Extension, Research, and Partnering Approaches Using Multi-county Clusters in Michigan with"	450,000

Proposal No./PI last name/institution/State/title	Amount awarded
9704827, Halbrendt, University of Vermont and State Agricultural College, VT, Balancing Economics and Environmental Impacts of Phosphorus Management	395,000
9704830, Wyman, University of Wisconsin, WI, Leveraging Community and Industry wide Resources to Foster Biointensive IPM	50,000
9704844, Goldman, University of Wisconsin, WI, Are Value Added CV Health Claims Valid for Vegetables? Onion-induced Antiplatlet Activity	378,918
9704852, Kastner, Kansas State University, KS, HACCP Implementation and Evaluation in Small and Very Small Meat/Poultry Plants	440,000
9704879, Jones, Washington State University, WA, Development and feasibility of perennial wheat for highly erodable lands	370,000
9704882, Gillespie, Cornell University, NY, "Retail Farmers' Markets and Rural Development: Entrepreneurship, Incubation, and Job Creation"	325,000
9704889, Hall, "Michael Fields Agricultural Institute, Inc.", WI, Diversifying Corn-Soybean Rotations for Profit and Environment in Upper Midwest	420,000
9704916, Klonsky, University of California, CA, Increasing Adoption of Sustainable Agriculture and Positive Community Impacts	400,000
9704922, Spittler, Cornell University, NY, Safe Practice Assessments for Gleaned Fresh Produce in Food Rescue	447,826
9704928, Camazine, Pennsylvania State University, PA, Improving the Health and Productivity of Honey Bee Colonies	450,000
9704950, Swan, Pennsylvania State University, PA, Economic and Environmental Benefits of Watershed Restoration in Rural Communities	365,000
9704985, Emara, University of Delaware, DE, DNA Marker Technology in Commercial Broiler Breeder Selection Programs	300,000
9704986, DiMaio, Tri-Community Action Agency, NJ, New Jersey Cooperative Gleaning Program	574,591
9704998, Souza, University of Idaho, ID, Improved Marketability for Wheat Grown in the Pacific Northwest	400,000
9705019, Fauth, "Land O'Lakes, Inc.", MN, Community Food Sourcing to Facilitate Rural Economic Development	400,000
9705048, Grohn, Cornell University, NY, Optimizing and Delivering Dairy Herd Health and Management Decisions	300,000
9705078, Ray, University of Arizona, AZ, Development of Guayule as New Crop for the Production of Hypoallergenic Latex	500,000
9705126, Hedrich, Iowa State University, IA, Legume Phyto Chemicals: Improving Utilization	490,000
9705135, Grauke, USDA-ARS Pecan Breeding & Genetics, TX, Conservation and Utilization of Pecan Genetic Resources	310,000
9705157, Etter, University of Arizona, AZ, Revitalizing the Navajo Wool and Mohair Industry	25,000
9705162, Sapers, "USDA, ARS, NAA, ERRC", PA, Ensuring the Microbiological Safety of Fresh Apples	420,000
9705205, Milner, Pennsylvania State University, PA, Inhibitory Effects of Allium Foods	300,000
9705216, Akridge, Purdue University, IN, Distance Delivered Master of Business Administration Degree in Food/Agriculture	400,000
9705218, Parker, University of Vermont, VT, Improved Greenhouse Technologies Supporting New England Family Farms	140,000
9705247, Vaillancourt, North Carolina State University, NC, Mobilizing National Resources to Combat Emerging Food Animal Diseases	450,000
9705301, Miles, Center for Public Interest Research, MA, National Student Food Salvage Program	64,440
9705364, Baker, Purdue University, IN, A Comprehensive Risk Management Education Program for Corn Belt Agriculture	300,000
9705407, Hagan, Manomet Center for Conservation Sciences, MA, Integrating Economic and Ecological Goals on Private Industrial Forestland in Maine	425,000
9705412, Kimmerer, Suny College of Environmental Science and Forestry, NY, Native American Model of Ecological Restoration and Community Enhancement	300,000
9705450, Shackelford, USDA-ARS, CO, Consumer evaluation of beef classified for tenderness	400,000

Proposal No./PI last name/institution/State/title	*Amount awarded*
9705513, Henkel, Jr., University of New Mexico, NM, Rural Agricultural Enterprise Network	330,00
9705546, Smith, Tuskegee University, AL, A Biotechnical Experimental Learning Program for Rural Alabama	193,800
9705570, Swan, Washington State University, WA, Distance Delivery of a B.S. Degree in General Agriculture in a Tri-State Region	450,000
9705599, Johnson, 228 Cheatham Hall, VA, The Forest Bank: Concept to Reality	420,000
9705633, Punches, Oregon State University, OR, Evaluation of Small-Diameter timber for Value-Added manufacturing	435,000
9705634, Bundy, Iowa State University, IA, Development of Standard Method of Odor Quantification using Olfactory and Chemical Analysis	375,000
9705645, Schmidt, University of Vermont and State Agricultural College, VT, CyberSkills: A Prototype for Regeneration in Rural Communities	300,000
9705682, Fluharty, University of Missouri-Columbia, MO, Innovations for Increasing Equity Capital in Rural Communities	435,000
9800477, Bomash, University of Minnesota, MN, Enhancing Rural Development Agribusiness Through Electronic Commerce	250,000
9800499, Griegio, Northern New Mexico Community College, NM, Northern New Mexico Distance Education Project	204,427
9800503, Travis, Pennsylvania State University, PA, Improving Farmer's Access to Pest Management Tools Through Integration with the NII	219,645
9800507, Crawford, Iowa State University, IA, Telecommunications Education Partnership Program for Rural Development in Southwest Iowa	175,000
9800516, Medeiros, Ohio State University, OH, Using Technology to Provide Nutrition Education for High Risk Students	150,832
9800527, Carlascio, United Tribes Technical College, ND, 1994 Tribal Land-Grant Colleges Information Infrastructure Development	199,712
9800537, Michaelson, Eastern Washington University, WA, "Rural Schools, Careers, and Community Development"	161,539
9800545, Civille, Center for Civic Networking, MA, Public WebMarket Expansion Project	112,000
9800550, Dunham, University of Minnesota, MN, Integrating World Wide Web Technology into Our Teaching and Learning Environment	227,827
9800552, Gallagher, Oregon State University, OR, Rural West Internet Masters Project	123,121
9800554, Stark, National Center for Small Communities, DC, An Off-System Road to the Information Superhighway	75,539
9800555, Smith, University of Georgia, GA, Internet and Computer Technology of Transfer of Information to Dairy Producers	212,358
Grand Total of 1997 Standard and Telecommunications Grants	19,267,575

Question. Please explain in detail the review and selection process for center and research proposals. How were the peer panels selected and who served on these panels? What criteria were used to evaluate the proposals within the three broad areas of: (1) international competitiveness, profitability, and efficiency; (2) environmental stewardship; and (3) rural community enhancement?

Answer. The proposal review and award selection process was based on a competitive, peer evaluation of applications submitted in response to an open solicitation. The selection of peer panel members was made by Fund staff working with: the university, client, and stakeholder communities; professional associations; federal, state, and local governments; private industry and not-for-profit organizations; and the Research, Education, Extension, and Economics Advisory Board. Peer evaluators were organized into subject panels, with the panels chaired by a university principal assisted by a Fund program manager. The panels followed the same general guidelines of primary, secondary, and tertiary review and open panel discussion of each proposal that is used by the National Research Initiative and the National Science Foundation. However, the concept of "peer" was expanded to include experts drawn from across disciplines (e.g., the biological, physical, and social sciences) and functions (e.g., research, education, and extension).

All proposals were evaluated initially by a subject-specific panel. Approximately 30 of these panels made the first round of funding recommendations for Planning

Grants in the summer of 1997 and Standard Grants in the fall of 1997. In both cases, the results of these first level panels were evaluated by a second-level overview panel designed to integrate results across crop and livestock science, environment, rural development, etc. to ensure Fund dollars were allocated to maximize their problem-solving impact.

The criteria used in the subject and overview panels are summarized below in Table 3. The subject panels focused most heavily on merit and relevance but also considered potential contribution to the Fund's broader program goals. The overview panels focused more on the third criterion and generally assumed that the first level panels had covered merit and relevance questions. The same criteria were applied across the three broad areas identified in the Fund's mandate: agriculture, environment, and rural development. However, the panel chairperson and members were asked to draw on their expertise, the FAIR Act language establishing the Fund, and the language included in the USDA Request For Proposals to make the more specific judgements regarding the substantive content of the proposals necessary to make a final rating and recommendation for funding.

Table 3. Fund Grant Selection Criteria

—Scientific and Technical Merit.
—Relevance
  —Relevance to agriculture, the environment, the rural development and USDA activities in these areas; priority given to proposals that address activities in two or more of these areas
  —Involvement of appropriate agriculture, environment, and rural development "communities of interest" in problem prioritization i.e., addressing user-identified/community-problems agendas.
—Contributions to Broader Fund Goals
  —practical, multidimensional problem solving with measurable short to intermediate term (2–5 and 5–10 year) impact
  —leveraging previous public and private investment in research, education and extension; targeting "break through" activities
  —forging research, education, and extension partnerships; building inter-institutional and interdisciplinary physical, biological, and social science teams that foster "system" approaches;
  —establishing partnerships with clients and stakeholders to address cross-cutting problems and strengthens dissemination/adoption
  —potential for replication—i.e., duplication, adoption, or adaption in other problem areas or different locals
  —facilitating the transition from "a program-based agriculture to a science and technology-based" agriculture; comparable shifts for environmental and rural development activities.

Question. How many proposal were received? How many were approved? Please breakdown this data by the three broad areas above for which proposals were solicited.

Answer. Statistics on Fund applications and awards follow.

	Planning grants	Standard grants [1]
Proposals Received	461	1,181
Primarily Agriculture	184	459
Primarily Environment	62	223
Primarily Rural Development	121	161
Primarily Food	.....	111
Other [2]	84	227
Proposals Awarded/Pending Award	36	115–120
Primarily Agriculture	19	47
Primarily Environment	6	23
Primarily Rural Development	7	29
Primarily Food	.....	14
Other [2]	4	7

[1] As of 3/1/98, 61 Standard Grants had been awarded and another 59 were in final administrative review. Hence, the range of 115 to 120; subject area subtotals add to 120 although a final decision on as many as 3 to 5 awards is pending the outcome of administrative review.

[2] Includes proposals focusing on education, information systems, etc., topics applicable to all subject areas.

Question. How were project applications screened to prevent projects funded through special research or administrative grants or other competitive grant programs from also receiving funds under this program?

Answer. Two approaches were taken. First, applicants were required to submit to CSREES information on other funding sources. The Fund staff and CSREES administrative staff reviewed this information on support from other sources—both support already in hand and applied for. Second, reviewers were asked and Fund staff focused on the relevance of a proposal to the Fund's particular program goals. This entailed determining if a proposal was eligible for support from another, possibly more appropriate, funding source. This consideration lead to the elimination of several excellent proposals when the work was judged more appropriately supported through the National Research Initiative Program or the Small Business Innovation Research Program.

GOVERNMENT AND PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The Cooperative State Research, Education, and Extension Service (CSREES) has developed an annual Performance Plan that links to that of the Research, Education, and Economics (REE) Mission Area. The Plan relates program activities to the mission and goals of the agency (as described in the Agency strategic plan) to the budget request submitted in support of research, extension and education activities. More importantly, it reflects the role of CSREES in enabling land-grant universities and other partners who carry out the research and extension activities authorized in the CSREES budget.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. In framing the agency strategic plan, a number of forums were utilized to focus on goals and objectives that would direct the use of budget resources toward shared national priorities. This included the establishment of a Partnerships Working Group, comprised of CSREES administrators and partner university administrators to link program activities with outputs and outcomes; planning and hosting regional orientation sessions to share the strategic planning concept with agricultural research, extension, and education administrators and evaluation staff; the development of electronic planning and reporting software to facilitate planning and reporting by partner institutions; and the appointment of a joint agency-university task force to consider alternative planning and reporting and insure that GPRA accountability standards are met through the preparation of performance plans and reports.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The agency performance plan is linked to performance measures that relate to the President's budget. Because of the complexity of the agency budget and the large number of components in its accounts, individual components were aggregated around five agency goals for more efficient planning and reporting. Using the five goals gives a national focus to programming that is planned and conducted in a dynamic process in the states by partner institutions and other award recipients. In this process, all program activities relate to the following goals: an agricultural production system that is highly competitive in the global economy; a safe and secure food and fiber system; a healthier, more well-nourished population; greater harmony between agriculture and the environment; and enhanced economic opportunities and the quality of life among families and communities.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Because of the complexity of the agency budget and the large number of components in its accounts, activities were aggregated in the performance plan around the five agency goals for more efficient planning and reporting. This means that the individual components in the account and activity structure do not have performance measures that are specifically linked to those accounts.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. CSREES does not plan to propose any changes to its account structure for fiscal year 2000.

Question. How were performance measures chosen?

Answer. Performance measures were chosen to reflect critical actions necessary to achieve shared and national priorities in agriculture and which describe the purposes and impact of the federal investment in research, extension, and education.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The agency response to data collection and verification under GPRA relies on existing data sources—enhanced Current Research Information System (CRIS), Food and Agricultural Education Information System (FAEIS), and university information systems, new joint data and analysis activities and collaborative efforts to collect data from states. Strategies were developed to solicit input from our university partners in the design of an electronic planning and reporting system. Under this strategy the partner universities provide data collection and verification as program plans and reports made to USDA. In addition, the agency is developing an integrated management information system, Research, Education, and Economics Information System (REEIS), to link databases and provide improved analytical capacity.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No. The agency plan includes performance measures for which reliable data will be available for the first performance report.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. In the development of our performance plan, we included critical program goals that can be used to track short and intermediate program results. These include research and education in food safety, pesticide clearance and other pest management initiatives, and expanded competitive grants to enhance the nation's agricultural knowledge base, to name a selected few.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The agency plan reflects substantial internal and partnership discussions to identify outcome/output measures which demonstrate that the goals in the plan have been met, including those noted in the previous answer.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, the plan specifies agency and collective program activities as outputs and university partnership and grantees' work as the outcomes which address objectives.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers?

Answer. Customer satisfaction measures for the agency will include, but not be limited to expert assessments (such as would be needed to assess impacts of genome research and discovery), customer surveys (such as would be needed to measure scope and effectiveness of selected extension programs), economic data or social survey data, and physical monitoring (such as would be valuable to determine effects of research-based changes in best management practices affecting environmental quality or public health indicators). Examples of customers would include Federal agencies (e.g. Agricultural Research Service, Department of Energy, National Science Foundation, Environmental Protection Agency, etc.), land-grant universities, agricultural producers and consumers of information related to the food and agricultural sciences.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The agency identified approaches to addressing relevant national issues (e.g. food safety, water quality, waste management, youth and families at risk, food genome initiative, small farms, etc.) in the formation of the budget. The measurable goals—and budget necessary to achieve the goals—contribute to achieving the strategic plan of CSREES.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. In collaboration with university partners, we will be able to describe the likely impact on programs and achievement of goals.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. We are working to develop the technological capability to measure and report performance throughout the year. We have completed modernization of CRIS,

are developing REEIS, and are in the final phases of a three-year project to establish integrated grants tracking and financial management. With university partners, we have developed a National Impact Database and are updating the form and format of state plans and reports so that they can be submitted and updated through a World Wide Web-based system.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Because of the complexity of the agency budget and its many lines, individual programs were aggregated around five general agency goals for more efficient planning and reporting. While the current account structure has offered a challenge in the way we respond to the requirements of GPRA, we feel we have been successful in using the five goals to give a national focus to programming that is planned and conducted in a dynamic process in the states by partner institutions and grantees.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Although changes in the budget account structure might clarify linkage of dollars to results in a meaningful way, that is not the solution to the challenges CSREES faces in responding to GPRA. Through a partnership with the system of State Agricultural Experiment Stations, land-grant and other colleges and universities, and other public and private research and education organizations, CSREES is USDA's principal link to the university systems for the initiation and development of agricultural research and education programs. Additionally, CSREES is the Federal partner in the Cooperative Extension system, a nationwide non-formal educational network. The challenge CSREES faces is capturing and reporting research and education results of our partners who conduct and deliver activities supported in the CSREES Budget. We are currently engaging our Partners in dialogue to help them understand the role of the Federal partner in response to GPRA. This will allow CSREES to be more responsive to the GPRA mandate. In concert with our Partners, we have prepared impact statements highlighting research, education, and extension accomplishments supported by the Federal investment.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee that the present structure?

Answer. CSREES does not propose to modify its budget account structure at this time.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. CSREES does not propose to modify its budget account structure.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Strategic plan includes this information in detail, but it is not included in the performance plan.

Question. If so, what steps have you identified to prepare, anticipate, and plan for such influences?

Answer. CSREES funding, in concert with State and other sources of funding, encourages and assists State and other public and private institutions in the conduct of agricultural research and education activities. These activities contribute to the five goals of the agency. CSREES will work with its university partners, other Federal agencies, and private sector organizations to address external factors that could influence goal achievement.

Question. What impact might external factors have on your resource estimates?

Answer. The achievement of national priorities and shared goals related to agricultural knowledge is dependent not only on Federal funding, but also state and private dollars. In addition, advances in related sciences have substantial impact on technology development and adoption in agriculture.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. There are no overlapping functions or program duplication in the plan, however there is substantial ongoing need for coordination with the Agricultural Research Service and among institutions.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The questions raised under the Results Act are new in terms of its accountability measures. Initially, there will be deficiencies. However, over time, the measures will mature and provide the desired responses.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Although we strive for accurate resource estimates, externalities, including program leveraging, unanticipated costs of conducting research and extension, and breakthroughs or problems in research may influence resources.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No, we do not see a need to make substantive revisions in our strategic plan.

QUESTIONS SUBMITTED BY SENATOR GORTON

SPECIAL RESEARCH GRANTS

Question. The regional research grants are all but zeroed out in CSREES's budget. Does USDA understand the importance of regional research? For example, rice research cannot be conducted in Washington state just as apple research cannot be conducted in Arkansas. Does CSREES understand the importance of NOT nationalizing research programs?

Answer. As a part of the Administration's efforts to balance the budget and direct spending to higher priority areas, projects earmarked for specific institutions were proposed for elimination. Funding distributed by formula under the Hatch Act could be used to continue aspects of these projects if they are deemed to be of high priority at State or local levels. Additionally, researchers could apply for funding under the National Research Initiative competitive research grants program or obtain funding from State and local governments and/or private sources, such as industry, to continue these projects.

REGIONAL RESEARCH

Question. I am seriously concerned about the fact that smart, experienced agriculture scientists are being frightened away from doing any public related research. Does the USDA understand the breakdown of morale in the agricultural research community as a result of continued elimination of regional research?

Answer. Regional research is part of the formula funding mechanism authorized by the Hatch and Evans-Allen Acts. Over the last several years funding for these programs, both regional research and state-specific research, has remained constant, but resulted in an erosion of real dollars because of inflation. Most federally-funded research programs have increased the availability of competitive funding for research relative to formula funding. Recently, the National Science Foundation, members of the US Congress, and others have urged USDA to increase competitive research funding relative to formula funding as a way to improve the quality of research. We agree with that recommendation. In fiscal year 1999 the budget includes, for the first time, a small, $15 million reduction in Hatch funding to be offset by about a $40 million increase in competitive funding. This proposed change in federal policy is causing some concern among scientists and administrators at land grant universities because formula funding has provided a substantial support base for agricultural researchers. That base provides a foundation for on-going basic and exploratory research; it provides support for new researchers and others less capable of acquiring competitive grants. Overall, we believe the change will improve the effectiveness of agricultural research.

Question. Does USDA realize that if all regional funding is privatized there could be a serious breakdown in the varieties of commodities produced in this country?

Answer. Large amounts of public and private research and cooperation between the public and private sectors have made US agriculture the marvel of the world. We intend to continue that effective research partnership by investing public research dollars in critical areas where there is a significant public interest and where private industry is unlikely to take the risk. We have no intention of privatizing regional research. In fact, many regional research activities provide a critical mass of researchers working together to solve complex problems. However, the mix of formula funding and competitive funding is likely to shift in the years ahead, as explained in the answer to the above question. USDA is very concerned about having

a very broad genetic base from which to create new varieties and is proposing a $10 million Food Genome Competitive Research Grants Program as part of the fiscal year 1999 budget proposal for CSREES. The proposed program will enable USDA to cooperate with similar programs of the National Science Foundation and the National Institutes of Health on plant and animal genetics.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

DECREASES IN CSREES AQUACULTURE CENTERS

Question. Aquaculture is rapidly being recognized as one of the great growth potential industries in U.S. agriculture. Yet, the budget proposal recommends a decrease for the Aquaculture Centers program. How do you justify this decrease at a time when the industry is most at need for more research and development?

Answer. Funding for the Aquaculture Centers program would be reduced so that other high priority National issues can be addressed in keeping with the Administration's goal to reduce the Federal deficit. The reduction is not expected to have a negative impact on the program, as alternate funding from formula programs, State and local governments, and private sources could be used to support projects that are deemed to be of a high priority.

Question. What other actions might the agency be taking to ensure U.S. aquaculture remains competitive?

Answer. The agency has taken steps to assure that aquaculture research and development can be addressed through the various funding authorities used to support other sectors of agriculture including formula funds, the National Research Initiative (NRI), and the Fund for Rural America. The agency has also provided leadership for coordination of all Federal programs in support of aquaculture development through the Joint Subcommittee on Aquaculture, under the National Science and Technology Council, Office of Science and Technology Policy. In addition the Joint Subcommittee on Aquaculture is currently revising the National Aquaculture Development Plan.

DELTA TEACHERS ACADEMY

Question. Please provide an update on activities of the Delta Teachers Academy.

Answer. The Delta Teachers Academy is a 100 percent USDA-funded program of The National Faculty. The Delta Teachers Academy is administered from The National Faculty's regional office in New Orleans, Louisiana. In addition to USDA funds, the project sometimes realizes cost savings when participating school districts do not bill The National Faculty for their incurred released time costs, choosing instead to absorb those expenses themselves.

The Delta Teachers Academy continues to serve the Lower Mississippi Delta Region, which is comprised of 219 counties and parishes clustered around the Mississippi River and encompassing portions of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The project focuses on educational improvement in the core subject areas of English, geography, history, mathematics, and science by providing long-term academic enrichment to approximately 525 elementary and secondary school teachers at 35 sites by teaming them with university scholars for in-service training sessions during the school year and continuing with summer institutes. Through its Fellows Program, the Delta Teachers Academy is also sustaining the professional development of over 650 Academy graduates throughout the region.

The fiscal year 1998 project is providing orientation sessions at 15 sites established in fiscal year 1997 and is training 225 new participants. The 1998 project is also conducting 125 academic sessions to 35 continuing teacher teams and will conduct 15 two-week summer institutes for 525 school teachers in the Delta Region. The project is also conducting 10 one-day seminars for 90 Delta Teachers Academy Fellows and is planning the first conference for Academy graduates. As part of the fiscal year 1998 project, the Delta Teachers Academy will also publish three issues each of its newsletters entitled "Currents" and "Fellows Exchange."

Question. Please provide an evaluation of the accomplishments of the Delta Teachers Academy in terms of educational improvement and the socio-economic implications of the program.

Answer. This project addresses the problem of insufficient professional development opportunities for K–12 teachers in a region of pervasive poverty and depressed economic conditions. Over the past six years of its operation, the Delta Teachers Academy has demonstrated proven benefits for participating teachers including increased content mastery, revitalized classroom teaching, and enhanced ability to ini-

tiate curricular and instructional change. In addition, this project potentially could have a significant regional impact by helping to achieve long-range goals for economic development through improved educational performance. Past project evaluations conducted by USDA, the General Accounting Office, and by private firms, have documented a positive impact on student learning and motivation resulting from increased enthusiasm and improved effectiveness of teachers involved in the project.

Results of a recent survey of 144 Delta Teachers Academy participants conducted by Westat, Inc., using a stratified random sample methodology, indicate that 89 percent of the teachers agree that the program provides useful information that strengthens their subject matter competency and the content of their classroom work, 92 percent reported developing challenging new teaching skills and strategies as a result of the program, and 90 percent felt more prepared to assume a leadership role in their schools and school systems as a result of their experience. Analysis of program impacts indicate that the longer a teacher is in the program, the greater and more positive the impact. In addition, the analysis found that teachers who increased their knowledge of the tools and procedures used in their subject area had exceptionally strong impacts on student performance measures such as student work habits, attitudes, interests, aspirations, and achievement.

Question. Would you agree that a well educated population is an important goal for the revitalization of rural areas and if so, do you think the Delta Teachers Academy is working toward that goal?

Answer. Yes, a well educated population and a work force equipped with modern technological, scientific, and communications skills are vital components for rural revitalization and economic competitiveness. The Delta Teachers Academy, through its teacher development programs and activities, is providing a very real service and helping to build a solid foundation toward the goal of rural revitalization in the Lower Mississippi Delta Region.

QUESTIONS SUBMITTED BY SENATOR KOHL

SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION PROFESSIONAL DEVELOPMENT PROGRAM

Question. I continue to follow with interest the sustainable agriculture extension funding known as the Professional Development Program. The program provides for competitive grants for training and outreach activities to promote sustainable agriculture practices. Can you tell us what the program has accomplished to date? How many projects have been funded? How many training events have been held? Nationwide, what percentage of Extension agents and NRCS field staff have participated to date?

Answer. In the four years since the Professional Development Program was first funded, 125 projects have been funded through a regional competitive grants process. In addition, small grants of approximately $10,000 per year have been made to each state and island protectorate to conduct state-level programming complementary to the regionally funded projects.

To date, 226 training events have been held, involving 11,541 participants. Of those, 6,720 were Extension faculty and 875 were NRCS staff. Thus virtually 100 percent of the approximately 2,500 Extension agents nationwide who have agriculture and natural resources responsibilities—the primary audience for the program—have been exposed to sustainable agriculture concepts and information sources through one or more SARE-funded events. In addition to this accomplishment, our state extension leaders for SARE report that a smaller proportion, which varies greatly from state to state, are at an advanced stage where they are experienced at applying sustainable agriculture concepts in their day-to-day work and are able to teach others. In most states, NRCS field staff are participants, but no more than one-third of those field staff have participated to date. Farm Services Agency field personnel have also expressed interest in SARE's Professional Development Program in some states, and represent another high-priority audience that has barely been tapped.

Question. The budget request for this program is for level funding at $3.3 million. What funding level would be necessary to fulfill the Farm Bill mandate for this program, including comprehensive curricula development, complete field staff training, and innovative outreach projects in each region of the country?

Answer. The SARE Professional Development Program, authorized as the Sustainable Agriculture Technology Development and Transfer Program, was authorized up to $20 million per year. If fully funded, comprehensive curriculum could be developed and extended to all agricultural professionals in Extension, Natural Re-

sources Conservation Service, Farm Services Agency, and other interested agencies, as well as reaching a critical mass of private-sector professionals, for example, crop consultants, pest consultants, and agricultural lenders whom our agency staff tell us also influence producers' decisions.

Question. Why does the budget request not include an increase to begin to reach those program mandates?

Answer. The budget request does not include an increase for this program because other competing priorities were judged more critical in the current environment of very limited budgets.

QUESTIONS SUBMITTED BY SENATOR LEAHY

SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION (SARE)

Question. I was pleased to hear the President give such strong support for research programs in his State of the Union Address and in the fiscal year 1999 budget proposal. However I am concerned about several areas of research which I believe did not receive the funding they need in the Administration's budget. In particular, while the Department did increase funding for the SARE program by $2 million, this increase is inadequate to meet the increasing demand for this critical program. The President's Council on Sustainable Development concluded that "sustainable U.S. agriculture will require research that focuses on integrating productivity, profitably, and environmental stewardship." I appreciate that the Department did increase funding in the ATTRA program to $2 million. However, $15 million is also needed to fund the SARE program. In addition to the current heavy demand for the program, implementation of the Food Quality Protection Act and the Organic Foods Production Act will leave many producers desperately seeking information on alternative practices. What impact is the Department expecting implementation of the Food Quality Protection Act and the Organic Foods Production Act to have on the SARE and ATTRA programs, and how will the funding increases in these programs be used to address it?

Answer. The Food Quality Protection Act requires EPA to establish new risk-based standards for a very large number of pesticides. USDA's Office of Pest Management Policy has been created to more fully engage EPA as it implements FQPA. USDA and EPA have signed a Memorandum of Understanding that commits the two agencies to work together when regulatory action by EPA would reduce farmer competitiveness, limit producers ability to adopt practices such as IPM, and ensure consumers a safe, abundant, high quality of food and other agricultural products. It is likely, however, that a number of pesticides, including some commonly used chemicals, will be restricted or even unavailable. Producers who rely on these materials for effective pest control will be looking for alternatives from SARE, ATTRA and other sources. SARE-funded research will contribute to the CSREES and department-wide effort to provide producers with research-based alternatives. Eighteen percent of SARE projects funded over the past ten years have dealt primarily with pest management, and many others have included pest management in the study of crop and livestock production systems.

CSREES and its land-grant university partners have been directing resources from several programs to begin providing science-based solutions to the challenges presented by FQPA: the Minor Crop Pest Management Program, IR–4; the National Agricultural Pesticide Impact Assessment Program, NAPIAP; the Pest Management Information Decision Support System; the Pesticide Applicator Training Program; the Pest Management Alternatives Program; and the Integrated Pest Management (IPM) Program. SARE will coordinate its efforts in pest management with these other programs through interaction with national program leaders and through interaction at the regional level such as through service on SARE technical review committees. One of SARE's particular strengths in pest management is that it includes research and extension of pest management alternatives in the context of whole farming systems, including such factors as soil and crop management, water management and marketing. Another great strength of SARE is that producers are directly involved at all levels of the program: they serve on the Administrative Councils that set program direction and recommend projects to fund and they are active participants in SARE projects. These characteristics help ensure that SARE findings are useful to farmers and therefore aid greatly in their rapid adoption.

The Organic Foods Production Act will stimulate greatly increased interest by producers, processors and marketers who want to take advantage of this emerging market which has been expanding by about 20 percent per year. SARE has funded dozens of research and education projects on organic production and marketing in

its ten-year history. An increased communications effort will be required to ensure that the public has the information it needs from these projects, and new research and education projects will be needed to find answers to the many questions that organic producers will face as they take advantage of the organic market.

The Appropriate Technology Transfer for Rural Areas (ATTRA) is the national sustainable farming information center that links people involved in full-or part-time farming to information and resources on sustainable agriculture. ATTRA program service are available to farmers, Extension agents, researchers, farm organizations, and others involved in commercial agriculture, including market gardeners and small farmers. ATTRA is funded through a cooperative agreement between the private nonprofit National Center for Appropriate Technology (NCAT) and the USDA Rural Business—Cooperative Service (USDA-RBS). Congress must annually approve ATTRA's funding because is is included as part of USDA's budget proposal.

Question. How could additional funding for the SARE program, over the $10 million recommended by the Department, be used to further aid producers?

Answer. Additional SARE funds could be used to aid producers who are eager for new information on a variety of sustainable agriculture topics such as improving soil quality, reducing nutrient run-off into surface and groundwater, managing pests effectively with reduced reliance on pesticides, diversifying cropping systems in ways that improve profits as well as protect the environment, taking advantage of new marketing opportunities, and enhancing communities through locally-owned value-added production and marketing. These benefits would come from increased communication of results from the more than 1,000 projects that SARE has funded over the past ten years, plus new research findings from an increased number of SARE grants. An increased communications effort could tailor packages of information to specific types of producers who have different needs and interests, for example, limited-resource producers, ranchers, market gardeners, organic producers, large conventional grain producers, and so forth. Increased funding would also develop new information on production and marketing alternatives that are both scientifically sound and of practical use to farmers and ranchers in the short term, and would allow additional investments in longer-term trials that are critical to our understanding of long-term impacts of farming methods.

HATCH ACT/MC INTIRE-STENNIS COOPERATIVE FORESTRY ACT

Question. In light of the Administration's support of research programs, I cannot understand the Department's dramatic reduction in funding for the basic land grant research funding programs. The Hatch Act, the McIntire-Stennis Cooperative Forestry Act, and the Smith-Lever Act form the basis of Land Grant College research programs. The kinds of cuts the Department is proposing would be devastating, certainly to the University of Vermont, and I am sure to other Land Grants around the country. Over the last ten years base funds for Land Grant research has declined sixteen percent even while other research program budgets were increasing. The National Association of State Universities and Land-Grant Colleges recommended $178,352,000 for the Hatch Act, $21,665,000 for the McIntire-Stennis program, and $283,797,000 for the Smith-Lever program—-all modest increases, well below the increases provided for other research areas. Instead, the Department has proposed $153,672,000 for the Hatch Act, $19,882,000 for McIntire-Stennis, and $257,753 for Smith Lever almost $50 million below the NASULGC request. For Vermont alone this would mean a reduction of $355,000. Has the Department identified the areas of research which would be affected by this dramatic decline in funding for the basic Land Grant Research?

Answer. The laws authorizing Federal formula programs enable the States to determine how to use their formula allocations to address critical issues facing agriculture in their States, region, and the Nation. The Department has not identified the areas of research which would be affected by the proposed reductions in the Hatch Act and McIntire-Stennis Cooperative Forestry formula programs because such decisions will be made by the States according to priorities at the State, regional, or local levels. Extension activities affected by the proposed reductions in the Smith-Lever formula program will also be made by the States according to priorities at the State, regional, or local levels.

Question. What are those areas of research?

Answer. The areas of research affected by the proposed reductions in the Hatch Act Act and McIntire-Stennis Cooperative Forestry formula programs will be determined by the States. Extension activities affected by the proposed reductions in the Smith-Lever formula program will also be made by the States according to priorities at the State, regional, or local levels.

Question. What are the fiscal year 1998 funding levels through these three programs to each of the Land Grant Colleges, and what would those institutions receive if the cuts recommended by the Department were adopted?

Answer. The information follows:

HATCH ACT FORMULA DISTRIBUTION, FISCAL YEARS 1998 AND 1999

Recipient	Fiscal year—	
	1998	1999
Auburn University	$3,554,184	$3,269,684
University of Alaska	887,889	827,373
American Samoa Community College	651,903	610,913
University of Arizona	1,740,990	1,599,741
University of Arkansas	3,076,640	2,821,266
University of California	4,567,954	4,144,190
Colorado State University	2,313,753	2,212,237
Connecticut Agricultural Experiment Station	719,210	663,751
University of Connecticut	922,295	844,775
University of Delaware	1,160,606	1,072,459
University of District of Columbia	611,810	565,100
University of Florida	2,616,878	2,361,333
University of Georgia	4,241,530	3,849,347
University of Guam	766,901	714,266
University of Hawaii	1,163,101	1,080,424
University of Idaho	1,881,933	1,713,749
University of Illinois	5,023,952	4,426,547
Purdue University	4,432,430	3,978,822
Iowa State University	5,436,781	4,875,947
Kansas State University	3,041,700	2,755,126
University of Kentucky	4,447,022	4,027,825
Louisiana State University	2,854,321	2,620,624
University of Maine	1,637,451	1,500,825
University of Maryland	2,202,469	2,014,626
University of Massachusetts	1,984,927	1,818,457
Michigan State University	4,581,853	4,137,827
College of Micronesia	665,539	620,933
University of Minnesota	4,408,023	3,966,039
Mississippi State University	3,646,818	3,379,946
University of Missouri	4,203,065	3,779,792
Montana State University	1,872,053	1,707,550
University of Nebraska	2,982,940	2,694,402
University of Nevada	1,085,480	1,004,493
University of New Hampshire	1,284,440	1,176,522
Rutgers University	2,550,764	2,357,458
New Mexico State University	1,447,638	1,335,273
Cornell University	4,073,261	1,160,533
Geneva Agricultural Experiment Station, New York	844,749	3,303,057
North Carolina State University	5,832,192	5,336,874
North Dakota State University	2,140,714	1,953,390
Northern Marianas College	618,931	578,649
Ohio Agricultural Research and Development Center	5,239,762	4,713,040
Oklahoma State University	2,769,030	2,514,850
Oregon State University	2,534,798	2,296,891
Pennsylvania State University	5,478,414	4,955,275
University of Puerto Rico	3,732,045	3,528,403
University of Rhode Island	1,105,048	1,023,684
Clemson University	3,054,848	2,811,649
South Dakota State University	2,191,946	1,991,904
University of Tennessee	4,297,820	3,929,481
Texas A&M University	5,796,678	5,232,730

HATCH ACT FORMULA DISTRIBUTION, FISCAL YEARS 1998 AND 1999—Continued

Recipient	Fiscal year—	
	1998	1999
Utah State University	1,663,792	1,532,426
University of Vermont	1,296,705	1,192,929
College of the Virgin Islands	750,754	698,789
Virginia Polytechnic Institute	3,716,142	3,397,715
Washington State University	3,282,091	2,909,660
West Virginia University	2,390,045	2,197,781
University of Wisconsin	4,528,655	4,082,223
University of Wyoming	1,380,124	1,270,939
Subtotal	159,380,193	145,142,514
Biotechnology Risk Assessment	203,600	203,600
Current Research Information System	219,318	218,900
Federal Administration	4,826,409	4,374,549
Small Business Innovation Research	4,097,690	3,732,437
Undistributed	6,790	.....
Total	168,734,00	153,672,000

MC INTIRE-STENNIS FORESTRY DISTRIBUTION, FISCAL YEARS 1998 AND 1999

Recipient	Fiscal year—	
	1998	1999
University, Alabama	$668,802	$648,208
University of Alaska, Fairbanks	441,352	427,762
Northern Arizona University	151,177	146,522
University of Arizona	151,177	146,522
Agricultural Experiment Station, University of Arkansas	567,713	550,232
California Polytechnic State University	30,281	29,349
California State University, Humbolt	90,843	88,046
University of California	484,497	469,578
Colorado State University	277,083	268,551
Connecticut Agricultural Experiment Station	160,427	155,486
Storrs Agricultural Experiment Station	53,475	51,829
University of Delaware, Agricultural Experiment Station	74,905	72,599
University of Florida Agricultural Experiment Station	529,805	513,491
University of Georgia School of Forest Resources	694,074	672,702
University of Guam	36,996	35,857
University of Hawaii	125,449	121,586
University of Idaho	428,716	415,515
Southern Illinois University	163,813	158,769
University of Illinois	163,813	158,769
Purdue University	352,899	342,032
Iowa State University, Agriculture and Home Economics Experiment Station	239,174	231,809
Kansas State University	163,358	158,328
University of Kentucky Agricultural Experiment Station	390,808	378,774
Louisiana State University, School of Forestry	406,244	393,735
Louisiana Technological University, School of Forestry	174,105	168,744
University of Maine	542,441	525,738
University of Maryland	226,538	219,562
University of Massachusetts	251,810	244,056
Michigan State University	197,662	191,576
Michigan Technological University	197,662	191,576

MC INTIRE-STENNIS FORESTRY DISTRIBUTION, FISCAL YEARS 1998 AND 1999—Continued

Recipient	Fiscal year—	
	1998	1999
University of Michigan	197,662	191,576
University of Minnesota	491,896	476,749
Mississippi State University	618,257	599,220
University of Missouri, School of Forestry	403,444	391,021
University of Montana, Forestry and Conservation Experiment Station	416,080	403,268
University of Nebraska	175,994	170,575
University of Nevada, Mac C. Fleischmann College of Agriculture	112,813	109,339
University of New Hampshire	314,991	305,292
Rutgers State University, Agricultural Experiment Station	188,630	182,822
New Mexico State University, Las Cruces	264,446	256,303
Cornell University New York College of Agriculture & Life Sciences	157,723	152,866
State University of New York, College of Environmental Science and Forestry	473,170	458,599
North Carolina State University	656,166	635,961
North Dakota State University of Agriculture and Applied Sciences	87,541	84,845
Ohio Agricultural Research and Development Center	365,535	354,279
Oklahoma State University	340,263	329,786
Oregon State University	681,438	660,455
Pennsylvania State University, Agricultural Experiment Station	479,260	464,503
University of Puerto Rico, Agricultural Experiment Station	100,177	97,092
University of Rhode Island	62,269	60,352
Clemson University College of Forestry and Recreation Resources	504,533	488,997
South Dakota State University	150,721	146,080
University of Tennessee	453,988	440,009
Stephen F. Austin State University, Texas	277,538	268,992
Texas A&M University Agricultural Experiment Station	277,538	268,992
Utah State Agricultural Experiment Station	138,085	133,833
University of Vermont	289,719	280,798
College of the Virgin Islands	49,633	48,105
Virginia Polytechnic Institute and State University	517,169	501,244
University of Washington, Seattle	353,941	343,042
University of Washington, Pullman	289,588	280,671
West Virginia State University	378,171	366,526
University of Wisconsin, Agricultural Experiment Station	466,624	452,256
University of Wyoming, Laramie	201,266	195,069
Subtotal	19,373,368	18,776,820
Biotechnology Risk Assessment	10,560	11,670
Federal Administration	614,910	596,460
Small Business Innovation Research	497,052	497,050
Undistributed	1,110	.....
Total	20,497,000	19,882,000

SMITH-LEVER ACT FORMULA DISTRIBUTION, FISCAL YEARS 1998 and 1999

Recipient	Fiscal year—	
	1998	1999
Auburn University, Alabama	$5,738,475	$5,562,676
University of Alaska, Fairbanks	870,391	828,156
American Samoa Community College	736,517	703,019
University of Arizona	1,513,585	1,449,471
University of Arkansas	4,850,041	4,696,680

SMITH-LEVER ACT FORMULA DISTRIBUTION, FISCAL YEARS 1998 and 1999—Continued

Recipient	Fiscal year—	
	1998	1999
University of California	6,064,473	5,779,244
Colorado State University	2,373,372	2,269,074
University of Connecticut	1,781,924	1,707,114
University of Delaware	1,025,832	978,127
University of the District of Columbia	969,600	930,816
University of Florida	3,558,379	3,378,724
University of Georgia	6,493,544	6,257,748
University of Guam	777,947	741,084
University of Hawaii	1,074,339	1,030,628
University of Idaho	2,153,613	2,056,420
University of Illinois	7,905,234	7,582,368
Purdue University	7,150,565	6,837,316
Iowa State University	7,598,038	7,267,756
Kansas State University	4,409,772	4,234,361
University of Kentucky	7,466,040	7,176,537
Louisiana State University	4,307,994	4,163,916
University of Maine	1,790,309	1,711,553
University of Maryland, College Park	2,697,447	2,586,754
University of Massachusetts	2,225,754	2,132,773
Michigan State University	7,194,178	6,898,070
College of Micronesia	803,547	766,721
University of Minnesota	7,086,676	6,789,427
Mississippi State University	5,909,404	5,749,625
University of Missouri	7,004,428	6,716,369
Montana State University	2,014,211	1,920,762
University of Nebraska	4,010,637	3,840,410
University of Nevada, Reno	880,746	837,279
University of New Hampshire	1,295,027	1,229,026
Rutgers State University	2,190,333	2,097,562
New Mexico State University	1,619,830	1,552,146
Cornell University	6,745,302	6,480,044
North Carolina State University	9,737,913	9,414,296
North Dakota State University	2,759,959	2,654,162
Northern Marianas College	715,969	678,974
Ohio State University	8,698,850	8,329,015
Oklahoma State University	4,424,317	4,258,973
Oregon State University	2,847,258	2,708,483
Pennsylvania State University	8,460,245	8,115,338
University of Puerto Rico	5,924,226	5,816,432
University of Rhode Island	868,752	828,474
Clemson University	4,733,086	4,571,842
South Dakota State University	2,867,580	2,746,539
University of Tennessee	7,111,332	6,869,667
Texas A&M University	9,966,767	9,577,519
Utah State University	1,323,262	1,268,151
University of Vermont	1,422,167	1,358,636
Virginia Polytechnic Institute and State University	5,910,496	722,398
College of the Virgin Islands	757,647	5,699,938
University of Washington	3,352,109	3,202,163
West Virginia State University	3,430,810	3,312,357
University of Wisconsin	7,086,051	6,781,845
University of Wyoming	1,202,245	1,147,478
Subtotal	225,888,545	217,002,436
Special Needs Formula	1,043,883	1,002,128

SMITH-LEVER ACT FORMULA DISTRIBUTION, FISCAL YEARS 1998 and 1999—Continued

Recipient	Fiscal year—	
	1998	1999
Special Needs Projects	477,852	458,738
CSRS Retirement [1]	15,023,000	14,422,080
FERS Retirement	3,841,500	3,687,838
Penalty Mail	15,221,000	14,612,160
Federal Administration	6,997,220	6,567,620
Total	268,493,000	257,753,000

[1] Estimated based on fiscal year 1997 actual.

Question. Why did the Department choose to cut funding for these basic research programs even as the Administration was promoting the need for increased funding for research?

Answer. The Administration advocates a broad range of funding mechanisms in support of university-based agricultural research, education, and extension. These mechanisms, including formula programs, competitive grants, special grants and projects, and other programs—such as Smith-Lever 3(d)—are interdependent and jointly contribute to the success of our knowledge-based system of agriculture. The priorities which define Federal support for programs in agricultural science and education are developed through a collaborative, State/Federal process of consultation with stakeholders, mutual planning, and in almost all cases, joint investment. Due to budget constraints, we have proposed decreases for Hatch Act, McIntire-Stennis Cooperative Forestry, and Smith-Lever formula funding to generate the resources needed to address issues of broad public concern that cut across State lines or other boundaries.

FUND FOR RURAL AMERICA

Question. I am a strong supporter of the Fund for Rural America and was especially pleased with the innovative approach the research office took to implementing its portion of the program. However, I am growing increasingly concerned about the results of the first round of funding. I wrote to the Department in support of several Vermont applications to the Fund almost a year ago. Decision dates on the awards have slipped continually from an original target date of October I believe. To this day, to my knowledge no announcements have been made regarding funding awards. In addition, I have heard from a number of organizations which had applied for funding, voicing confusion about calls they had received from the Department which appeared to award them grants on one hand, and then warn them that they might not actually receive the funding. When will the Department be making Fund for Rural America research awards?

Answer. The first round of Fund Planning Grants was made in September, 1997. The second round of Fund Standard Grants is being made in two increments; the first half was made in late February, 1998 and the second half will be made in March, 1998 after completion of final programmatic and administrative review.

Question. Will Congressional offices receive early notification as is standard with grant awards? What caused the delay in making grant awards?

Answer. Congressional Offices are being notified as is standard, but with the lead time slightly reduced to get the Fund awards out sooner. The USDA Congressional Relations Staff has been in contact with their counter parts in the Members' Offices and notifications have been hand delivered to expedite the process.

Delays in the first round of Fund awards relate to several factors. Initial delays involved in designing and starting-up a new program. These delays will be substantially reduced in the future. Secondly, innovative design of the first round of Fund grants. The January, 1997 Request For Proposals included provision for two simultaneous proposal submission, evaluation, and award tracks—one for Planning and Center Grants and the other for Standard Grants. We plan to streamline processes in round two by combining scientific and technical review activities for all types of proposals related to similar problems, issues, or scientific disciplines. In addition, the competitive grants program of the Fund did not allocate dollars to issues prior to receiving and reviewing proposals. This decision to support the best proposals across a wide range of disciplines and functions required new processes to support award recommendations. An overview panel to evaluate the merit of grant rec-

ommendations across subject areas was conducted to guide final award recommendations. The Fund legislation also calls for a "relevance review" by the Research, Education, Extension, and Economics Advisory Board. Together these factors worked to delay awards 2–3 months beyond our plans.

Question. What problems led to the confusion with potential recipients about awards, and what steps is the Department taking to ensure that these problems do not recur?

Answer. In an effort to fund as many high quality proposals as possible, Fund staff entered into discussions with investigators about focusing proposed work on specific objectives and possible budget savings. Many applicants interpreted budget negotiations and poorly-worded staff correspondence as a commitment prior to final award. The Department decided to postpone Center Grant awards. This allowed Fund staff to expand the number of grants funded, but also entailed changing signals to grant applications who otherwise would not have been funded.

Given the number of proposals received and the dollars available for award, the Fund success rate is about 10 percent. This means there are substantial numbers of excellent proposals which cannot be supported by the program this year.

Question. I am also very concerned about the gap in funding for the Fund. A drafting error in the Farm Bill inadvertently eliminated funding for the initiative in fiscal year 1998. I have been working with my colleagues on the Agriculture Committee to restore this funding in a agriculture research authorization bill. However, I have been disappointed by the lack of active support from the Department for efforts to resolve this problem and restore the Fund in fiscal year 1998. If funding for the program is restored for fiscal year 1998, will the Department be ready to publish a request for proposals and administer a competition in fiscal year 1998, and when would that RFP be published?

Answer. The Department will move expeditiously to announce a fiscal year 1998 competition should the language in question be passed. Even if the language remains as in the original enabling legislation, we plan to release the second Fund Request For Proposals later in fiscal year 1998 in order to make the second round of grants as early in fiscal year 1999 as possible.

Question. The fiscal year 1997 competition focused on several specific areas of research. What areas of research, education, or extension will the Department focus on in an fiscal year 1998 competition?

Answer. The first program description and request for proposals (RFP) for the FRA competitive grants program emphasized integrated research, education, and extension activities designed to address practical, short to intermediate term problems that cut across agriculture, environment, and rural development. This first RFP was designed to solicit a broad range of proposals in which the importance of problems would be established through community relevance as described in the proposal. The second Request For Proposals will address these same concerns, but with a significant tightening in award criteria and more program explanation designed to reduce the number, while maintaining the quality, of the proposals submitted.

For example, we will clarify integration, client/stakeholder linkage, and evaluation criteria. We also plan to include extensive reporting of award examples in the RFP text in an effort to improve guidance to the research, education, and extension communities. Hopefully, these efforts will allow us to continue funding an unusually strong, balanced portfolio of grants, while reducing the cost of competition to the community and program managers.

Question. Will the Department consult with the authorizing and appropriation committees when deciding on the focus of a potential fiscal year 1998 competition?

Answer. The Department is considering authorizing and appropriating committee concerns about the next RFP as expressed though vehicles such as these hearings and other communications. We also are prepared to brief committee and member staff in greater detail on the awards made from fiscal year 1997 funds and regarding plans for the next round of Fund activities.

ECONOMIC RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD AND NUTRITION PROGRAM RESEARCH

Question. The President when signing the fiscal year 1998 Appropriations Act last November, noted in his statement his concern about the provision in the bill transferring funding for research on nutrition programs from the programs' administra-

tion to the Economic Research Service (ERS). The President's fiscal year 1999 budget proposes to transfer this funding back to the Food and Nutrition Service (FNS). Would you please explain how the ERS is executing the nutrition research and evaluation program transferred to it from the Food and Nutrition Service for fiscal year 1998 and why the Administration believes that ERS is not the appropriate agency to oversee and administer these research funds?

Answer. The Economic Research Service has developed a comprehensive research program for addressing the needs of the Nation's food assistance and nutrition programs. The ERS food and nutrition assistance research program includes three broad areas of research: (1) dietary and nutrition outcomes, (2) program targeting and delivery, and (3) program forecasting and budget analysis. The dietary and nutritional outcomes area includes studies of program impacts on enhancing the access and choice of palatable, nutritious, and healthy diets of program participants. The program targeting and delivery area addresses how successful the programs are at targeting and reaching needy, at-risk population groups; program gaps and overlap; difference between rural and urban program delivery; outreach; waste, fraud and abuse; commodity procurement and distribution; public and private partnerships; and alternative benefit delivery mechanisms. The third area, program forecasting and budget analysis, focuses on how program needs change with local labor market conditions, economic growth, recession, food price inflation and general inflation; how changing State welfare programs interact with food and nutrition programs; and projections of program participation, benefit levels, and overall budgetary needs.

ERS has consulted with many government agencies, private and nonprofit organizations, universities, and the Food and Nutrition Service to solicit input for program development. A recent conference conducted under the auspices of the National Academy of Sciences was sponsored by ERS to help design and focus the program. ERS plans to operate a nationally diverse program which draws on the research capabilities of the public and private sectors, including the nation's academic institutions.

Despite the excellent work that ERS has done, the Administration believes this research and evaluation program should be administered by the Food and Nutrition Service. FNS has detailed knowledge of the country's food programs and, because they administer and have oversight responsibility for the programs, they understand their research and evaluation needs.

Question. How has shifting the $18.5 million for evaluations of food stamp, child nutrition, and WIC programs to the ERS from FNS affected full-time equivalent (FTE) personnel requirements?

Answer. ERS has not used any of the $18.5 million allocation to hire new staff nor has any of this money been used to support existing staff. ERS has, however, reallocated existing resources to address this important activity and has assigned some of the most senior management and research staff to this. A new position, Deputy Director for Food Assistance Research, was created to help administer the program. Nearly 20 researchers have been directed to focus on food assistance issues. These researchers will help implement our extramural research program. ERS's senior administrative officer has also been detailed to this project to manage the business side of the operation and the Agriculture Research Service's Contracts Office that supports this project has also given this activity its highest priority.

Question. What FTE reductions, if any, are associated with the fiscal year 1999 budget proposal to transfer funding for the research program from ERS back to the FNS?

Answer. Since ERS has reallocated and detailed existing staff to support this project, we do not foresee any need for FTE reductions associated with the transfer of funding back to FNS in the fiscal year 1999 budget proposal.

SITUATION AND OUTLOOK REPORTS

Question. There was concern earlier this year among some commodity groups regarding the possible reduction in frequency of the publication of certain Situation and Outlook Reports. Please summarize for the Committee which groups expressed concern and the nature of their concern. What change was made in the distribution of these reports and why? Has ERS now reassured the concerned commodity groups that they will have continued access to all necessary information provided in the Situation and Outlook Reports?

Answer. Field crop and livestock reporting has been reduced in most cases from 12 monthly reports to 6 reports annually. Annual yearbooks for these commodities continue to be produced. Specialty crop reports have been reduced by 1 issue each year.

Report frequency has been reduced in order to free a small amount of additional time for ERS analysts to pay more attention to maintaining and improving the quality of ERS and USDA forecasts and market analysis. In past years, short-term outlook reporting has been maintained and even expanded as staff has declined, at the expense of research and analysis to support USDA forecasts and commodity analysis. In the judgement of Agency management, this could not continue without compromising the quality of Departmental analysis. ERS continues to fully participate in the monthly Departmental estimates process, and the additional research will improve the quality of these estimates and commodity analysis support for the Department and other clients.

ERS has heard directly from: the American Sugar Alliance; the National Cotton Council; a number of firms and associations concerned with cottonseed production and marketing; and several private purveyors of livestock information, news, or newsletters. Members of the American Sugar Alliance (ASA) expressed an overall concern about the quantity of ERS resources devoted to sugar market analysis and reporting, as well as specific concerns about frequency and accessibility of sugar market information reporting, and of ERS's role in the Department's interagency commodity estimation committee process. They were greatly relieved to learn that ERS is not planning any modification of its role in the interagency process, at least for the short run. But ASA appears to remain concerned about ERS levels of resource allocation to sugar market analysis.

The National Cotton Council's (NCC) communication with ERS took the form of a request for more information about and explanation of planned changes, rather than a particular complaint. ERS staff briefed an NCC official, with apparent success.

Cottonseed interests were dismayed by ERS cancellation of a monthly, autoFAXed fact sheet on the forecasted supply of and demand for cottonseed. As a consequence of feedback from the industry, that cottonseed data series has been reestablished and now appears in the agency's Oilseeds Situation and Outlook Report, although it is now available 6 rather than 11 times per year.

The private firms that make their livelihood by repackaging, summarizing, or interpreting periodic information released by ERS on livestock market indicators remain concerned that they will have less frequent access to the information that acts as a feedstock for their own services. ERS plans to help direct these firms to the original sources (such as the Commerce Department) of some of that ERS-reported information, and will continue to make the full set of information available at a reduced frequency of reporting.

ERS is expanding its electronic distribution of material through developing commodity briefing rooms on our Web site, through continued monthly e-mail dissemination of critical data, and through some increase in the content of tables in Agricultural Outlook magazine. We have also been meeting and talking with commodity and industry groups, and listening to their needs and concerns. We have accommodated most of the concerns expressed by our clients and are convinced that we will be delivering products that are better and more useful for most of them.

ELECTRIC UTILITY DEREGULATION

Question. ERS is requesting an increase of $200,000 for an interagency research activity with USDA's Rural Utilities Service (RUS) and the Department of Energy (DOE) to expand REE's capacity to assess the potential impacts of electric utility deregulation. Will this project be completed in fiscal year 1999, or do you anticipate funding request in future fiscal years? Will RUS and DOE fund any portion of the research project? If so, how much is being provided by each agency? If not, why? What will be the role of each agency in this project?

Answer. We expect that ERS will be asked to extend its research on issues associated with electric utility deregulation for one additional fiscal year beyond fiscal year 1999.

DOE is not funding any portion of the research project beyond its commitment to provide a series of model runs, using its Policy Office Energy Modeling System, (POEMS), to provide input into the analytic framework being developed by ERS. RUS has agreed to provide $100,000 in fiscal 1998 to partially support ERS analysis of electric utility deregulation issues of interest to them. In addition, RUS has indicated a willingness to fund necessary POEMS model runs required to support the ERS analysis, in the event DOE does not provide ERS the needed model runs.

Using ERS developed scenario assumptions, DOE has committed to provide ERS with the output of several model runs of its POEMS model. DOE has not yet provided the requested model runs because it is still calibrating its POEMS model. RUS has made operational and trade area data on rural electric cooperatives avail-

able to ERS. ERS is making available its rural economic and farm cost and returns survey data bases, certain modeling capability, and providing primary support to persons who are conducting analyses on the effects of electric utility deregulation on rural consumers, businesses, farmers and on the competitiveness of rural regions.

FOOD SAFETY INITIATIVE

Question. ERS is requesting an increase of $906,000, for a total budget request of $1,391,000, for an interagency research effort to understand the benefits and costs of programs and policies to improve the safety of the Nation's food supply. Considering that this is a collaborative effort, please provide the Committee with a prioritized account of how the ERS funds will be spent, and what other agency funding will be contributed to this effort, by agency. How will the research being conducted by ERS differ from that conducted by other USDA agencies, the Food and Drug Administration, and the Centers for Disease Control? What measures are being taken to ensure there is no duplication of research efforts?

Answer. Our funding request falls into three categories. The first is surveillance activity—ERS is asking for $253,000 (an increase of $253,000 from fiscal year 1998). Other agencies contributing to this effort include the USDA Food Safety and Inspection Service (FSIS)—$1,500,000 (no change from 1998), Food and Drug Administration (FDA)—$6,038,000 ($2,200,000 increase from 1998), and the Centers for Disease Control and Prevention (CDC)—$19,000,000 ($4,500,000 increase from 1998).

The second category is for risk assessment and cost/benefit analysis—ERS is asking for $686,000 (an increase of $653,000 from fiscal year 1998). Other agencies contributing to this effort are USDA Agricultural Research Service (ARS)—$4,818,000 (increase of $320,000 from 1998), USDA Cooperative State Research, Education, and Extension Service (CSREES)—$1,962,000 (increase of $1,812,000 from 1998), FSIS—$1,000,000 (increase of $1,000,000 from 1998), USDA Office of the Chief Economist (OCE)—$158,000 (increase of $98,000 from 1998), and FDA—$13,532,000 (increase of $7,200,000 from 1998).

The third category is for educational efforts to promote food safety. ERS is asking for $420,000 (no increase from fiscal year 1998). Other agencies contributing to this effort are CSREES—$7,365,000 (increase of $5,000,000 from 1998), FSIS—$2,500,000 (increase of $2,500,000 from 1998), USDA Food and Nutrition Service (FNS)—$2,000,000 ($2,000,000 increase from 1998), and OCE—$420,000 (no increase from fiscal year 1998).

ERS plans to use the increased appropriation to support collaborative research in food safety economics. We plan to fund extramural research with cooperators in the land grant university system, and to work cooperatively with economists from the Centers for Disease Control and Prevention, Food Safety and Inspection Service, and the Food and Drug Administration. Working collaboratively in this manner will allow us to leverage our resources to support expanded research without adversely affecting other components of the ERS program.

ERS is the only USDA agency conducting research on the economics of improved food safety—the benefits of safer food and the economic consequences of interventions in the food system to reduce or prevent microbial contamination of the food supply. We are collaborating with economists from CDC and FDA in the "FoodNet" surveillance program to develop better national-level estimates of the benefits of improving food safety. We are also conducting research on how providing information on food safety through education, outreach, and food labeling can help influence consumer behavior and encourage safer food handling and preparation practices. We will be working with FSIS to provide guidance on how consumers make choices regarding safe food handling and preparation. This will enable USDA to more effectively target educational efforts under the Food Safety Initiative to promote awareness of food safety and help consumers protect themselves from foodborne health risks.

ERS is represented on multiple committees charged with the development of research plans under both the National Food Safety Initiative and the Initiative to Ensure the Safety of Imported and Domestic Fruits and Vegetables. We are actively coordinating with economists from CDC and FDA to ensure that our research efforts represent true inter-agency collaboration and to ensure that we are not duplicating efforts. The National Food Safety Initiative established the Risk Assessment Consortium, as part of the Joint Institute for Food Safety and Applied Nutrition, a collaborative activity of the FDA's Center for Food Safety and Applied Nutrition and Center for Veterinary Medicine and the University of Maryland. ERS is a member of this Consortium, which includes scientists from many Federal agencies, as well as from the academic community and the private sector. ERS will work collaboratively with consortium members to provide economic assessment of food safety

risk management and risk reduction strategies, with an emphasis on food safety risks from microbial pathogens.

SMALL FARMERS

Question. ERS is requesting an increase of $350,000 to organize and lead an interagency research activity to assess whether or not USDA is meeting the information needs of small farmers, niche marketers, and other casualties of an industrializing agricultural sector. Will this project be completed in fiscal year 1999, or do you anticipate funding requests in future fiscal years? Please provide the Committee with an account of how the $350,000 will be spent. How will ERS' involvement in this initiative relate, for example, to the CSREES $4 million request to support integrated research and education activities to address the resource constraints on small farmers?

Answer. The request is for a one-year, one-time budget increase. The full funding will be obligated in fiscal year 1999, although the project may not be completed until sometime in fiscal year 2000. We do not anticipate the need for funding beyond fiscal year 1999.

The vast majority of the funding will spent on focus group and survey methodology, the development of survey instruments, and the implementation, editing, and analysis of a broad scale survey questionnaire. We expect that most of that work will be obtained through cooperative research agreements and/or contracts. The only in-house expenditure foreseen is to hire a full-time but temporary research assistant to act as project officer and liaison between ERS project managers and the Agency's cooperators in carrying out the project.

The proposed ERS project is unique in that it investigates the commodity market, marketing, financial, and other economic information needs of small and socially disadvantaged farmers. Its findings should serve as a guide to public data collection and economic reporting programs, as distinct from extension information programs focused on dissemination and customization of related data and information. Certainly, though, this project's findings should be complementary to CSREES efforts.

Question. Regarding the research project to assess the information needs of small farmers, you state in your prepared testimony that subsequent plans would be designed to reform and modify USDA programs in the manner suggested by the assessment. What role will ERS play in monitoring the implementation of any recommended changes?

Answer. The implementation of recommended changes in the ERS market analysis and information program will be monitored in-house in order to provide documented input into the Agency's GPRA assessments.

COUNTY-BASED STUDY

Question. The Secretary indicated when he testified before this Committee that USDA now has an outside consulting firm conducting a workload study of the farm and rural program delivery system of country-based agencies. Did the ERS contract out for this study? If so, what is the cost of this study and from where were those funds taken? What has the consulting firm been told to look at specifically?

Answer. The Department has contracted with Coopers and Lybrand, the accounting and consulting firm, for a study concerning the operation of the USDA county-based agency operations. The goal of the study is the identification of alternative approaches to organizing and staffing these offices in delivering services that are: (1) clearly linked to Federal policy and program priorities and (2) transparently managed to meet Federal budget targets. Although the ERS Administrator has responsibility for the project's management, no ERS appropriations were used to support the $800,000 contract, which is funded by CCC, FSA, NRCS, and RD. ERS participates only to the extent that it responds to requests for data or analyses in accordance with its usual responsibilities. A detailed statement of work for the county study has been prepared, and if requested, could be provided to the Committee.

ERS REIMBURSEMENT POLICY

Question. In the fiscal year 1998 Appropriations Act, the committee encouraged the Department to consider the relationship between the core analytical program of the ERS and the short-term and longer-term needs of other USDA program agencies, including the circumstances under which reimbursement to the ERS would be appropriate. Has the Department carried out this Committee directive? How has ERS' core analytical program been defined and under what circumstances will ERS be able to charge USDA agencies for research more specific to their short and longer-term needs?

Answer. ERS has adopted a reimbursement policy which broadly defines the agency's core analytical program and the circumstances under which full or partial reimbursement will be sought as a condition for providing services to other agencies. When reimbursement is determined to be appropriate, the level of reimbursement is negotiated between ERS and the requesting agency. Since most program agencies have a staff of economists, ERS seeks to design its assistance so as to emphasize development of the program agency's capacity to perform its own short-term, program-oriented analyses.

The ERS reimbursement policy is as follows: The ERS core program of research and analysis is aimed at understanding key relationships and causal factors underlying economic behavior, trends and resource management decisions in the food, agricultural, and rural sectors. This body of work is informed by the longer run analytical needs of USDA program agencies, as identified in a collaborative process with ERS, and changes to accommodate shifts in their research requirements. When program agencies seek assistance that is not a component of this core research program (for example, risk assessments, cost-benefit analyses, or program evaluations), such work should be performed by ERS only on a reimbursable basis. Recognizing that the program agencies employ half of the Department's economists, ERS assistance should emphasize development of the program agency's capability to perform its own short term, program-oriented analyses.

Question. How much ERS research is conducted in-house and how much is contracted out?

Answer. In fiscal year 1997, 4 percent of ERS research was contracted out.

Question. Please explain the increased funding for the following object classifications from the fiscal year 1997 to the fiscal year 1998 level: (1) travel, (2) printing and reproduction, and (3) research and development contracts and agreements.

Answer. All of these projected increases are due to the fiscal year 1998 appropriation increase to evaluate food stamp, child nutrition, and WIC programs.

PRIORITIZING RESEARCH PROJECTS

Question. How does ERS prioritize the research projects it conducts for other USDA agencies and other organizations with the agency's normal workload? Please provide the Committee with a prioritized list of projects planned for fiscal year 1998.

Answer. ERS develops and maintains an integrated set of division plans of work (a part of the GPRA process). Each division conducts an intensive review and planning process annually, but the work plans are considered living documents that are continually reviewed and revised as problems, issues and conditions change. The work plans are developed taking into account the analytical needs of the Department and its program agencies. These needs are communicated to ERS in a number of ways. Some come in the form of specific requests for short-or long-term assistance and studies but, more frequently, needs are jointly identified though continuing exchange of information and discussion. For example, FAS and ERS have formed a Senior Coordination Task Force, co-chaired by the agencies' Associate Administrators which has a standing monthly meeting scheduled for exchange of information on program status and communication of needs and requests. Also, ERS participates regularly in the weekly staff meeting held by the Chief Economist. Similar but usually less formal exchange takes place with other agencies. The ERS Administrator has also initiated a series of briefings for senior managers of the Department's Mission Areas. The purpose of these briefings is to discuss analytical work ERS has done and is doing in support of that Mission Area and to elicit comments on the degree to which this work is meeting needs. Thus, many of the projects ERS does for other agencies are totally integrated into and are considered a part of the core program of the agency. Projects that are less closely related to our core program and for which reimbursement is received are considered of lower priority but, since reimbursement is received, additional resources are available so that these projects do not substitute for higher priority projects. Normally work plans do not rank order projects other than to identify those that are congressionally mandated and a selected few, usually inter-divisional projects, that have been identified as especially time or policy sensitive.

As an indication of the extent and variety of analytical work done in support of other agencies the latest compilation of such projects is attached. If the Committee would also like copies of current division work plans, these can be provided.

[The information follows:]

ERS Research Supporting USDA Agencies

AGRICULTURAL MARKETING SERVICE (AMS)

Analysis of the Effectiveness of the Dairy Promotion Programs.—USDA is required to submit an annual report on the producer and processor dairy promotion programs to the Congress by July 1 of each year. ERS prepares an independent evaluation of both programs to ensure program funds are properly accounted for and that the programs are administered in accordance with the respective acts and orders.

Regulatory Flexibility Act (RFA) Analysis.—The RFA requires that AMS make initial and final regulatory analyses available to the public whenever a proposed rule or rule change under a federal marketing order would have an economic effect on small handlers of products under the marketing order. ERS has developed a spreadsheet-based modeling structure for AMS use in analyzing the effect of marketing rule changes on small handlers.

AGRICULTURAL RESEARCH SERVICE (ARS)

Evaluation of Agricultural New Uses Research.—The ERS Office of Energy is working with ARS and the University of California-Davis to develop technical information on soyink and wheat starch as a concrete substitute. ERS will help develop a specific set of economic procedures for setting priorities for new uses research.

CENTER FOR NUTRITION POLICY AND PROMOTION (CNPP)

Technical Assistance on the USDA Thrifty Food Plan.—ERS provided technical assistance and price data to assist CNPP in making revisions to the thrifty food plan. The project is completed.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES)

Sustainable Agriculture Economic Impact Study.—The objective of this study led by CSREES and the Environmental Protection Agency is to determine the implications of widespread adoption of more sustainable production systems in the United States. ERS is coordinating six cooperative agreements with the Universities of Maryland, Montana State, Nebraska, Ohio State, Tennessee, and Washington State. ERS will submit cooperator reports with an overview and summary to CSREES.

National Environmental Monitoring.—ERS helps CSREES by being a reviewer of environmental monitoring research efforts.

FARM SERVICE AGENCY (FSA)

Implementation of the Conservation Reserve Program.—ERS provides economic analysis of alternative program levels, analyzes environmental impacts of the Conservation Reserve program, and evaluates long-run scenarios for establishment of minimum environmental benefit index levels for sign up acceptance. ERS has assembled data and developed air and water quality scoring look-up tables for use by local FSA and NRCS offices for EBI scoring of offers.

Evaluation of Commodity Procurement Procedures.—ERS conducted a case study for peanuts and flour to identify any commodity procurement practices that could prevent FSA from making efficient use of funds and to examine the cost effectiveness of alternative procurement practices.

Annual Cotton Transportation Cost Study.—ERS estimates the cost of marketing U.S. cotton in northern Europe which is determined in part by transportation costs. This cost estimate is need by FSA to calculate the adjusted world price (AWP).

FOOD AND NUTRITION SERVICES (FNS)

Household Food Insecurity and Hunger Validation Studies.—ERS is analyzing the extent to which household's reporting food insufficiency have lower nutrient intakes. Data from the 1989–91 Continuing Survey of Food Intake by Individuals (CSFII) will be used to assess the relationship between the "USDA food sufficiency" question and nutrient intake of all household members.

Determinants of Food Behaviors.—ERS is developing a concept paper to identify issues, problems, data, and alternative modeling approaches for developing comprehensive food and agriculture policy models. Emphasis is being directed to linkages and relationships among low income populations, food and nutrition programs, farm programs and policies, and the food production, processing, and marketing system. The concept paper will be the basis for future program developments.

Impacts of Household Resource Constraints on Food Sufficiency.—ERS will analyze the determinants of food insufficiency using data from the Survey of Income

and Program Participation (SIPP). The survey provides information on proximal causes of food insufficiency including a lack of money or food stamps to buy food, a lack of working kitchen facilities, a lack of transportation, and nonparticipation in available food programs.

FOOD SAFETY AND INSPECTION SERVICE (FSIS)

User Fees for Meat and Poultry Inspection.—ERS is conducting a broad-based evaluation of the issue of charging user fees for meat and poultry inspection. The study includes reviewing economic literature dealing with user fees and other charges levied against the private sector in support of public health and safety. Use of fees elsewhere in Government and in other countries will also be included.

Economic Support for Food Safety Regulations.—ERS is responding to a FSIS request in three areas. The research includes providing methodology for estimating the costs of illness from bacterial foodborne diseases, developing a common methodology for valuing loss of life, and developing a shared data system to facilitate analysis of entry and exit and efficient plant scale in the meat industry. The effort includes helping FSIS in doing cost/benefit analyses of proposed FSIS regulations. Foreign Agricultural Service (FAS)

Analysis of Trade Agreement Snapback Provisions.—The tariff snapback provision of the Canada-U.S. Trade Agreement requires monitoring acreage and market prices for fresh market fruits and vegetables. ERS maintains a spreadsheet acreage database with the acreage data and formulas required to determine acreage-based snapback eligibility. This information is regularly provided to FAS.

Analysis of Chile's Policies and NAFTA Accession.—ERS has an ongoing project to assess economic implications of an expansion of NAFTA to include Chile in support of a Free Trade Area of the Americas (FTAA).

Analysis of Trade Promotion Programs.—ERS is working with FAS and the Trade Promotion Coordinating Council (TPCC). The TPCC is coordinated by OMB. The ERS role is to provide government agencies participating in the TPCC with technical assistance to analyze the costs and benefits of trade promotion ERS was specifically asked to assist in the process by using Computable General Equilibrium modeling capabilities.

Federal Interagency World Food Summit Working Group.—ERS is inventorying existing research and determining the need for additional research in support of USDA World Food Summit follow-up Activities.

Ukrainian Emerging Democracies Project.—ERS is working with Ukrainian analysts to establish an on-going Ukrainian capability of producing a series of commodity reports and to develop the capability to analyze policy issues. The project includes help in establishing dissemination procedures and training of analysts in preparing and delivering briefings for agricultural decisionmakers.

China Technical Assistance Project.—ERS is providing technical assistance to Chinese analysts for the purpose of establishing commodity supply and demand balance sheets with short-term forecasts for major commodities.

Bulgarian Policy Analysis.—ERS initially provided a resident advisor to the Bulgarian Ministry of Agriculture in addition to training Bulgarian analysts to conduct analysis of agricultural and trade policy issues. Additional training of new analysts will be conducted in cooperation with analysts from the Polish Institute of Agriculture and Food Economics.

Agricultural Information in Transition Economies.—Transition economies face difficulties in establishing agricultural information systems. A conference was arranged for countries implementing agricultural information systems. Follow up work has involved establishment of Internet procedures and facilitating country to country information exchanges.

Mexican Emerging Market Project.—ERS is collaborating with Mexico to strengthen its market information and analysis system. This project will significantly improve USDA's ability to serve the information needs of the wide range of U.S. producer groups affected by developments in Mexican agriculture.

Romania Emerging Democracies Project.—ERS is working with Romanian analysts to establish an on-going series of commodity and policy issue reports and to establish regular dissemination mechanisms to make the information available to agricultural decisionmakers.

Taiwan Technical Assistance Project.—ERS provided assistance through the American Institute in Taiwan to help develop a production and marketing information system in Taiwan. This involved developing commodity situation and outlook reports, quantitative models, and database and survey methods. ERS provided training to help Taiwanese analysts conduct policy alternative analyses. The project has been completed.

Slovakia Policy Analysis ERS analysts helped the Slovaks to prepare short analytical pieces on current policy issues.—The ERS role was to help identify the problem, provided training in the methodological tools needed to conduct analysis and review the final product. The project has been completed.

FOREST SERVICE (FS)

Noxious Weeds.—The USDA Forest Service and the Bureau of Land Management in the Department of Interior head up a Federal Interagency Committee for Management of Noxious and Exotic Weeds. ERS is assisting this committee by providing economic input to assess noxious weeds issues. One of the ERS tasks is to manage a cooperative agreement with the University of Maryland to develop methodology to assess the cost effectiveness of management strategies to control noxious weeds.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION (GIPSA)

Regional Hog Procurement Study.—ERS and NASS are analyzing hog transaction data from four hog packers. The study is aimed at developing better information regarding hog pricing and procurement in the western cornbelt.

Assessment of Western Organization of Resource Council Petition.—The Western Organization of Resource Councils has petitioned GIPSA to make rules prohibiting certain procurement practices by meat packers. A GIPSA team is tasked with making recommendation regarding GIPSA's response to the petition. ERS is assisting the team to evaluate economic arguments made in public comments.

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

Florida Everglades.—ERS is assisting in developing the USDA action plan for Federal-State Florida Everglades restoration efforts.

OFFICE OF RISK ASSESSMENT AND COST-BENEFIT ANALYSIS (ORACBA)

Economic Support for HACCP Benefit/Cost Analysis.—ERS participated in the Food Safety Working Group chaired by ORACBA and collaborated on the development of a fault tree model for E. Coli 0157:h7 in hamburger. ERS also provided assistance in the review of benefit/cost analyses associated with Hazard Analysis at Critical Control Point (HACCP) systems and other Departmental proposals for reducing pathogens in meat, eggs, and poultry. This project has been completed.

OFFICE OF THE SECRETARY, USDA

Economic Impact of the Methyl Bromide Scheduled Phaseout.—USDA policymakers need information about the economic impacts of the scheduled phaseout of methyl bromide (MB) and the economic viability of alternatives to MB. ERS is estimating economic impacts of the phaseout of the use MB on important crops; including impacts on producers, consumers, production, prices, and international trade. As part of this effort, ERS is organizing workshops involving agricultural scientists, grower groups, and the pesticide industry in an effort to assess and share information.

OFFICE OF THE USDA CHIEF ECONOMIST (OCE)

NAFTA Monitoring Task Force.—ERS has a continuing effort to monitor the impacts of the North American Free Trade Agreement (NAFTA). ERS prepares periodic reports that cover agricultural commodity trade, employment, environmental effects, and policy actions in the United States, Mexico, and Canada.

Climate Change and Agriculture.—ERS took the lead in writing white papers on the impact of climate change on agriculture and possible impacts of climate change mitigation policies. The assignment included preparing briefings in response to questions from the Senate on the above issues. ERS provided ongoing support and analysis for the Framework Convention on Climate Change.

OFFICE OF THE USDA GENERAL COUNSEL (OGC)

Assessment of IBP Trade Practices Case.—ERS assisted OGC critique an industry analysis of IBP marketing practices and reviewed hearing exhibits for economic relevance and analytic soundness.

RISK MANAGEMENT AGENCY (RMA)

An Examination of How Farm-Level Decisionmaking Affects Insurance Decisions.—ERS is using time series farm business records from Illinois and Kansas to examine how crop yield and revenue risk affect the whole farm risk portfolio.

Development of a Dynamic Multi-Year Aggregate Risk Model to Assess Policy Decisions.—ERS is developing a model to determine the relationship between farm-level yield impacts and aggregate effects at the national level. The assessment includes focusing on risk within the year and also year-to-year interrelationships.

Yield Forecasting for Crop Insurance Premium Rate Setting.—ERS is analyzing whether the estimates of means and variabilities of individual farm yields can be improved by taking account of additional county or nearby farm yield data

Analysis of Actuarial and Economic Issues Underlying Crop Insurance Rate Setting.—ERS is examining whether premium rate discounts should vary by unit size and if so, how the magnitudes of the discount would vary by crop and region. Another area of work deals with factors used to adjust the base county rate to farms with yields above and below the base county yield. A third area focuses on premium rate variation relating to length of continuous participation and crop and region.

Evaluation of Existing Crop Insurance Programs.—ERS is examining the actuarial aspects of underwriting and other issues associated with crop insurance for peanuts, potatoes, and peaches.

Feasibility Studies on Insuring Various Commodities.—ERS has undertaken feasibility studies on insuring approximately 51 agricultural commodities.

Review of Alternative Revenue Insurance Products.—ERS has analyzed various revenue insurance and market value protection products. Work is now underway to assess the potential for producers to adversely select among insurance products.

Risk Management Strategies Under the 1996 Farm Act.—Risk management options being analyzed in this area of work include various risk management tools such as crop insurance, revenue insurance, price futures and options, and yield futures.

RURAL BUSINESS-COOPERATIVE SERVICES (RBCS)

EZ/EC Background Assistance.—ERS is preparing economic information packages for the use of local leaders to help them understand aspects of community development and economic growth. The resource books are based in part on community interviews. The resource book for the Mississippi Delta is complete, the book for the Texas Rio Grande Valley is nearly complete, and the interviewing stage in the Kentucky Highlands has been completed.

RURAL HOUSING SERVICE (RHS)

Rural Housing Service Research Initiative.—ERS is exploring the feasibility of conducting surveys on the characteristics of participants in the RHS single family and multifamily housing programs. The surveys would provide a data base and analysis to help RHS assess the match between RHS assisted housing and the demographic needs of rural areas, develop performance indicators to measure program effectiveness, and explore the effects of changing Federal policies on RHS housing programs and their participants.

RURAL UTILITIES SERVICE (RUS)

Rural Electric Utility Deregulation.—The ERS Office of Energy is exploring the issues involved in deregulating the electric utility industry. The objective is to analyze the potential impact on agriculture, rural areas, and rural development.

USDA WORKING GROUP ON WATER QUALITY

Water Quality Program.—The USDA Working Group on Water Quality is a multiagency group. ERS meets regularly with representatives of this group to discuss issues and progress of the USDA Water Quality Program and develop plans of work and to identify economic issues.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. ERS's annual performance goals of enhanced understanding of economic issues by policy makers, regulators, program managers, and those shaping the public debates directly flow from ERS's mission to provide economic analysis on efficiency, efficacy, and equity issues related to agriculture, food, natural resources, and rural development to improve public and private decision making. The annual performance goals parallel ERS's strategic goals. ERS program activities—research, development of economic indicators, and dissemination of research results and economic information—directly support the strategic and annual performance plan goals.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. ERS research, development of economic indicators, and information dissemination activities are focused on topics that ensure ERS can meet its performance goals of enhanced understanding of economic issues by policy makers, regulators, program managers, and those concerned with agricultural competitiveness, food safety, good nutrition, environmental quality, and rural prosperity. The link between the goals and the activities needed to attain them was an easy one for ERS to make.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. ERS's budget has one appropriation item, economic analysis and research. The Performance Plan's five goals are linked and dependent on funding levels allocated within the agency.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. ERS performance planning structure does not differ from its account and activity structure.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. ERS does not propose any changes to its account structure for fiscal year 2000.

Question. How were performance measures chosen?

Answer. ERS has always been concerned with its performance and maintained information on its analytical outputs, their use, and their impacts on decisions about U.S. agriculture, food, natural resources, and rural development. ERS began a review of its planning and performance measurement systems in fiscal year 1995 when it provided all managers training on the Government Performance and Results Act (GPRA) and results oriented management approaches. At that time, a group of middle managers reviewed and redrafted ERS performance measures. Subsequent mission area-wide activities in 1996–97 provided senior and middle ERS managers additional opportunities to test and refine ERS's performance measures including exchanges with staff at other government research agencies that were engaged in pilot GPRA projects and staff at private research oriented companies. The performance plans external reviews included meetings convened by the National Agricultural Research, Extension, Education, and Economics Advisory Board and included individuals from agri-business, public interest groups, and universities. The measures have also been critiqued extensively within USDA. Lessons reinforced were: do not make performance measurement so difficult that no one has time to work on achieving goals; good planning is an ongoing process and assessments will lead to further refinements; staff will perform to indicators—make sure measures lead to correct outcomes; and research agencies face special difficulties in tying research results to broader outcomes.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance measures?

Answer. ERS will be able to produce and verify the data needed to underpin measures specified in its performance plan. ERS would like to get more feedback from users outside the federal government, but is carefully considering the costs of doing so, not just to ERS, but government wide and to society. The present requirements that must be completed before contacting non federal users (including the 60 day advertisement of intention in the Federal Register and the lengthy time involved in clearing any questionnaire/focus group/survey instruments) involve considerable costs to the government. Furthermore, this extensive clearance process regarding such contacts reflects legislative and executive concern about respondent burden—even for voluntary responses.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. ERS will have sufficient and reliable data to complete its March 2000 performance report.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The performance goals for each major goal specify quantitative goals for research outputs and qualitative goals with regard to enhancing understanding of important economic issues. Simplistic reliance on quantitative output measurements, however, can inhibit rather than contribute to successful outcomes. Care

must be taken in setting and measuring against quantity output goals to ensure that quality is not sacrificed for quantity. Quantitatively and definitively establishing the link that decision makers make particular decisions because of the provision of analyses is widely acknowledged as extremely difficult. ERS narratives will be essential to demonstrate that ERS ensured policy makers, regulators, program managers, and organizations shaping public debate had high quality, objective, relevant, timely, and accessible analyses. The narratives will cover ERS anticipation of issues and the timeliness of output, review prior to release, customer views on relevance and accessibility of ERS analyses, and how ERS analyses contributed to informed decision making on economic issues related to agriculture, food safety and nutrition, natural resources, and rural development. The narratives will provide perspective on ERS success in bridging customer satisfaction measurement—e.g., responsiveness and courtesy shown to customers—with basic outcomes goals—e.g., improving the efficiency and effectiveness of policies and programs that meet societal equity standards.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure the goals in the plan include a significant number of outcome measures?

Answer. Interpreting outcome measurements is not a straightforward process for research organizations. The cause and effect relationship between research outputs and eventual outcomes is complex. The challenges facing those interpreting performance measures for a public information and analytical organization such as ERS are even greater. Public information can be freely used without attribution. Its widespread use and effects may be difficult to fully measure. Delays between when research results are presented and when their effects are fully assimilated are variable and can be long. Specific outcomes are influenced by quality research results, as well as other factors. If ERS analysis is objective, analysis on the efficacy, efficiency, and equity impacts of specific policies, programs, and regulations will at any one time support some customers' proposals but not others. Analysis may show that an export promotion program helps corn exporters at the expense of beef exporters. Research may show that a water allocation proposal costs farmers but benefits recreation interests. Corn exporters and farmers in such cases may not fully appreciate the relevancy, accessibility, and objectivity of ERS analysis. Rigorous adherence to standards of disciplinary excellence contributes greatly to the quality and objectivity of ERS analyses and their defensibility in the face of politically-motivated criticism. The narratives that ERS will include in its performance reports will be key to showing how ERS analysis enhanced understanding by policy makers, regulators, program managers, and others of key economic issues relating to competitiveness, food safety, good nutrition, environmental quality, and rural prosperity.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. ERS has a head start in making sure that program managers understand the difference between workload and effectiveness measures. Most ERS employees are economists with substantial interest, training, and experience in understanding efficacy, efficiency, and equity concepts. In addition, ERS has augmented program managers training specific to GPRA requirements beginning in fiscal year 1995 and provided all managers training on GPRA and results oriented management approaches.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers?

Answer. ERS will include a variety of qualitative indicators to help measure the relevance, productivity, and quality of its program and outputs, and to understand how ERS research results are used by decision makers and thus affect outcomes. Indicators will include: (1) call backs for follow up information/analysis from policy makers; (2) requests for ERS staff as primary speakers at important meetings and conferences; (3) articles in major public media that correctly and effectively use ERS analysis and data; and (4) changes in legislation, regulation, and designs of social science programs related to agriculture, food, natural resources, and rural areas. To ensure that the outputs present data and analyses that are high quality, comprehensive, objective, relevant and accessible, ERS routinely provides its customers many opportunities for feedback, conducts rigorous peer reviews before analysis is released, and uses a wide variety of proven and innovative dissemination systems.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The interaction between goals and budget developed is not unidirectional. The allocation of resources across goals reflects efforts to balance economic information needs among competitiveness, food safety, nutrition, environmental, and rural

development issues. The level of funding affects ERS ability to produce and disseminate research results and economic indicators and thus the particular targets that can be set and met.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and achievement of various goals?

Answer. ERS will be able to indicate the likely impact on the level of program performance and achievement of various goals due to increases or decreases in its funding.

Question. Do you have technological capability of measuring and reporting program performance throughout the year on a regular basis, so the agency can be properly managed to achieve the desired results?

Answer. ERS could prepare program performance reports at anytime during the year. However, the nature of research outcomes, including the often long evolution between provision of economic analysis and any particular public and private decisions, means that more frequent detailed measurement and reporting may not be cost-effective.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear meaningful way. Have you faced that difficulty? Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure? How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Because ERS's budget has one appropriation item, economic analysis and research, ERS does not face difficulties in linking performance across various accounting and reporting structures and presenting its budget by performance goals.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate and plan for such influences? What impact might external factors have on resource estimates?

Answer. ERS's fiscal year 1999 performance plan discusses external factors that influence goal setting and achievement. ERS's future depends on its ability to achieve national prominence as a center of excellence for economic analysis on agriculture, food, environmental, and rural issues. Policy makers and program managers in program implementation agencies increasingly will be called to defend the efficiency and equity consequences of public policies, regulations, and programs. Tighter budgets in other USDA mission areas will decrease their already limited internal ability to anticipate the economic effects of policies and programs. ERS must clearly identify its role as the intramural social science research agency at USDA, with a focus on maintaining its core analytical activities while remaining responsive to short-term information demands.

ERS will continue to be asked to do more with declining real resources as demand for information grows in a knowledge-based and increasingly complex society. The agency will continue to pursue and integrate useful new information technologies into agency operations to help improve staff productivity and meet ERS performance goals despite fewer staff resources.

ERS will adjust its research program to the changes in the larger policy context. Changing perceptions about the role of government regulation is accelerating the search for more voluntary and market-based measures to promote public good. The agricultural policies and programs in the 1996 Farm Bill raised new issues regarding the structure and geographic location of agricultural production, as well as the volatility of prices in response to international shocks and weather. Increasing scale and concentration of agricultural activities raise environmental and economic issues pertaining to waste management. Rapidly changing economic, social, and medical environments raise challenging questions about the nutritional quality and costs of good diets and their implications for individuals, society, and the food industry. International trade agreements are shifting the focus of trade barriers away from tariffs toward issues relating to food safety and environmental quality. Continued evolution of the social, economic, and industrial structure of rural areas will change policy debates regarding the well-being of rural people and communities.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so does the Performance Plan identify the overlap or duplication?

Answer. Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies is extensive and complicated. ERS, even before new GPRA requirements, was cognizant that its unique contribution is provision of external economic analysis and took care not to duplicate or overlap with program functions in other agencies.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. ERS performance measures are sufficiently mature to allow funding decisions to consider actual performance compared to target with the caveats about the complexity of measuring performance for a public research organization given in answers to prior questions.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997.

Answer. ERS will not need to revise it strategic plan based on its fiscal year 1999 performance plan.

QUESTION SUBMITTED BY SENATOR CRAIG

Question. I am troubled by a recent ERS decision to cutback in its work on short-term commodity supply-demand analysis. It is my understanding that ERS has reduced its situation and outlook reporting by 50 percent. Yet ERS officials have told us that American producers will not pay the price for these cutbacks—that all previously available date will continue to be readily accessible through other means. Can you elaborate on this and show where this information will be published and in what form?

Answer. Much of the data provided in ERS outlook reports will continue to be available from the originating agency—the National Agricultural Statistical Service, the Foreign Agricultural Service, and the Bureau of the Census, for example. Our Situation and Outlook reports will continue to contain the data they have always contained. In months when they are not published, critical data and data that are unique ERS products will be available, in most cases, through a combination of commodity briefing rooms on the ERS Web site, through monthly E-mail distributions of critical commodity data, and through some increase in the content of tabular material in Agricultural Outlook magazine.

NATIONAL AGRICULTURAL STATISTICS SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

AQUACULTURE CENSUS DATA COLLECTION

Question. NASS has requested a one-year increase of $500,000 and 2 staff-years to conduct an aquaculture census, which would provide for the first time detailed State and national data about aquaculture production. Please explain the importance of the census, what data will be collected, and who will use this data. Is this a one-time cost or will it be necessary to conduct this census every so many years? What future year funds will be required for this census?

Answer. The NASS request of $500,000 would fund a census of all farms participating in the 1997 Census of Agriculture that produced and sold $1,000 or more of aquaculture or aquaculture products. Under this proposal, NASS would conduct an extensive aquaculture census every 5 years following the census of agriculture. The $500,000 funding would be for fiscal year 1999 only and would be dropped from the NASS budget base in fiscal year 2000.

The aquaculture census would provide, for the first time, national and State level detailed data about aquaculture production, and would be the only source of nationally consistent data for all types of aquaculture. The current NASS aquaculture program is limited to providing statistics for catfish and trout production in major States. This census would provide periodic statistics related to the production of finfish, shellfish, and animal aquaculture, which is one of the most rapidly changing segments of agriculture.

Aquaculture is an emerging industry and therefore does not have the infrastructure to collect, compile, and publish industry statistics. The aquaculture census would provide improved information on the present and possible future supply of aquaculture and aquaculture products for a broad range of data users, including in-

dustry representatives, producers, marketing and trade groups, Federal and State organizations, policy makers, and colleges and universities. Accurate and timely data are needed in order for aquaculture to be recognized as a significant sector of the agricultural industry. The aquaculture industry needs data to competitively compete for research and development funds, to efficiently plan and market aquaculture products, and to develop new products. Aquaculture data are necessary in order for the industry to receive higher priority in the certification and re-certification process for obtaining pharmaceuticals for use in aquaculture production. Aquaculture production is expanding in response to the problem of declining fisheries worldwide. Marine aquaculture can provide new employment opportunities through jobs that are near towns formerly dependent on fishing.

CENSUS OF AGRICULTURE—NEW RESEARCH

Question. In your prepared statement, you mention that the growing diversity and specialization of the Nation's farm operations have greatly complicated procedures for producing accurate agricultural statistics. You further state that considerable new research will be directed at improving the census of agriculture to be conducted in 2003. Has funding for the new research been included in the fiscal year 1999 budget? If so, where is it included? If not, do you anticipate a need for additional funding in future fiscal years?

Answer. Yes, funding for on-going research related to new sampling and survey methodology, improved data collection techniques, and increased use of enhanced computer technology is included in the NASS budget under each budget activity. This research is integrated with NASS's on-going programs and is therefore not identified as a separate item. Requests for additional research funds are not anticipated in future fiscal years.

AGRICULTURAL ECONOMICS AND LAND OWNERSHIP SURVEY

Question. NASS has requested an increase of $100,000 and 1 staff-year to begin preparatory work needed to conduct the Agricultural Economics and Land Ownership Survey. Why is the Agricultural Economics and Land Ownership data collection done through a separate survey and not included in the census of agriculture?

Answer. The Agricultural Economics and Land Ownership Survey (AELOS), historically conducted every 10 years following the census of agriculture, is a survey of farm and ranch operators that participated in the census of agriculture, and the landlords of those operators. AELOS provides the only comprehensive source of data on agricultural land ownership, financing, and inputs by farm operators and landlords for each State. Separate questionnaires are used to collect data on farm operating expenditures, capital improvements, assets, and debts for agricultural production from operators and their landlords. AELOS is conducted as an independent survey from the census of agriculture for two major reasons. First, a separate survey is required because AELOS is based on a sample of farmers and ranchers who participated in the census who meet certain criteria for size and type of operation, along with their corresponding landlords. Second, because the AELOS questionnaire is quite detailed it would not be feasible to include those questions on the census form.

PESTICIDE USE DATA COLLECTION

Question. The NASS budget includes funds to collect data on pesticide use in nursery and greenhouse crops where farm worker exposure is potentially high. Will this effort in any way relate to that carried out under the Agriculture Marketing Service (AMS) Pesticide Data Program (PDP)? If not, why?

Answer. AMS's responsibility in the Pesticide Data Program is to collect pesticide residue data on fruits and vegetables. AMS does not collect pesticide use data.

RESEARCH PROJECTS

Question. How does NASS prioritize the research projects it conducts for other USDA agencies and international organizations with the agency's normal workload? Please provide the Committee with a prioritized list of projects for fiscal year 1998.

Answer. NASS places a high priority on providing statistical services to all USDA agencies and international organizations. Because each year the total requested projects has remained fairly constant, NASS has been able to maintain the staff and infrastructure to complete all requested projects without significantly impacting the agency's core program.

The following is a list of all the surveys done on a reimbursable basis in fiscal year 1997.

[The information follows:]

NATIONAL AGRICULTURAL STATISTICS SERVICE REIMBURSABLE SURVEYS, FISCAL YEAR 1997

Source	Project
Agricultural Marketing Service	Cheese Price Data.
	Milk Price Data.
	Pesticide Data Program.
	Pesticide Recordkeeping.
Agricultural Research Service	Assistance on Food Consumption Survey Data.
	Cotton Model Survey.
	Employee Climate Survey.
Animal Plant Health Inspection Service	National Animal Health Monitoring System.
	Animal Damage Control.
	Agricultural Quarantine Inspection.
Economic Research Service	Agricultural Resource Management Survey.
Farm Service Agency	Employee Climate Survey.
	County Estimates.
	Farm Operating Loan Program.
	Feed Grain County Estimates.
Forest Service	Grazing Fees.
Rural Development	Cash Flow Models.
Department of Interior	Grazing Fees.
State Departments of Agriculture	Crop Reporting Services.

NASS REIMBURSEMENTS

Question. Do other USDA agencies requesting work from NASS reimburse NASS for the work requested? If not, when is reimbursement required?

Answer. If the requested work can be accomplished in two days or less, reimbursement is not requested. Otherwise, NASS negotiates a reimbursable agreement with the requesting agency to provide funding that covers NASS's costs for the project.

NASS RESEARCH

Question. How much NASS research (both in dollars and in number of studies) is conducted in-house and how much is contracted out?

Answer. The majority of NASS research dollars are for intramural activities. Only a small amount is expended for extramural research.

RESEARCH DOLLARS AND NUMBER OF STUDIES BY FISCAL YEAR

Item	Fiscal year 1997 actual	No. of studies	Fiscal year 1998 estimate	No. of studies	Fiscal year 1999 estimate	No. of studies
Intramural	$3,182,000	37	$3,276,000	40	$3,220,000	40
Extramural	190,000	7	205,000	6	229,000	6
Total	3,372,000	44	3,481,000	46	3,449,000	46

OBJECT CLASSIFICATIONS

Question. Please explain the increased funding for the following object classifications from the fiscal year 1997 to the fiscal year 1998 level: communications, utilities, and miscellaneous charges; printing and reproduction; advisory and assistance services; other services; and purchases of goods and services from Government Accounts.

Answer. Most of the increase from fiscal year 1997 to fiscal year 1998 in the cited object classes is attributable to data collection and processing activities associated with the 1997 Census of Agriculture, which peaks in fiscal year 1998.

[The information follows:]

NATIONAL AGRICULTURAL STATISTICS SERVICE

[Dollars in thousands]

Selected object classes	Fiscal year—		Increase	Explanation of increase
	1997	1998		
Communications, utilities, and miscellaneous charges (23.3).	$3,467	$6,210	$2,743	Postage for census questionnaires
Printing and reproduction (24.0)	345	625	280	Printing of questionnaires for irrigation and horticulture surveys
Advisory and assistance services (25.1)	132	339	207	Consultants for the Agricultural Statistics Board archives
Other services (25.2)	19,762	24,206	4,444	Data collection activities for the census
Purchases of goods and services from Government Accounts (25.3).	11,066	14,868	3,802	Contract with the Census Bureau for the census mail-out and ADP

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The NASS annual performance plan parallels the NASS strategic plan. Both plans are framed by the NASS mission statement, the five REE general outcomes which are the NASS general goals in both plans, and the NASS objectives under each of the five general goals. In addition, the strategies for achievement of the objectives are contained in both plans, and the performance measures outlined in the strategic plan are part of the Performance Goals and Indicators table in the performance plan for each of the general goals. The applicable budget program activities are indicated for each general goal in the performance plan, and for the fiscal year 1999 budget request, the dollars and FTE's for each of the three NASS budget activities are cross-walked to the five general goals. The corresponding funding levels and FTE's for fiscal years 1997–99 are also shown under each of the general goals of the performance plan.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. NASS maintains cost data for all major program activities under each of NASS's budget categories: agricultural estimates, statistical research and service, and the census of agriculture. These cost data include Agency administrative and infrastructure costs. These major activities and associated costs were then categorized into the five general goals which frame both the strategic plan and the annual performance plan. Sometimes it is difficult to determine where a given statistics program best fits under the five broad general goals. In this case, categorization is determined by which goal is most supported by the statistical data generated by that program.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The NASS performance plan is linked to the budget. The three program budget accounts have been aggregated as they apply to the performance measures. Each goal and corresponding objectives list the applicable budget activities and the funding and FTE levels. Also, the resource table at the end of the annual performance plan provides an even more detailed breakdown by individual budget program activity for each of the five general goals.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The annual performance plan is framed by the five general goals, but each goal is cross-walked to the applicable budget activities; funding and FTE levels are shown by general goal as well as by individual budget activity. NASS's program activities are agricultural estimates, statistical research and service, and census of agriculture.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. Not at this time.

Question. How were performance measures chosen?

Answer. The measures in NASS's annual performance plan were chosen because they are indicators of performance for key core NASS activities, representing each

budget category, under each of the five REE general goals. NASS also wanted a mix of measures based on external customer input and internal evaluations. NASS held several meetings to obtain input from both field and Headquarters employees on the measures that would best gauge NASS's performance.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. NASS carefully examined each performance goal to determine which would benefit most from measures based on customer input, in order to limit costs and the respondent burden on NASS customers and data users.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No. NASS anticipates having performance data available for each measure in time for the first performance report.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. NASS recommends tracking the performance goal listed under general goal 1, since this represents the largest part of NASS's agricultural statistics program. The other key performance goal for NASS is listed under goal 5, which contains the measures for the census of agriculture.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Developing meaningful outcome measures for an agency which doesn't deliver a program, but instead supplies information such as agricultural statistics is extremely difficult. NASS took the approach of formulating meaningful outcome measures which assess NASS's ability to provide accurate, unbiased, meaningful, useful data on time with no errors. Assessing these attributes requires a mix of internal measures and surveys of NASS customers and data users.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. NASS program managers are knowledgeable about the distinction between output and outcome measures. NASS first began strategic planning efforts in 1994, and all levels of NASS employees have been involved in the development of internal agency performance measures down to the Branch level since 1996.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Each of the NASS customer satisfaction measures included under the five general goals require surveys of both internal and external customers, since there is a mix of both for every statistical product and data series produced by NASS. Some of the measures included under the three management initiatives in the fiscal year 1999 Annual Performance Plan are obtained from periodic surveys of NASS employees.

Examples of customer satisfaction measures included the performance plan are: percent of data users who rate NASS data as important or essential to the orderly marketing of agricultural products; percent of agricultural leaders surveyed who rate NASS chemical use data as important or essential to analysis and risk assessment; and percent of stakeholders who rate NASS census and economic data as important to their work.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. NASS did consider the level of support for each of the five REE general goals and corresponding performance goals and measures in decisions related to the development of the fiscal year 1999 budget, particularly the new initiatives.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, particularly since adjustments would most likely be made to new budget initiatives, each of which have a unique performance indicator in the annual performance plan. Significant downward adjustments to NASS's core programs could have significant effects on program coverage, accuracy, and timeliness measures as well as customers' evaluation of the agricultural statistics program.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Some of the internal performance measures related to accuracy and timeliness can be monitored throughout the year. Others, especially those reliant on external customer surveys, are more conducive to annual reporting. However, customer surveys could be staggered during the year if the customer and data users for a particular data series or product were unique.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty? Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure? How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. NASS's present budget accounting structure cross-walked with the REE general goals allows for the development of meaningful performance indicators and resource allocations. The only weakness in this design may be that the REE general goals which each agency in the REE Mission Area adhere to, are quite general, which makes it difficult to make specific budget decisions about NASS program activities.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate and plan for such influences? What impact might external factors have on your resource estimates?

Answer. The NASS performance plan alludes to key external factors which are explicitly listed in the strategic plan. For example, one key external factor influencing NASS is the increasing demand among data users for new kinds of information provided in different forms. These pressing needs always require an assessment of NASS resources and priorities. The demand for increased coverage in the 1997 Census of Agriculture for minority farm operators, including American Indians, prompted NASS to initiate additional steps in the census mail list building process and to introduce new procedures to collect census information on American Indian reservations. Rapid changes and continued concentration in the agricultural industry has required NASS to modify procedures for collecting and publishing information for certain sectors. The need to sustain, and even increase, NASS standards for accuracy, timeliness, and relevancy in order to meet rising public expectations requires constant technology upgrades, training, and improved survey technology. Changes in priority can result in shifts in resource allocations.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. The development of the NASS performance plan has not identified any overlapping functions or program duplication. However, duplication related to NASS merging responsibility for the census of agriculture with the current agricultural statistics program have been identified and are being eliminated.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that, to what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Available resources could heavily influence the attainment of performance measures. In addition, the customer service performance measures for fiscal year 1998 are targets which were set without the use of baseline data, so actual survey data acquired starting this fiscal year could potentially be much different than these targets.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No substantive revisions are necessary at this time.

QUESTION SUBMITTED BY SENATOR BUMPERS

CENSUS OF AGRICULTURE IMPROVEMENTS

Question. Explain why you think USDA will do a better job conducting the Census of Agriculture than previously done by the U.S. Census Bureau. When will the current Census be available?

Answer. The consolidation of the agricultural census and the existing NASS agricultural estimates program benefits the government, census respondents, and data users. The government realizes improved efficiencies in both census programs and NASS current surveys. In fiscal year 1998, NASS realized a budget decrease of $1 million in list frame development and costs due to efficiencies gained from NASS conducting the census of agriculture. Additional decreases are proposed in the fiscal year 1999 budget. Census respondents incur less burden because they are no longer reporting information to two different Federal agencies. Data users will enjoy a "one-stop shop" for agricultural data, with earlier release of census data and improved coverage and accuracy. Many of these efficiencies and improvements in timeliness and accuracy are directly attributable to the involvement of NASS's 45 field offices in the conduct of the census.

Results of the 1997 Census of Agriculture will be available starting in February 1999.

QUESTION SUBMITTED BY SENATOR CRAIG

CENSUS TRANSFER

Question. What effect would current Congressional proposals to move the annual Agricultural Census from the Department of Commerce to the Department of Agriculture have on this important survey? Does NASS support these changes?

Answer. NASS was appropriated funding to conduct the census of agriculture starting with the fiscal year 1997 budget. Legislation to transfer the authority to conduct the census of agriculture from the Department of Commerce to the Department of Agriculture, Public Law 105–113, the Census of Agriculture Act of 1997, was signed by the President on November 21, 1997. NASS supported the change and is committed to conducting a census of agriculture that will equal or exceed the quality formerly produced by the Bureau of the Census, Department of Commerce.

SUBCOMMITTEE RECESS

Senator COCHRAN. We are going to continue our hearings. Our next hearing is going to be on Thursday of this week in this room. We will review the Department's budget request for natural resources and environment programs at that time.

I again want to thank Dr. Gonzalez and all of our witnesses who have been here today for your assistance in understanding the budget request and the implications of it.

Until then, the subcommittee stands in recess.

[Whereupon, at 11:05 a.m., Tuesday, February 24, the subcommittee was recessed, to reconvene at 10:06 a.m., Thursday, February 26.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

THURSDAY, FEBRUARY 26, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:06 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burns, Bumpers, and Kohl.

DEPARTMENT OF AGRICULTURE

STATEMENT OF JAMES R. LYONS, UNDER SECRETARY, NATURAL RESOURCES AND ENVIRONMENT

NATURAL RESOURCES CONSERVATION SERVICE

STATEMENT OF THOMAS A. WEBER, ACTING CHIEF

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. Today we continue our hearings reviewing the budget request submitted by the President for Agriculture, Rural Development, and related agencies. This morning we are specifically reviewing the budget requests of the Natural Resources Conservation Service.

We are pleased to have with us Under Secretary for Natural Resources and Environment James Lyons. He is accompanied by a number of individuals from the Natural Resources Conservation Service, including the Acting Chief Thomas Weber.

We appreciate the presence of all of you this morning to help us understand the proposals of the administration with respect to the accounts funded under this agency.

We are a little concerned about the proposal submitted by the administration insofar as it contains assumptions that the Congress is going to authorize user fees to be imposed on landowners and others who have the benefit of some of the services provided by this agency.

It is unlikely that Congress is going to approve this request. And so the assumption, insofar as it takes into account additional funding from these sources, is probably flawed and unrealistic.

We are also concerned about the proposal to consolidate watershed and some of the other programs in the operations accounts and wonder what the practical consequences would be for watershed and flood prevention efforts. This is an area that has been

very important, particularly in the part of the country that I represent. We worry that the watershed activity might very well disappear and not be available to landowners and local areas if this request is approved as it is submitted by the administration.

So these are some concerns that I hope the witnesses can address, and explain, as you see it, what the practical consequences of the proposals will be.

In all other respects though, we hope that we can continue to support the important work to protect our land and water resources. This is a very important area. Conservation is essential if we are to maintain a capacity to produce agriculture commodities that are important for our Nation's well-being and our economic well-being as well.

We are also interested in some of the initiatives that the Congress has passed in recent years establishing new ways to encourage conservation activity on private lands. There is just no way for the Government to obtain fee title to enough land to provide wildlife habitat and resource conservation to do the job.

We have to have the cooperation of private landowners. We have to respect their property rights. We have to respect their goal to use their land to make a living. And this all has to be worked out in a compatible way.

We think there are some important new initiatives that we should fund to try to encourage and do a better job of soil and water conservation in this process.

So having said that, I am prepared now to yield to other members of the committee for any opening comments that they would care to make. And then we will hear the testimony of our witnesses.

Senator Bumpers.

STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Thank you, Mr. Chairman. Mr. Chairman, I will submit my prepared remarks for the record and just simply echo some of the things you said; and that is that user fees—this subcommittee has never been very friendly toward the proposals for user fees, not likely to be this year either.

Second, in visiting with the Secretary the other day, I was very pleased to know that they have a goal of 2 million miles of buffer zones along streams in this country. And I think that is of critical importance.

Third, there is in my State a critical problem, which the President is helping us address. And it deals with the rapidly depleting underground aquifers in east Arkansas, the Mississippi River alluvial aquifer.

And the President, in the Energy and Water Subcommittee, has asked for $11.5 million to start helping us divert water from service streams to the rice fields. Rice is of critical importance to us. We raise 43 percent of it. And it is fairly critical to Mississippi, too. They raise a lot of rice.

And incidently, Mr. Chairman, Mississippi is also a part of that Mississippi River alluvial aquifer. You have heard me say these things before, I know, but it is of such critical importance I have

to keep talking about it until we really know that we are on our way.

We are talking about probably $1 billion overall to divert enough water on the Mississippi and the Arkansas and the White and the other rivers of east Arkansas to make up for the loss of the aquifer.

It is estimated that by the year 2015 the 200-foot aquifer will be virtually depleted. We use such tremendous amounts of it for rice growing. So we don't have an awful lot of time to deal with that.

But while that is energy and water and the Corps of Engineers will be called upon to start that project, I wanted to just say that ties in with this subcommittee's responsibilities and this particular agency's responsibilities.

I think that pretty well summarizes. I am pretty well pleased with this budget. We will obviously have to make some changes in it, probably have to make some cuts in it. But generally, I think it is a pretty good budget, Mr. Chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Senator. Your complete statement will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

I would like to welcome Secretary Lyons, Mr. Weber, and other officials from USDA to our hearing this morning. The work of the Natural Resources Conservation Service (NRCS) has long been important to my state. Arkansas is known as the Natural State and I see the role of NRCS, in a large measure, as an agency friendly to the purpose of keeping Arkansas a "Natural State".

That is not to say that my state, and the entire country, do not face serious conservation challenges. Water and wind erosion still cause problems and water pollution in spite of the dramatic improvements since the 1970's remain serious threats to the health and safety of the American people. We made great progress since the Dust Bowl days of the Depression largely due to the predecessor agency of NRCS. But we still have a long way to go.

Water pollution problems from point sources have been greatly reduced since the first Clean Water Act. As a result, more and more attention is given to non-point source pollution, which means farms. The American farmer is a world leader in conservation. His livelihood is tied to protection of his land and water resources. Any farmer who is willing to watch his farm wash into gullies and downstream will not be a farmer for long. It is the role of NRCS to assist the American farmer in doing what he does naturally.

In my own state of Arkansas, we face some serious conservation problems. The ground water supplies in East Arkansas are being depleted at an alarming rate and we have no choice but to start making use of our abundant surface water supplies. In the western part of my state, the incredible growth in the livestock industry poses serious challenges to watersheds in the form of waste management. Similar challenges are heard from coast to coast and NRCS remains the single agency at USDA, and perhaps in government, best suited to rise to the call.

The budget submission for NRCS appears as an improvement from the previous year. Increases are found in important accounts and would go far in helping the cause of conservation. I hope we can accommodate them. Unfortunately, the NRCS budget is only a part of the larger budget submission which does present major challenges for this subcommittee. I notice, however, that even the NRCS budget contains proposed user fees which have never been popular with this subcommittee and are a dangerous foundation on which to build a budget.

I note that the prepared statements of Mr. Lyons and Mr. Weber provide a good overview and I look forward to their comments. Let me simply end my remarks by restating my commitment to conservation and I will work with Senator Cochran to develop a bill for the coming fiscal year that will do all we can to give USDA, and America's farmers, the tools they need.

STATEMENT OF SENATOR BURNS

Senator COCHRAN. Senator Burns.

Senator BURNS. Thank you, Mr. Chairman, and thank you for holding this hearing this morning. Of course, I would imagine the Secretary down here understands what our problems are with this.

I am glad to hear that Arkansas would like to divert some water. We would, too. And we will——

Senator BUMPERS. We will sell it to you.

Senator BURNS. We will take all that in consideration whenever that time comes. I think the Senator from Arkansas understands what I am talking about. We have not had a lot of luck in storing water way upstream from where he is for use later. And I am still a big proponent of that, and I will probably be a proponent of what he is trying to do down in Arkansas.

But that great river system is in the center of our country, and it supplies a lifeline to a lot of things. We continually have this administration usurping the process of getting some things done. And I think the moratorium on the roads in the West and the roadless areas of this country is one of those.

We have talked with Secretary Glickman, and we want to resolve that problem as soon as we can. One wonders about this whole business of providing food and fiber for this Nation and then put all the restrictions on the people who are responsible for those provisions to get it done. And I am very concerned about that.

I am concerned about user fees. I am concerned about this business of counties that depend on public lands for economic livelihood, the receipts that are derived from those lands of harvesting and providing for America from a renewable resource, not a finite resource. And I am concerned about public safety that money provides.

I am concerned about schools and roads that are provided by those dollars, that renewable crop that we have there, and will continue to be concerned about that and the approach this administration has taken to deal with some of those problems.

I need not go into this business, that Mr. Lyons and I disagree on many things, although we agree on some. I still say I made my greatest mistake 2 years ago. I capitulated, and I should not have done that. But nonetheless, that is water under the bridge, and that is my mistake, and I will live with it forever, I think.

But I am concerned about their approach to public lands and how they are managed, especially from a renewable resource standpoint, and denying, absolutely denying, the people that live in those neighborhoods any kind of an opportunity to do what they do best. And that is they manage those lands and move this decision process out of this 17 square miles of logic-free environment where we get our eyes glazed over and our brain completely becomes dead.

So with that, I appreciate this hearing. And as we move through this process, I am satisfied there is going to be a lot of changes in the budget, as it has been presented to this Appropriations Committee.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Senator Kohl.

Senator KOHL. Thank you, Mr. Chairman.

Mr. Under Secretary——

PREPARED STATEMENT

Senator BURNS. I would like to submit my—I am sorry. Senator, if I might, I would submit my full statement for the record.

Senator COCHRAN. Without objection, it is so ordered.

Senator BURNS. I am sorry. Thank you.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BURNS

Thank you, Mr. Chairman. I appreciate you calling this hearing this morning so we learn more about what the Administration plans for the budget for the Department of Agriculture for fiscal year 1999. I appreciate seeing this particular portion of the Agriculture budget come before the subcommittee this early in the year. With our expedited appropriations process this year I thank you having some of the more controversial agencies come before the committee early.

As we are all well aware one of the primary agencies in this Subcabinet level position is that of the Forest Service. We are all also very aware of the fact that this subcommittee does not fund that portion of the Department, instead that funding comes from the Interior Appropriations Subcommittee. With this in mind, I know and understand that this is not the place to bring up decisions regarding the Forest Service. However, Mr. Chairman I would be totally negligent to my duty to my constituency if I did not bring up my utter disappointment in the Forest Service, this level of management and the Department if I did not take a moment to discuss the recent decision on the construction of roads in our national forest system.

In early January it came to our attention that the Forest Service was preparing some sort of plan to deal with the construction of roads in national forests. Soon there after, myself and several members of the Energy and Natural Resources Committee sent a letter to Secretary Glickman outlining our desire to work with the Department and the Forest Service to come up with a plan to address this issue. Approximately a week after that letter we were informed by the Forest Service that they were developing a plan and would be informing us of it as soon as it was prepared and signed off on by the higher ranking officials in the Administration.

So any thought of working in a cooperative manner had slipped out the door without so much as even an official reply to our letter. Another opportunity to work out a plan in due process to benefit all the people had escaped. Instead the Administration took this opportunity to once again issue an executive proposal to implement what they know will be a controversial plan. I am so disgusted by this Administration taking every opportunity to circumvent process when they do not see it going the way that they like to see. Instead of a process which we could all participate in, this Administration forces upon people the will of the special interest groups which support them.

Then just a little over two weeks ago, prior to the hearing with Secretary Glickman, we found out that there were plans to circumvent the process even further. The Forest Service was prepared to cancel the public meetings they had previously announced and just move forward with their plan. Thankfully this week, the Forest Service announced that they were extending the comment period on this very issue, and would host a series of public forums throughout the west. This due only to fact that Senator Craig and I caught the Secretary and voiced our complaints in person.

I never realized it would be so very difficult to defend the interests and rights of my constituents in this town. I never dreamed that the Forest Service and the Department of Agriculture were so prepared to totally disregard the voices and concerns of the citizens of rural forested America. As I stated to Secretary Glickman, I am severely disappointed and alarmed by this action taken by himself, the Chief of the Forest Service, Under Secretary Lyons.

I have said my piece on this issue now, and I thank the Chairman for his indulgence on this matter, since as I stated this is not an agency issue funded by this committee but it is one of vital importance to the people of rural Montana. I will go into this further this year during hearings before the Interior Appropriations Subcommittee and the Energy and Natural Resources Committee.

I have stated in the previous hearings before this committee I am displeased, shocked and somewhat stunned to see the budget that the Administration has pro-

posed for the Department of Agriculture. Times are difficult enough on the farm and ranch in rural America at this today, and the federal government is doing nothing to ease the pressure on these hard working people. Additional rules and regulations are continually being proposed forcing these people research and respond in order to deal with the Federal government.

This past year, for an example, people applying to place land in the Conservation Reserve Program (CRP) were forced to rewrite and reapply every time an additional sign up was announced for additional acreage to be included in the program. It is not the issue that they should have to reapply, but instead the concern arises from the rules governing each sign up period. Rules which changed not only prior to the sign up, but after the sign up had begun, and even again after the sign up had closed. Basically, Mr. Chairman, the rules were changing daily if not hourly on the ground.

The results of this confusion led to some of the best producing land in the state of Montana being placed in CRP. Excluding those marginal lands which the program was originally designed to protect. It was my understanding that the Conservation Reserve Program was a program developed to take marginal, environmentally sensitive lands out of production and allow them to be reseeded in grasses. This then would serve to protect those lands, the environment and enhance wildlife opportunities in areas of a sensitive nature.

Instead in Montana what has occurred, by the development of the indexes used to judge the fields was the exact opposite of what the program was intended to do. We have large sections of good solid producing land coming out of production, and those areas with highly sensitive land will continue to see the plowshare breaking the soil. This just does not make sense to me or to the people trying to protect the lands on which they plant.

Furthermore, during the sign up periods, people were provided with certain sets of rules and standards by which their land was judged for suitability for inclusion in the program. Only to find out afterwards, that during the process the rules and standards had changed. Ultimately these people found that what they thought they were applying to put into CRP was not eligible for the program under the rules which were finally implemented.

In a large operation it might be possible to overcome this type of realignment of seed purchase for cover forage, but on many of the smaller operations who count on this land for stable income, well it completely wipes out their cash reserve for the coming planting season. Making nearly impossible to either continue their enrollment in the program or plan for planting costs for the upcoming year. Much of this confusion was due to a lack of communication between the officials from the Natural Resource Conservation Service (NRCS) and the Farm Services Agency.

For the past several years I have supported funding for the Grazing Lands Conservation Initiative, the grassroots organization working on behalf of private landowners. This organization combines the efforts of conservation based organizations and the private land owner to work with NRCS for technical assistance on the private property owners pasture and grazing land. However, it appears that NRCS is not willing to provide an accounting of where the funding is being used to the people directly involved.

If the agency is not willing to provide this information to the participants, I will seek assistance from this committee to have them provide it. This is again another indication of the unwillingness of this agency to work with the public in the role of technical assistance instead they exert pressure in the role of a regulator.

I have read with interest your side of the story as it relates to the funding and actions during the recent implementation of the Environmental Quality Incentives Program (EQIP). Unfortunately what you detailed did not occur in my state of Montana. Instead of local districts selecting the priority areas of concern, it was the state Director doing so on his own initiative. I appreciate the work of your staff here in Washington in working with my state staff to make sure this was straightened out before the program became a catastrophe in Montana.

However it is my concern that we are taking funding to assist our producer on the world market to pay for this program. At a time when we are being out marketed and out traded on the world market forcing our domestic grain supply to continue to build to the detriment of the market price.

The farmers and ranchers are having a difficult enough time this year, with grain and livestock prices being so low. Brought on, in part at least, by the unwillingness of this Administration and the Secretary to use all the marketing tools at their disposal to make gains on the world market stage. American agriculture is always one of the first issues taken off the table at trade negotiations, in favor of the hi-tech industry, of which I am very supportive, for which the United States is famous. For-

saking our ability to continue to produce our own supply of safe, reliable and cost effective food and fiber.

As we move into the next century, I am afraid for the future of American Agriculture. As due to over regulation, misguided approaches to land management and the lack of a solid and effective trade policy that our American farmer and rancher will become an endangered species in their own rights. Forcing us to import our food supply and pay additional costs associated with the lack of our own production. The land as we once knew it will revert to what many believe the pioneers first saw as they crossed this country. However, this will not be the case as the land will continue to feed upon itself and so make itself unsuitable for the wildlife that now flourishes with sound and meaningful management practices.

I ask you to work with these great people to allow them to compete with the rest of the world in trade for our agricultural commodities. Do not overburden them with regulations which the rest of the world does not impose for production purposes. Give them the opportunity to make a decent living off the land, and they will provide you with excellence in land management and protection.

Mr. Chairman, the Secretary, in his position has the opportunity and the tools available to secure and assure the future of the American farmer and rancher on the land. All he needs is to use those tools to assist and not over regulate the producer, instead provide them guidance and technical assistance. Instead the Department and the agencies use those same tools to overburden the producer with rules and regulations, making it difficult, if not in many cases impossible, for the producer to work with you and your agencies.

The time has come for the leadership in this Department to come out swinging for the future of American agriculture. Take on the fight for the producer and not for those groups which do not either understand or care about the farmer and rancher. The producer has placed their faith in you as sworn officials of their government to work with them and for them be it in Washington or in any other capitol in the world.

Don't turn your back on them, work for them and they will provide you with a healthy, clean, and reusable food and fiber supply. One which will provide not only for the health and well being of the consumer but also for the land and the environment in which they live. Remember they are the ones living on the land. They are the people who must work the land to make a living. It is the producer who must face the land on a daily basis, knowing that it is only from the land that their future is secure.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR KOHL

Senator KOHL. Mr. Under Secretary, we appreciate your willingness to testify before the subcommittee today regarding the Natural Resource Conservation Service's proposed budget. These conservation programs were created to protect water quality and improve wildlife habitat.

In Wisconsin we have many farmers who take advantage of these programs and support them. However, we have heard serious concerns about your agency's ability to administer these programs, especially when you have full participation, as we do in Wisconsin.

For example, the Wisconsin NRCS office was so short of help that the Wisconsin Department of Natural Resources had to donate 100 staffers to help with the most recent conservation reserve program signup.

Because in Wisconsin we probably have as many miles of lake shore and river property as we do dairy cows, we are most interested in your agency's programs that protect and promote water quality, the Wetland Reserve Program and the Environmental Quality Incentives Program.

In fact, Wisconsin has one of the largest WRP programs success stories, Duffy's Marsh. Twelve local landowners worked with the county, State, and Federal agencies to restore a 1,700-acre wetland to its natural state.

Both the tourism and the dairy industries can and have coexisted in the past. But both are undergoing tremendous change and stress. We are counting on the NRCS to help us meet these challenges, and we hope to hear from you today how your agency will operate the environmental programs upon which many States depend.

Senator COCHRAN. Thank you, Senator.

Secretary Lyons, we appreciate very much your being here and submitting your statement for the record. We will print it in the record in full and the other statements that we receive from the witnesses.

You may proceed with any comments that you think would be helpful to the committee.

STATEMENT OF JAMES R. LYONS

Mr. LYONS. Thank you very much, Mr. Chairman. And I, too, appreciate the opportunity to be able to appear before the subcommittee today to discuss our proposed fiscal year 1999 budget for the Natural Resources Conservation Service.

If you had a chance to review the testimony, I think you can see it is an excellent discussion of all the programs that we administer and the rationale for the 1999 budget. I will spare you the details of that and ask that it be submitted as a part of the record.

Before I begin, Mr. Chairman, I want to commend you for your outstanding conservation leadership over the years, both in your role on the authorizing committee in effecting the creation of many of the conservation tools that we have to work with today, as well as obviously your outstanding leadership in the creation of the WHIP Program. And I hope you are going to join us, Friday to make an announcement related to that program.

Senator COCHRAN. I have submitted a statement with some quotes for you. I do not think I will personally be able to be at the news conference. I regret that I cannot——

Mr. LYONS. Well, that is unfortunate.

Senator COCHRAN. But I will be there in spirit anyway.

Mr. LYONS. You will be well recognized for the leadership role you have played. We appreciate it, as well as the role that Senator Bumpers has played over the years as a strong supporter of conservation, helping to put together the framework that now constitutes the conservation programs that we have here in the United States, which I think represent really the most outstanding set of tools for achieving the conservation goals of this Nation, as well as the leadership of your colleagues, Senator Burns and Senator Kohl, for their efforts in helping to promote good land stewardship across the United States.

With me today are a number of people who really play the key leadership roles in NRCS and in my office. If I could, I would just briefly introduce them for the record.

Tom Weber is our Acting Chief for the Natural Resources Conservation Service to my immediate left. Tom has served in an outstanding capacity since Paul Johnson elected to go back to his farm in Iowa.

He sends his regards. I saw him just last week, and he is having a wonderful time. And he does not miss the beltway at all, I can assure you, Senator Burns.

Senator BURNS. He probably does not like the hog market either, does he?

Mr. LYONS. Well, I think he is growing Christmas trees these days.

Senator BURNS. That figures. [Laughter.]

Mr. LYONS. But Tom has done an outstanding job, and I am sure that the committee is aware that the Secretary has announced the appointment of Pearlie Reed to become the next Chief of NRCS effective March 1.

Pearlie did an outstanding job as the Acting Assistant Secretary for Administration and helped us tremendously in working both on an administrative convergence and in addressing the civil rights concerns that have been raised in the Department. And we look forward to Pearlie's outstanding leadership as the next Chief of NRCS.

Also with me are Dr. Gary Margheim, Acting Associate Chief; Larry Clark, Deputy Chief for Programs; Carole Jett, who is Acting Deputy Chief for Soil Survey and Resource Assessment; Fee Busby, who is Deputy Chief for Science and Technology; Dwight Holman, Acting Deputy Chief for Management; and Ann Dubey, who is the Director of the Budget, Planning, and Analysis Division, who put our budget together for us.

If I could, I also want to introduce a new member of my staff. His name is Craig Cox. He is sitting behind me. You may be aware that Tom Hebert, formerly of the Senate Agriculture Committee staff and then my Deputy for Conservation Programs, elected to retire. All I can tell you is that he is taking 6 weeks off and collecting his breath before he engages in a new career in conservation.

We certainly miss Tom's assistance, but Craig, who also served on the Senate Agriculture Committee staff at one time will do an outstanding job as Tom's successor.

What I would like to do very briefly, Mr. Chairman, is talk a bit about the successes we have realized over the past decade in conservation, obviously focusing on the 1999 initiatives and what that budget does for us in furthering our efforts to achieve good land stewardship and promote sound conservation and talk a little bit about the opportunities that lie ahead.

I know, Mr. Chairman, that you and the members of the committee have seen over the past year this document, "Geography of Hope," which was constructed by NRCS under Paul's leadership to help to document some of the successful accomplishments in conservation we have realized, the tremendous achievements in reducing soil loss across the United States and improving water quality, in repairing damage to riparian habitat and promoting wildlife habitat across the Nation.

The legacy, particularly of the last 10 years in conservation, is an outstanding one in improving, as I said, wildlife habitat, in restoring wetlands, and in promoting a sound land stewardship based on the principle of voluntary commitment to conservation.

America's farmers and ranchers have shown their dedication to conservation, and through the assistance provided by NRCS over

the last 60 years, as well as the assistance provided in partnership with the conservation districts, America's farmers and ranchers have done an outstanding job in achieving much of the conservation achievements we recognize today and are documented in "Geography of Hope."

This budget is built upon that foundation of conservation achievements in a number of ways. You will see in our proposed budget that probably the largest proposed increase in funding is in the conservation operations area. In essence, Mr. Chairman, these are the funds that provide the support for the people who go out on the ground and provide conservation technical assistance and administer the programs that have been authorized by the farm bill.

The bottom line for us in conservation is people. People are conservation. And the work that is done one-on-one between landowners, conservation districts, and our conservationists is really critical to achieving what we have achieved in the past and critical to a successful continuation of those achievements in the future.

It is critical that we have the people and the resources, the financial resources, to continue with our conservation efforts. This budget places an emphasis on trying to achieve additional funding for that element of the program.

You will see, however, in the budget that we do call for a reduction in FTE's in personnel, as a result of some difficulties we have had in providing additional support for funding programs, for funding the technical assistance that is a part of the programs that are funded out of CCC.

And I know the committee is aware of some of the concerns we have there and the need to address these issues. And I welcome a dialog on the internal debate we have or how to provide support for those people and those programs.

I would also highlight that the budget, as we have submitted it, includes a number of increases in funding for programs that were authorized by the 1996 farm bill and are funded out of the CCC program.

For example, we proposed an increase of $100 million for the Environmental Quality Incentives Program [EQIP]. This additional funding for EQIP is critical to continuing our achievements in conservation and is an integral part of the President's clean water action plan, which the President announced just last week at a meeting up in Baltimore.

What is exciting about the opportunities associated with this clean water action plan—and we will be sure to get a copy of the document to you, Mr. Chairman, and the members of the committee—is the focus it places on natural resource stewardship and land conservation as the key to accomplishing future gains in clean water.

Much of the success in clean water that we have realized over the last 25 years has really focused on what I would call the easy tasks. I am sure the industries that are impacted do not consider it easy.

The larger challenge is dealing with the pollution that comes from nonpoint sources, which includes both urban and suburban

runoff, as well as the runoff that occurs across rural landscapes from agricultural activities and forestry activities and the like.

This plan calls for a continuation of the voluntary approaches to dealing with those challenges through increased technical assistance and cost-share assistance, through using tools like EQIP to get the job done, and calls for a continued partnership between America's private landowners, primarily farmers and ranchers, and the conservation agents and agencies at the State and Federal level to achieve these goals.

I think it is a remarkable accomplishment. And I think in many respects, Mr. Chairman, it exemplifies what we have been achieving in conservation over the last 10 years. The recognition on the part of our partner in this report, the Environmental Protection Agency, that voluntary stewardship and technical assistance and conservation services is a key ingredient to achieving our long-term clean water goals, is, I think, a significant milestone in where we are headed.

This program does not call for any new regulatory strategies to continue our progress in dealing with clean water. But it does recognize the important contribution that private and public land stewardship can make to achieving those goals. And that is significant.

As a part of our conservation operations budget and related to the clean water action plan is $20 million for grants to local interests and communities to help them in achieving their clean water goals in the context of watershed planning.

There is a great deal of enthusiasm and initiative and creative solutions that have been devised out on the ground by conservation districts, by RC&D's, by community groups and organizations that are working together with private landowners in partnership to improve water quality and address conservation needs. And we seek to provide some additional support for their efforts.

You will also find in the conservation operations budget additional funds to leverage additional contributions from State entities and State interests to further our efforts to improve conservation. This is an attempt to try and further the use of those Federal dollars and achieve those ends.

I would also mention that you will see in our budget a slight reduction in proposed funding for the Wetland Reserve Program. The reason for that is we are well on track to achieving the goals that were laid out in the 1996 farm bill. In fact, we believe we will achieve the enrollment of 975 million acres—975,000 acres.

Yes; that would be a lot of acres—975,000 acres by the year 2000, which is 2 years ahead of schedule. So I encourage you not to misread our commitment to conservation of wetlands by that reduced funding level.

You will also see, Mr. Chairman, that we ask for $20 million, basically the remainder of the funds that were authorized for the Wildlife Habitat Improvement Program. I would dare say we could always use more money for that program. We have seen tremendous interest and success with that program.

And I think that is a program that benefits not only landowners but all of us who fish and hunt and enjoy the outdoors. And it

helps to demonstrate the contribution that agriculture is making to improving wildlife habitat.

You will also see an increase in funding for the Conservation Farm Option Program, which is the remainder of the installment of funds for that program, an attempt to try and come up with an innovative way to put 10-year conservation plans in place that provide a little more flexibility in that regard.

Let me close, Mr. Chairman, by emphasizing two things which you pointed out in your opening statement. I think the future challenges in conservation and land stewardship in the United States are on private lands. Seventy percent of the American landscape is privately owned.

And while we spend a tremendous amount of time debating what occurs on those lands that are in public ownership—and I know, Senator Burns, you and I will have many opportunities to discuss this issue—the real challenges that lie ahead, and I think the real accomplishments we are going to realize in the long term, have got to come from a working partnership with landowners and conservation agents who can provide the technical skills and the cost-share assistance to help them manage their lands, not only for long-term productivity, but from the standpoint of improving conservation overall.

This budget seeks to make investments that will further the progress that we already realize. And let me just say that with regard to the public land issues, Senator Burns, of course we will have another opportunity to address these issues next week in the Energy and Natural Resources Committee oversight hearing.

I know that there are many areas in which we disagree with regard to public land policy, but on the other hand I think there are many on which we do agree. And I hope we will have an opportunity to discuss some of those today.

And, Senator Kohl, I would point out that NRCS is stretched in many regards with the conservation challenges and opportunities that we face. I would characterize what is going on in conservation in Wisconsin as a tremendous opportunity, given the commitment of the residents of that State to leaving a legacy of conservation that they will all be proud of.

The State conservationist in Wisconsin is a former classmate of mine and a good friend, Pat Leavenworth. So I can assure you that the State is in good hands under Pat's leadership.

The role that Wisconsin DNR is playing right in programs like CRP is part of any effort really to develop a long-term partnership.

There is no doubt we can use the help, but we hope in a closer working relationship with State agencies like DNR, as well as the State department of agriculture, we can further our efforts to work together, to use our resources more efficiently and make sure that through collaboration we get better land stewardship and hopefully even a better legacy to leave behind.

With that, Mr. Chairman, I think Chief Weber has a few comments that he would like to offer.

PREPARED STATEMENTS

Senator COCHRAN. Thank you, Mr. Lyons. We will insert your prepared statement and the statement of Mr. Weber in the record.

[The statements follow:]

PREPARED STATEMENT OF JAMES R. LYONS

Mr. Chairman, Members of the Committee. It is my pleasure to outline for you the fiscal year 1999 budget request for the Department of Agriculture's Natural Resources Conservation Service (NRCS).

The budget plan that the President recently presented to Congress is an historic proposal. Founded upon the notion that the commitment and contributions of individuals will ensure a better tomorrow, the fiscal year 1999 budget proposal gives Congress and the Administration the opportunity to reverse three decades of budget deficits and burdening debt. In a sense, this Budget proposes to build a legacy for the American people of fiscal integrity and responsibility. It ensures our children the promising future of a productive and prosperous economy. Under this proposal, everyone has a part to play. And more than ever before, local people will be challenged to take the lead and ownership for that which they value the most.

I would like to speak today of another legacy which our 1999 Budget Proposal challenges us to begin. That is the legacy of conservation and land stewardship in America. We speak frequently about the programs and activities that we provide and attempt to quantify them in terms of dollars of financial assistance provided, and tons of topsoil that we preserve. However, we rarely take a step back and look not only at a bigger picture of the landscape, but to gaze beyond the horizon into the future of our resources. I believe we would all like to ensure that citizens who want to help themselves will have the resources and knowledge available to meet their future needs.

As we consider the fiscal year 1999 Budget and the personal commitment that we are asking of citizens, we find no better historic and present example of local leadership and ownership, than in America's conservation movement. In response to the alarming realization that the future viability and productivity of domestic agriculture was at stake, conservation activities on private lands were solidified and organized with a strength from which we continue to benefit. There are many parallels between the nation's response to the Dust Bowl and the current effort to balance the Federal budget. But more importantly, what I would like to talk about today, is how we proceed to the next level—how we foster a conservation ethic in America well beyond a balanced budget, the duration of current program authorizations, or even our own tenure as public servants.

What we have learned from witnessing the success of the Conservation Partnership over sixty years is that folks want to help themselves. They only need some guidance and a helping hand from time to time. This helping and guiding hand is the foundation upon which the conservation legacy must be built. We are all familiar with the story of how a house built upon sand was swept away by the rains, while the house built upon the rocks endured. So too, conservation must be founded upon a rock-solid base that will not erode with time.

This foundation is the conservation partnership which should be bolstered and strengthened so that it may serve us for generations to come. We sometimes refer to our farm programs as tools that are used to assist the landowner build conservation practices and structures. Furthermore, we might think of our conservation field staff as the carpenters with the knowledge and skills to put those tools to work. But we all know that we cannot build a lasting structure without a firm foundation. This groundwork is the legacy that we must preserve and strengthen for future generations.

Clean Water Initiative.—Perhaps no better example provides a picture of the legacy that NRCS strives to build than the Clean Water Action Plan. On October 18, 1997, the 25th anniversary of the Clean Water Act, the Vice President challenged Federal agencies to develop a clean water plan that would address three goals—protecting public health, preventing polluted runoff, and promoting community-based watershed management. More specifically, the plan calls for specific actions including identifying sources of nitrogen and phosphorus in water; achieving a net gain of 100,000 acres of wetlands per year by 2005; and promoting "smart growth" that is compatible with clean water.

The Clean Water Action Plan, contains common sense goals that are highly valued by the public. It also reveals a clear consensus that watershed-based assistance, and the kinds of voluntary conservation work NRCS supports are a preferred approach to ensuring lasting conservation measures in communities. As a result, NRCS will have a leading role in helping achieve the goals that are part of the President's Clean Water Initiative. On many accounts, the challenge that has been presented to Federal agencies involved in this initiative are far reaching and present a formidable task in the time frame that has been established. However,

the resource of NRCS technical assistance and the program tools that are presented in this budget proposal, represent the foremost resource that is available to the public to accomplish the goal of improving water quality across the nation.

The Clean Water Action Plan will help landowners. It will encourage Federal, State and local governments to develop agreements that clarify their roles and responsibilities, enhance coordination and efficiency, and reduce duplication effort. Citizens and landowners will realize a more streamlined process to government programs and assistance, with fewer office visits and program application forms required.

Without doubt, the environmental challenges facing agriculture with respect to water quality and availability are daunting. Every day we read or hear about concerns from across the country about the quality of drinking water supplies, conflicts over the availability of water for agricultural and urban uses, and about wildlife needing water and habitat in order to survive. For these and all the other similar issues, USDA does not accept the premise of many that places sole responsibility on agriculture. But USDA also believes that it is agriculture's primary responsibility to address these challenges aggressively and effectively.

The proposed fiscal year 1999 budget request strives for a balance in spending that will provide farmers and ranchers with sufficient financial incentives for conservation work, including targeted land retirement, while continuing to focus on technical assistance as the basis for these activities. The budget will allow us to continue to work cooperatively with state conservation agencies, local conservation districts, and our agency's many other public and private-sector partners in assuring an adequate measure of conservation on our Nation's working land.

The following table shows the major items in this year's budget request, including CCC funded programs, and contrasts them with the comparable figures from the two prior fiscal years.

[In thousands of dollars]

	Fiscal years—		
	1997	1998	1999
Appropriation:			
Conservation operations	620,219	633,231	742,231
Watershed and flood prevention operations	226,660	101,036	[1] 49,000
Resource conservation and development	29,377	34,377	34,377
Watershed surveys and planning	12,381	11,190	([1])
CCC funding:			
Wetlands Reserve Program [WRP] [2]	99,308	218,597	123,741
Wildlife habitat incentives [WHIP]	.....	30,000	20,000
Environmental Quality Incentives Program [EQIP]	200,000	200,000	300,000
Conservation farm option [CFO]	.....	15,000	25,000
Farmland Protection Program [FPP]	2,000	18,000	.....

[1] Technical Assistance for Watershed and Flood Prevention Operations and Watershed Surveys and Planning is included under the Conservation Operations Account.

[2] Does not include technical assistance costs funded from unobligated WRP appropriation balances; fiscal year 1997—$12 million; fiscal year 1998—$18 million; fiscal year 1999—$4 million.

Now, let me describe how NRCS differs from other federal agencies and summarize the unique characteristics and assets that make it the foundation for a conservation legacy on private lands.

BUILDING UPON THE ASSETS OF THE NATURAL RESOURCES CONSERVATION SERVICE

NRCS provides natural resources conservation assistance primarily on private lands. More than 70 percent of the land in the contiguous United States is privately owned, including virtually all of the Nation's agricultural lands. It is on the private lands where millions of individual decisions are made by farmers and ranchers, that the ultimate success of the majority of our natural resource efforts will succeed or fail in helping meet the twin goals of productive agriculture and an economically and environmentally sustainable future.

Technical Assistance

The foremost tool that we use to meet our goal and the most fundamental building block of the conservation legacy is the technical assistance that our field staff and partners provide to our customers. We try hard to define what technical assist-

ance is on many accounts. There are tables and graphs that show the number of hours that a technician spends on a number of different functions on a day to day basis, and the many types of educational, engineering, and scientific functions that they serve. In addition, NRCS will continue to work toward quantifying assistance to fulfill provisions of the Government Performance and Results Act. But really, the definition of technical assistance is quite simple. It consists of all the things that our staff do to advance our mission of conserving, improving, and sustaining natural resources.

It has been said in athletics that the great teams are the ones that do all of the "little things". I believe that the success of NRCS and its partners are a testament to this theory. The tasks may not always be glamorous, and to a casual spectator they may very well remain overlooked. But still, all of the things NRCS staff do on a daily basis contribute greatly toward the common goal of moving the conservation effort forward. This might mean preparing a soil probe truck long before twilight to visit a rancher at the far end of the county. It might mean taking extra time to assist low-income producers to ensure that their program applications are clear and complete. Or it may entail transferring duty stations to another part of the region to assist fellow workers with Emergency Flood engineering work that could save a community. Conservation technical assistance takes many shapes and forms. However, our support of this work is fundamental to the conservation legacy we seek and ensuring the stewardship in the communities of tomorrow.

Civil Rights.—As we speak of building a legacy of land stewardship in America, I would like to underscore the contributions that NRCS is making toward ensuring equitable service and opportunity for all customers and employees of USDA. NRCS has had a good record of ensuring diversity and opportunity in the past, however I believe we can do better. Throughout various program and technical assistance activities, NRCS will work hard to provide the necessary outreach and assistance to ensure that our customers have easy access to services. In response to the Civil Rights Action Team report, the Secretary has undertaken many steps to improve the Department's activities and policies in this area. I am confident that NRCS will continue to seek proactive ways to better serve minority and low income customers. One of the hallmarks of the conservation assistance is that it is available to anyone, anywhere. That includes areas that are not typically designated as high workload areas based upon farm program participation, population, or other demographic factors. By offering basic and universal conservation assistance on a national basis, NRCS offers minority and limited resource farmers a needed helping hand. Clearly, a legacy of conservation on private lands must be built with the participation of everyone.

NRCS is the only Federal agency whose major purpose is to provide conservation technical assistance to private landusers across the country. The agency's focus is on helping landowners and users achieve natural resource and environmental goals while maintaining productive and profitable operations and economically viable rural communities. NRCS has had some significant successes in the past, and the structure is designed to continue that success in the future. A few of its many assets include the following:

Delivery system.—NRCS has a nationwide network of professional staff at the local level that provide conservation technical assistance to owners and users of privately-owned land. This nationwide delivery system is based on a partnership that combines a Federal natural resource presence at the local level with locally sponsored and controlled conservation districts and their employees and state conservation agencies and their employees. This conservation infrastructure is interwoven and interconnected at the local, State, and Federal levels with complex relationships and program support systems that are interdependent. The local field staff provide the kind of site-specific technical assistance individual private landowners need and want.

Technical skills.—NRCS' natural resource specialists are trained to deliver technological support to groups and individuals quickly, efficiently, and consistently nationwide. Through our regional framework, NRCS technical staff are able to apply their knowledge of soil science, engineering, landscape architecture, agronomy, biology, range management, economics, geology, and other fields with a much greater degree of sensitivity to local conditions. NRCS field staff working in partnership with the local conservation districts are used as a primary source of help by local people—and often by people administering programs for other Federal, State, and local agencies. About 9,000 staff are at the local level.

Technical excellence.—Throughout government and private industry, NRCS specifications for soil and water conservation practices are the national standard. In addition, the agency is the leader in soil classification and soil mapping. Recently, in

recognition of the vital importance of soil quality, NRCS has made a commitment to better understand and emphasize the fundamental role of soil quality.

Natural resource planning experience.—NRCS has vast experience in broad-scale planning in watersheds and other areas and site-specific planning on farms and ranches to address natural resource concerns. Effective natural resource planning in the future will require this type of planning process to develop effective solutions that meet the needs for a sustainable land and its people. NRCS is now serving as a catalyst by providing coordination to bring local people together with skilled technical people to develop and implement meaningful solutions. These planning efforts are provided through the Watershed Survey and Planning Program, the Resource Conservation and Development (RC&D) Program, and Coordinated Resource planning provided through Conservation Operations.

Partnerships and volunteerism.—Since its creation, NRCS has operated through voluntary cooperative arrangements with individuals, the private sector, and Federal, State, and local governments. The value of NRCS technical assistance is recognized by local and State partners; equally, we recognize the invaluable contribution of volunteers, who contribute immeasurably to conservation efforts. Americans from all walks of life have freely and generously given of their time to the volunteer arm of NRCS, known as the Earth Team. In fact, in fiscal year 1997, some 15,518 NRCS Earth Team volunteers donated 534,668 hours to conservation efforts. As calculated by the Points of Light Foundation, this equates to an additional $8,300,000 in direct assistance to private landowners for natural resource protection, an increase of nearly 30 percent from fiscal year 1996.

Local people as decision-makers.—When NRCS provides conservation and program assistance, the agency works under mutual agreements with some 3,000 conservation districts that are established under state law. About 17,000 local conservation district supervisors provide the agency with invaluable guidance. The NRCS cooperative team structure is an established and practical example of how Federal programs can be managed with local guidance at the local level. It is crucial to remember that the agency's approach is a voluntary one. Our professionals provide options for problem-solving—developed in conjunction with customers, but it is the customers who make the final decisions.

Leverage.—State and local governments contribute substantially, with both people and dollars complementing NRCS technical assistance. Without NRCS technical assistance, which greatly enhances the value of State and local efforts, these funds almost certainly would not have been spent on natural resource protection. In a sense, this cooperation constitutes a two-way leveraging: State and local programs and NRCS benefit from each other's involvement.

Now I will describe our programs and plans for fiscal year 1999.

PROGRAM EFFECTS AND THE FISCAL YEAR 1999 BUDGET REQUEST

The activities of the Natural Resources Conservation Service serve the Nation in numerous ways and provide many indirect benefits. The programs and services provided by NRCS involve direct assistance to landowners on an individualized basis. However, this assistance results in even greater benefits for the public at large that encompass ensuring potable drinking water, cleaner air, and a sustainable supply of productive land. In many instances, NRCS involvement spurs local investment and as a result, enhances local economic activities as well. In other cases, NRCS is simply present to help landowners help themselves. By supporting voluntary conservation and fostering stewardship, the agency ensures support that is not available or provided by other government or private entities. In addition, NRCS serves as a vital link between the science of resource conservation and the practice of land stewardship on the ground. The data and expertise which the agency offers, are truly a treasure for the communities around the country that turn to NRCS everyday for help. These services are an essential component of the conservation fabric of the Nation. I will briefly highlight several for you.

Conservation Operations is the foundation for most of the agency's activities. Conservation Operations represents a long-standing and historical partnership of interests all working in a concerted effort toward a sustainable and productive nation. The following programs and initiatives are funded through conservation operations and represent the legacy of conservation on private lands:

America's private lands conservation is the cornerstone for most agency activities. This account (formerly Conservation Technical Assistance) has been renamed to more accurately represent its uniqueness as the sole federal conservation technical assistance program on private lands. The fiscal year 1997 appropriations were $529,150,000; and the fiscal year 1998 comparable appropriations are $541,739,000. The fiscal year 1999 budget request is $589,110,000.

The proposed funding levels represent support to the functions and activities that are vital to meeting the mission of conserving, improving, and sustaining our natural resources for the future. Conservationists on the ground are under increasing demand for their services, as they tackle new programmatic responsibilities while retaining a commitment to the community for providing basic assistance to landowners in need. It is our goal to ensure NRCS staff support to grassroots watershed partnerships and the development of conservation plans for communities. Throughout the nation, NRCS conservationists facilitate and enable local action. Technical assistance funding ensures the presence of these individuals and promotes voluntary conservation.

During fiscal year 1997, NRCS assisted approximately 800,000 private landowners in preparing conservation plans and implementing conservation systems, as well as providing assistance to units of government in developing area wide conservation plans and goals. This resulted in conservation treatment on over 100 million acres of land, including cropland, rangeland, pastureland, woodland, and other land. While the Federal Agriculture Improvement and Reform Act (1996 Act) has provided valuable new tools to assist landowners with their needs, the workload associated with support for the Conservation Reserve Program (CRP), the Agriculture Market Transition Act (AMTA) and several others will place further demands on our field staff. Also, because both agriculture and the environment are constantly changing, the agency and programs are constantly evolving. NRCS is regularly required to provide new plans and conservation systems as land use and the needs of the landowner change. Our proposed increase in funding for America's Private lands Conservation is reflective of the increased need.

The proposed funding level for Conservation Operations also represents a continued cooperative effort between NRCS and its conservation partners including Conservation Districts, Resource Conservation and Development Councils, and other non-profit and community action groups. The relationship between NRCS and its partners represents a catalyst that empowers local people to become involved in conservation activity. In addition, the funds that are appropriated by Congress are leveraged and matched by the hard work and resources of the thousands of partners and volunteers in virtually every aspect of NRCS operations. The budget request calls for $20 million to be set aside for Partnership Grants in support of the President's Clean Water Initiative. The grants will be used to strengthen the leadership of locally-based institutions through the hiring of non-federal watershed coordinators. The goal of this activity will be to improve water quality in watersheds that show particular signs of degradation.

In the past decade, major strides have been made in reducing erosion; improving soil and water quantity and quality, air quality, pasture and range conditions; improving and conserving wetlands and woodlands; enhancing fish and wildlife habitat; and reducing upstream flooding. We are proud of the gains that have been made. While the combined value of education, technical and financial assistance is well illustrated, more remains to be done. The proposed level of technical assistance funding will accelerate building the legacy of land stewardship that will benefit the Nation for generations to come.

Year 2000.—One of the necessary steps toward a legacy for conservation is to ensure that our technical tools and information infrastructure will be available for years to come. Many concerns have been raised with respect to information technology of NRCS and other USDA agencies. I am happy to report that all NRCS systems will meet the Office of Management and Budget target compliance date of March 1999. NRCS has 15 critical information technology systems. Renovation has been completed for eleven of these systems and are currently undergoing validation testing to ensure that they are compliant. The remaining four systems are being reengineered and will be completed by March, 1999.

Highly Erodible Land Conservation (HELC).—Since 1985, NRCS has devoted a significant portion of its technical assistance resources to helping farmers and ranchers meet the highly erodible land conservation provisions. With NRCS technical assistance, more than 1.7 million plans have been prepared covering about 142 million acres of highly erodible land, and 95 percent of those plans were implemented by the mandated deadline of December 31, 1994. Between 1985 and 1995, technical assistance was provided to nearly one million decision-making land owners and users each year; one result is that soil erosion has been reduced by over a billion tons annually. By the end of fiscal year 1995, all the highly erodible plans were installed. The Federal Agriculture Improvement and Reform Act of 1996 provided amendments that have made HELC compliance requirements more farmer friendly and have provided USDA with additional options in assisting producers with compliance status, reduced the burden of complying with the HELC provisions and have provided USDA with additional tools to use in working with producers.

However, all producers who receive USDA program benefits must fully apply a conservation plan or use an approved conservation system on highly erodible land. Therefore, NRCS continually assists producers in developing plans for land that they acquire and in making changes in their current plans so that their practices may reflect changes in cropping systems, weather conditions, and economic incentives. Our experience has shown that approximately 20 percent of producers will change their conservation systems each year. This figure may be slightly higher in the next few years as producers begin to respond to market signals as a result of the Agricultural Market Transition Act Program (AMTA).

Wetland determinations and certifications.—The 1996 Farm Bill changed Swampbuster to give farmers greater flexibility in complying with wetland conservation requirements and in making wetlands more valuable and functional. As a result, NRCS now determines areas subject to Swampbuster and responds to requests from farmers who plan activities that may adversely impact wetlands. NRCS certifies wetland determinations only upon request when clients propose a project to alter the hydrology or bring new land into production. Responding only to "need" ensures that requests from clients are serviced in a timely manner and that certifications are conducted where absolutely necessary. Certified determinations stay in effect as long as the land is used for agricultural purposes (unless a violation occurs) or until the owner or operator requests a review after natural events change the topography or hydrology of an area. Under the terms of the 1994 Wetlands Memorandum of Agreement (MOA), certified wetland determinations will be valid for both Swampbuster and 404 of the Clean Water Act (CWA). Landowners have continued to request a number of certified wetland determinations and these requests are expected to increase as these issues continue to play themselves out in Congress. Also, the enrollment in AMTA generated requests to NRCS for over 25,000 new wetland determinations.

Aside from determinations, changes initiated by the 1996 Act have increased the activities of NRCS in wetland mitigation. NRCS provides assistance to landowners who wish to enhance existing wetlands, restore former wetlands, and create new wetlands to offset loss from planned conversions or alterations. These options, while creating increased opportunity and flexibility for landowners, require a great deal of attention by NRCS field staff, who assess the function and values of individual wetlands and provide the customer with technical assistance in every phase of the mitigation process. Other changes by the 1996 Act include policies in determining if a planned activity will have a minimal or inconsequential effect on wetland functions, and also revises the concept of abandonment. When done under an approved conservation plan, landowners with farmed wetlands and farmed wetland pastures may allow an area to revert to wetland status and convert it back at a future date without violating Swampbuster. Thus far, interest and participation in these wetland activities has been widespread among landowners. While NRCS welcomes the opportunity to provide landowners with additional services and flexibility, marked workload increases are seen throughout the Nation.

Grazing Land Conservation Initiative (GLCI).—This grassroots-driven initiative has helped NRCS better define the resource needs and benefits generated when grazing lands are improved. NRCS has been requested by this group to continue technical assistance to livestock producers on private grazing lands. Grazing lands include rangelands, pasture, hayland, and grazed forestlands.

Natural Resources Inventory (NRI) analysis of range vegetation shows that over 15 percent of non-Federal rangelands are in poor condition; over 44 percent are in fair condition; 34 percent in good condition; and only 6 percent in excellent condition. The NRI indicates that 75 percent—nearly 299 million acres—of non-Federal rangelands need conservation treatment. Properly managed grazing land represents a renewable resource for producing food and fiber. Vegetative cover on well-managed grazing lands contributes to: 1) increased water quality and quantity; 2) improved wildlife habitat; 3) reduced soil erosion and sedimentation; and 4) improved riparian areas. For fiscal year 1999, an additional $3 million is requested for NRI needs associated with Land Health Monitoring and assessment work in support of the President's Clean Water Initiative. This effort will enable NRCS to develop baseline assessments, integrate compatible inventories, and evaluate program impacts.

In addition, livestock management means better management of waste nutrients as well. No doubt, over the course of 1997, there was a heightened awareness on the part of the public about issues of animal agriculture and waste management. Conservation Operations will continue to support technical assistance for these unmet conservation needs and will provide additional assistance within current funding levels as the field level workload permits. In fiscal year 1998, NRCS was able to continue support for a Grazing Land Conservation Coordinator position in each of the fifty states. This position helps us to provide multi-resource technical

assistance to support grazing lands conservation and water quality improvement on rangelands and begin the process of rebuilding the agency's expertise in rangeland conservation, a capability demanded by our customers.

Urban Conservation

Another area of attention has been the work of NRCS in urban and suburban conservation. Natural resources do not recognize the boundary between urban and rural areas and to ignore their interaction within a watershed would not do justice to either. The watershed approach to resource conservation has been widely acclaimed and highly successful. However, when we begin to examine and work to rehabilitate the health of a watershed we must include all contributing factors that may be present, including community and residential elements. The efforts of NRCS are aimed to improve water quality and protect our natural resources while maintaining and enhancing production. The demand for assistance with issues such as water quality and soil erosion prevention are matters that effect everyone, and workable solutions must include the participation of everyone. NRCS has had great success in utilizing the science and technology that it has gained in its 60 year history to all types of resources in many settings. Likewise, the expertise in soil and water quality that the agency has gained is well suited and easily applied to help communities realize their goals for ecosystem health. We will continue to work together as neighbors to achieve actual goals.

Snow survey and water supply forecasts provide western states and Alaska with vital information on summer water supplies. The fiscal year 1997 appropriation was $5,835,000; the fiscal year 1998 appropriation is $5,835,000; and the fiscal year 1999 request is $5,990,000. NRCS field staffs provide necessary leadership, standardization of procedures, and automation to a partnership of Federal, State, and local personnel to collect snow-pack data from more than 1,200 remote high mountain sites. Data are collected with many partners, including Conservation Districts, Bureau of Indian Affairs, Bureau of Land Management, Forest Service, the National Weather Service, Army Corps of Engineers, Bonneville Power Administration, and many State and local entities both public and private. After compiling and analyzing the data, NRCS is able to provide snowpack estimates and water yield on a monthly basis throughout the snow melting period. The knowledge gained through this effort supports critical decisions on billions of dollars of agricultural production, municipal water supply, hydroelectric and industrial water supply, flood control, and water flow requirements for fish and wildlife. This modest program contributes substantially to the economic and environmental well-being of a very large part of the country.

Soil Surveys provide the public with local information on the uses and capabilities of their soil resources. The fiscal year 1997 appropriation was $76,409,000; the fiscal year 1998 appropriation is $76,409,000; and the fiscal year 1999 request is $78,323,000. Soil surveys are based on scientific analysis and classification of soils and are used to determine land capabilities and conservation treatment needs. The published soil survey for a county or designated area includes maps and interpretations with explanatory information that is the foundation of resource policy, planning and decision-making for Federal, State, county, and local community programs. Homeowners and landowners also use soil survey information when making decisions. Soil surveys are conducted cooperatively with other Federal agencies, land grant universities, State agencies, and local units of government, many of whom contribute funds and staff.

Soils information has been gathered over many years and is primarily contained in published soil survey manuscripts and maps. There is a need for digital soils data for use in geographic information systems (GIS). NRCS has the leadership role for coordinating the development, maintenance, and distribution of a modernized digital soils data base. Geographically referenced digitized soil survey data, along with orthophotography will provide the accurate reference base needed for computer-assisted conservation, natural resource planning, and for geographic referenced data sharing. In addition, digitizing the soil surveys provides efficiency when updating and maintaining the soil survey data.

Funding opportunities are constrained for all agencies; therefore, NRCS is aiming to expand the resources available for all. The budget includes $20 million for bonus payments rewarded to those States that increase their conservation spending and/or maintain spending above a specified threshold. By leveraging these incentive payments, conservation funds from State and private sources can be increased. Also, to further increase contributions, the budget proposes that NRCS collect user fees for certain products and services.

Plant Material Centers assemble and test plant propagation and the usefulness of plant species for biomass production, carbon sequestration, erosion reduction,

wetland restoration, water quality improvement, stream bank and riparian area protection, coastal dune stabilization, and to meet other special conservation treatment needs. The Plant Materials Centers also focus on the important role of native species in ecosystem functions. The fiscal year 1997 appropriation was $8,825,000; the fiscal year 1998 appropriation remained at $8,825,000; and the fiscal year 1999 budget request is $7,825,000. This reduced level requested for Plant materials Centers reflects the conclusion of an extensive renovation and modernization efforts that were started in 1994. Plant materials represent inexpensive, long-term conservation solutions to many environmental and natural resource problems and their maintenance costs are usually low. Many landowners and managers willingly use plant materials, if available, to meet their conservation needs.

The work at the 26 centers is carried out cooperatively with State and other Federal agencies, commercial businesses, and seed and nursery associations. Plant Materials Centers play an important research and development roles since most commercial nurseries will not develop new plant materials due to limited markets, but will grow and market the stock once a dependable plant has been developed. After species are proven, they are released to the private sector for commercial production.

Water Resources Assistance is a new account under Conservation Operations for fiscal year 1999. Water Resources Assistance contains the technical assistance dollars that have been previously included in the Watershed and Flood Prevention account. The fiscal year 1999 requested funding level for Water Resources Assistance is $70,983,000. This is a $9.8 million increase from fiscal year 1998. This requested funding level would enable approximately 92 Federal watershed coordinators to develop project work plans; coordinate volunteers, projects, and watershed council activities in 40 priority watersheds.

The funding request for fiscal year 1999 also includes an increase of $1 million to evaluate the condition of the aging infrastructure created by previous works of improvement installed under our watershed programs and to help sponsors implement environmentally acceptable and economically justified watershed projects in a timely manner. NRCS has assisted project sponsors to install over 15,000 individual measures since 1944. An integral part of many of these projects was structures for flood and water control, municipal and industrial water supply, and recreation. Since their installation, conditions surrounding the structures have changed due to an increase in population, residences built below the structures, upstream land use changes, and changed Federal and State dam safety regulations. By fiscal year 2000, approximately 2,000 of the aging structures could require significant restoration. The safety and stability of these installations are in question with serious threats posed to life and property. Clearly, there are major public health, safety, and environmental risks that must be addressed so that a legacy of sound watershed projects can be ensured.

Watershed and Flood Prevention Operations is the first and only national program that helps local organizations plan and install watershed-based projects on private lands. It provides site-specific technical expertise and locally based watershed planning and financial assistance for plan implementation. The Watershed Program provides a process to solve local natural resource problems and avoid excessive regulation. Fiscal year 1997 funding for Public Law 534 and Public Law 566 was $101,036,000; the fiscal year 1998 financial assistance funding was $51,036,000; and the fiscal year 1999 request is $49,000,000. The difference from fiscal year 1998 levels is due to a shift of technical costs to the Conservation Operations account and the presentation of financial assistance activities under Watershed and Flood Prevention Operations. The authorized purposes of watershed projects include watershed protection, flood prevention, water quality improvements, soil erosion reduction, irrigation water management, sedimentation control, fish and wildlife habitat enhancement, wetland creation and restoration, and public recreation. The program empowers local people as decision-makers, builds partnerships and requires local and State funding contributions and ownership.

We aim to focus resources to address the backlog of approved watershed infrastructure projects. NRCS recognizes the need to meet currently unfunded commitments to stakeholders and sponsors. Currently, there are over $1.5 billion in need for Public Law 566 and Public Law 534 projects combined. Local sponsors have demonstrated their support and await action by their Federal partner to do the same. The process of allocating funding to approved projects will be based on a competitive process that funds those projects with the highest environmental and commercial benefits, which will enhance NRCS's ability to succeed in its strategic plan.

The Emergency Watershed Protection (EWP) program provides assistance to reduce hazards to life and property in watersheds damaged by severe natural events. An emergency is considered to exist when floods, fires, droughts, or other natural

disasters result in life and property being endangered by flooding, erosion, or sediment discharge. In calendar year, 1997, EWP was employed in 26 states providing disaster assistance including hurricane, flood, and fire rehabilitation.

Technical and financial assistance under the EWP program is available for small-scale, localized disasters not necessarily declared as national in scope. Among the emergency activities, generally performed with temporarily employed local labor, are disaster cleanup and subsequent rebuilding; restoring stream corridors, wetland and riparian areas; establishing quick vegetative cover on denuded land, steep land, and eroding banks; opening dangerously restricted channels; repairing diversions and levees, and assisting the Federal Emergency Management Agency when it plans and relocates communities away from floodplains.

Resource Conservation and Development (RC&D) is a program initiated and directed at the local level by volunteers. The fiscal year 1997 appropriation was $29,377,000; the fiscal year 1998 appropriation is $34,377,000; and the fiscal year 1999 budget request remains at $34,377,000.

Each RC&D area encompasses multiple communities, various units of government, municipalities, and grassroots organizations. The RC&D's represent a creative approach for helping citizens address multi-jurisdictional natural resource and community development issues. NRCS provides coordination to the program which serves as a catalyst for these civic oriented groups to share knowledge and resources, and it leverages public and private funds to solve common problems—including economic development—in a given area. Assistance is obtained from the private sector, corporations, foundations, and all levels of government. Historically, every dollar of NRCS technical and financial assistance for this program and applied directly to local projects, has been matched by about $13 from other sources. By fostering local ownership and self sustenance for conservation and rural development projects, we believe that RC&D will contribute greatly to the legacy of locally-led action. The 1999 request will support the 290 RC&D areas currently authorized as well as any new area authorizations made in 1998.

Commodity Credit Corporation Programs.—NRCS also administers, on behalf of the Commodity Credit Corporation (CCC), several cost-share programs, including those set forth in the Federal Agriculture Reform and Improvement Act of 1996 (1996 Act) and also provides technical assistance to individuals and groups participating in the Conservation Reserve Program, which is administered by the Farm Service Agency. The conservation programs provided by the 1996 Act, which NRCS administers on behalf of CCC, include the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Protection Program (WHIP), Farmland Protection Program (FPP), and Conservation Farm Option (CFO). The 1996 Act also amended the Food Security Act of 1985, to the continued implementation of the Wetlands Reserve Program (WRP) which NRCS administers on behalf of CCC.

The Environmental Quality Incentives Program (EQIP) provides in a single, voluntary program flexible technical, financial, and educational assistance to farmers and ranchers who face serious threats to soil, water, and related natural resources on agricultural land and other land, including grazing lands, wetlands, forest land, and wildlife habitat. Assistance is provided in a manner that maximizes environmental benefits per dollar expended, while assisting producers with issues such as local environmental laws or community identified environmental needs.

Funds of the CCC are used to fund the assistance provided under EQIP. For fiscal year 1998, $200 million was available to implement the EQIP. The program is primarily available in priority conservation areas throughout the Nation. The priority areas consist of watersheds, regions, or areas of special environmental sensitivity or having significant soil, water, or related natural resource concerns. For fiscal year 1997, nearly 71 percent of the EQIP financial assistance funding was provided within priority areas. The process for selecting these priority areas begins with the local conservation district(s) convening local work groups, which are a partnership of the conservation district, NRCS, Farm Service Agency, Farm Service Agency county committees, Cooperative Extension Service, and other state, local, and tribal entities with an interest in natural resources conservation. They develop proposals for priority areas, develop ranking criteria to be used to prioritize producer's applications for EQIP, make program policy recommendations, and other related activities. The priority areas recommended to NRCS by the local work group are submitted to the NRCS State Conservationist, who with the advice of the State Technical Committee sets priorities for the program, including approval of priority areas. Over 600 priority areas were approved by the State Conservationists and about 550 of these were funded. Funds are made available to the States based upon the quality of the priority area proposal, local initiatives, and the environmental needs of the affected areas.

The program has been very successful. We received nearly 60,000 applications in fiscal year 1997. NRCS estimates that it would require over $550 million to fully fund all of the applications received last year, alone, which is three times the available financial assistance funds. After NRCS ranked the applications based on criteria developed at the local and state level, FSA county committees approved over 22,000 long-term contracts with farmers and ranchers. The EQIP financial assistance on these contracts will exceed $174 million.

Based on the fact that requests for assistance far exceed available funding, there is a need to continue to prioritize and focus our efforts so that we meet our Congressional mandate to maximize environmental benefits per dollar expended. We expect that in fiscal year 1999, continued interest in animal nutrient management will spur an increase in EQIP participation in this area. The nutrient management focus of the program will help meet national objectives of water quality, while involving farmers and ranchers in voluntary and cooperative solutions. Utilizing inventory and assessment tools, NRCS will continue to build the capacity of local communities to inventory and assess their watersheds to identify needs for nutrient management and priorities for conservation treatment. In addition, EQIP outreach, education, and information efforts will include working with conservation partners to launch efforts within priority watersheds to inform landowners and communities of the opportunities to improve water quality and agriculture production through soil conservation and nutrient management. The 1999 budget proposal seeks by proposed legislation to increase funding for EQIP by a total of $350 million through fiscal year 2003. NRCS would receive an additional $100 million in fiscal year 1999 and fiscal year 2000, and $50 million in each subsequent fiscal year through 2003. The increased funding would be directed toward technical, financial, and educational assistance to farmers in addressing problems associated with agricultural runoff and would support the President's Clean Water Initiative. The request will also help with increased assistance to minority and limited resource farmers to ensure participation in the program. The technical assistance component would be funded initially at the 10 percent level.

The Wildlife Habitat Incentives Program (WHIP) provides for implementing wildlife habitat practices to develop upland wildlife habitat, wetland wildlife habitat, threatened and endangered species habitat and aquatic habitat. WHIP provides a significant opportunity to restore native habitat, help landowners understand how to best meet their own needs while supporting wildlife habitat development, and to develop new partnerships with State wildlife agencies, nongovernmental agencies and others.

WHIP is a solely voluntary program, whose projects encompass a wide array of wildlife practices. Projects performed under the program include advancing the following measures: upland wildlife habitat, wetland wildlife habitat, threatened and endangered species habitat, fishery habitat and other approved activities. The budget proposal assumes 171,400 acres enrolled in fiscal year 1998 and an additional 114,300 acres enrolled in fiscal year 1999.

State NRCS offices have made an enormous effort to develop partnerships and outreach methods with government and private organizations to develop a program that targets specific state concerns. We propose to continue to facilitate development of the program in a fashion to ensure the greatest amount of success for wildlife for the funds appropriated. Based upon proposals currently on hand, NRCS anticipates that program funding needs continue to mount as the public becomes more aware of its successes and the multiple benefits that it offers. The fiscal year 1999 budget request assumes continued funding of WHIP at $20 million. This level would conclude the authority granted under the 1996 Act.

The Farmland Protection Program (FPP) protects prime or unique farmland, lands of State or local importance, and other productive soils from conversion to nonagricultural uses. It provides matching funds to leverage funds from States, Tribes, or local government entities that have farmland protection programs. The FPP establishes partnerships with States, Tribes, and local government entities to acquire conservation easements or other interests in land. It protects strategic farmland from urbanization. It ensures that the valuable farmlands are preserved for future generations and also helps maintain a healthy environment and sustainable rural economy.

The easement acquisition is on a voluntary basis. Qualifying farmland must: (1) have a pending offer from a State, Tribe, or local farmland protection program; (2) be large enough to sustain agricultural production; (3) be accessible to markets for what the land produces; (4) have adequate infrastructure and agricultural support services; (5) have surrounding parcels of land that can support long-term agricultural production; and (6) experience urban development pressure. When selected, a

conservation plan consistent with other conservation programs is required for each farm.

The FPP was authorized in the 1996 Farm Bill. During fiscal year 1996, 53 entities from 20 States submitted proposals requesting Federal matching funds of $130 million for 628 farms with 176,000 acres of valuable farmland at an estimated easement value of $330 million. $14.5 million of CCC funds were provided to match 37 government entity programs. That allocation will lead to the protection of approximately 76,000 acres of valuable farmland on 203 farms with an estimated easement value of $116 million in 17 States once all easement acquisitions have been completed. Experience in the first request for proposals for the FPP indicates that demands are almost 10 times greater than the available Federal matching funds.

For fiscal year 1997, $2 million was approved by Congress for use from CCC funds to purchase development rights from farmers and ranchers. In fiscal year 1998, the $18 million approved by Congress exhausted the original authorized funds for the program.

The Conservation Farm Option (CFO) pilot program provides producers of wheat, feed grains, cotton, and rice who are enrolled in AMTA one consolidated USDA conservation program payment, in lieu of the many conservation programs that are available. Producers must implement a conservation plan that addresses soil, water, and related resources, water quality, wetlands, and wildlife habitat. The statute provides broad discretion in designing CFO pilots, and provides the opportunity to tap local agricultural initiatives and innovations for improving environmental quality.

We envision CFO as an opportunity to test the feasibility of innovative program delivery processes and innovative solutions to environmental concerns. We look to the locally-led effort to provide the ideas for innovative pilots. The innovations tested through the CFO may well be the basis for changes in statutory authorities for conservation programs into the 21st century. In fiscal year 1998, pilots will be determined through a Request For Proposal in the Federal Register. Funding for the CFO is provided through the Commodity Credit Corporation. The fiscal year 1998 funding for CFO is $15,000,000. For fiscal year 1999, we are requesting authority for $25,000,000 in CCC program funds, as authorized by the 1996 Act.

Wetlands Reserve Program (WRP) is a voluntary incentive program to assist owners of eligible lands to restore and protect wetlands and necessary adjacent upland areas. The Federal Agriculture Improvement and Reform Act of 1996 (the 1996 Act), re-authorized the WRP to be funded under the Commodity Credit Corporation (CCC) beginning fiscal year 1997, extended the duration of the program to 2002, added cost-share agreements, and restructured the contract payment terms and length.

WRP preserves, protects, and restores valuable wetlands mainly on marginal agricultural lands where historic wetlands functions and values have been either totally depleted or substantially diminished. Wetland restoration of such marginal lands provides landowners with a financial alternative to continued attempts to produce agricultural products on such high risk lands. Program delivery is designed to maximize benefits to wildlife, to provide for water quality and flood storage benefits, and to provide for general aesthetic and open space needs. Many of the WRP project sites are within areas that are frequently subjected to flooding and the flood storage being provided will lessen the severity of future flood events. The WRP is making a substantial contribution to the restoration of the nation's migratory bird habitats, especially for waterfowl.

The WRP is a mandatory program from a budget perspective but is offered to program participants on a strictly voluntary basis. Under the WRP, the Secretary of Agriculture acquires permanent easements and 30-year easements, enters into restoration cost-share agreements/contracts, provides for overhead costs associated with the cost of purchasing an easement or establishing an agreement, develops wetland restoration plans, cost-shares the restoration, and monitors the maintenance of the easements and agreements. Close cooperation with other Federal and State agencies and private conservation entities is an integral aspect of program delivery. The State Conservationist, in cooperation with the State Technical Committee, is responsible for WRP implementation and operations.

Beginning in fiscal year 1997, the program was funded under the Commodity Credit Corporation (CCC). The fiscal year 1997 program provided $99,000,000 in CCC financial assistance funds to enroll approximately 125,000 acres involving more than 700 individual projects. The fiscal year 1998 program will provide $218,597,000 in financial assistance to enroll approximately 212,000 acres. In fiscal year 1999, we propose enrolling an additional 164,000 acres at a cost of $123,741,000. Technical assistance funding for fiscal year 1998 will be funded from fiscal year 1996 unobligated appropriated funds under the old WRP account due to the limitation on CCC reimbursements. Technical assistance funding for fiscal year

1999 will include both unobligated appropriated funds ($4,000,000) and CCC funds ($11,059,000).

From inception of the program in 1992 through 1997, interest in the program has been exceptional, providing approximately 449,250 acres enrolled in the program through the end of fiscal year 1997, and coupled with the fiscal year 1998 and fiscal year 1999 program sign-ups, approximately 825,450 are expected to be enrolled by the end of fiscal year 1999 through use of fiscal year 1997 and fiscal year 1998 CCC funding. We expect to reach the 975,000 acre enrollment goal mandated by the 1996 Act in fiscal year 2000, two years ahead of deadline. Historically, there have been more than five fold as many acres offered than the program could enroll. The fiscal year 1998 sign-up was the fifth that has occurred under WRP since fiscal year 1992. The fiscal year 1998 effort provided landowners with the continuous opportunity to seek enrollment in the program. States periodically rank all unfunded offers and seek allocation of funding for the highest ranked offers. By following this process, the maximum opportunity for landowner participation is provided and the WRP is assured of having the best possible list of ranked offers available for funding during the year.

In response to the 1996 Act, the fiscal year 1997 sign-up is separated into three components (i.e., permanent easements, 30-year easements, and cost-share agreements). Enrollment is targeted to achieve a balance, to the extent practicable, of each component. The level of enrollment established for 1998 is 212,000 acres with a requirement that the initial 32,000 acres of easements be limited to 30-year duration. Thus far, approximately 48,596 acres of 30-year easements have been enrolled. This enrollment was completed before the enrollment of permanent easements was initiated. The 48,596 acres represents approximately 60 percent of the 30-year easement offers that have been received. We would expect during fiscal year 1998 to easily fulfill the 75,000 acre enrollment that is called for in statute. Approximately 50,980 acres of permanent easements have been enrolled. This represents approximately 32 percent of the permanent easement offers. Approximately 4,154 acres of restoration cost-share agreements have been enrolled. This represents approximately 100 percent of cost-share agreement offers.

Under the continuous sign-up process the backlog lists for each of the program components will continue to be updated. Once the fiscal year 1998 enrollment process is completed, these lists will be available for immediate use in selection of the 1998 enrollment.

CONCLUSION

It is clear that as we consider the appropriations for the private lands conservation as part of the 1999 budget, that we stand at a crossroads. We have been granted a wealth of tools and resources, and have willing partners and customers to put them to work. We have the opportunity to establish a foundation for the future of conservation—fulfilling our commitment to the resources, while ensuring healthy and productive land is within our reach. Even more, we can instill a conservation ethic that will endure for generations.

However, these policy and financial commitments become moot unless the Department of Agriculture and NRCS, its lead conservation agency, have sufficient resources to deliver the technical assistance that farmers and ranchers time and again say they need to take advantage of the conservation opportunities now confronting them. Our partners in State and local governments and the private sector, responding to widespread public support for environmental protection efforts, have increased their financial commitments to conservation on private land in recent years. At the same time, they look to the federal government for a continuing commitment to technical assistance for private land and private landowners, not the diminishing commitment in real dollars that has been the trend over the past two decades. It is this technical assistance that, when coupled with the contributions of our many public and private-sector partners, will allow us to realize the full promise of the 1996 farm bill and to look beyond. Given the needed resources in this appropriation request, together we can ensure a conservation legacy for future generations.

That concludes my statement. I am looking forward to working with you in the months ahead to review the proposal and work together to maximize service to our customers and help them be good stewards of the land. I will take any questions that members of the committee might have.

PREPARED STATEMENT OF THOMAS A. WEBER

Mr. Chairman, it gives me great pride to represent the Natural Resources Conservation Service—NRCS—before the Committee, today. For over two decades I

have had the pleasure of serving among what I would consider to be the most committed and invaluable group of public servants and conservation professionals in this nation. It has been said so many times that the whole is greater than the sum of its parts. I feel this is especially true of NRCS. It has value far beyond the conservation programs, cost share dollars, or even the staff that comprise it. It is the unique combination of technical skills, partnerships, dedication to public service and commitment to working with people on the land that are the keys to its value. Therefore, rather than focusing on talk about numbers and budgets, I want to highlight leadership, partnerships, the accomplishments of our employees, and the challenges ahead.

NRCS has had the fortune of being led by a tremendous cadre of leaders who had a vision of natural resources for the future and the creativity and courage to see them through. Primary among them was Hugh Hammond Bennett who asserted that the solution to soil erosion was to tailor conservation practices to fit the individual situation and needs of the landowner. In recent history, the leadership of Paul Johnson crystallized in our minds the importance of conservation on private lands and how the success of voluntary conservation is the key to ensuring the productivity and health of the land for future generations.

But meeting the enormous task of performing conservation work on the nation's private lands takes far more than the work of a single individual or even a federal agency. It is instead through a partnership of a federal agency, local conservation districts, state conservation agencies and others, and the hard work of local people that we are able to accomplish all we do. We refer to it as the Conservation Partnership. It is a unique and effective delivery system, it is geared to meeting the needs of local people, and it has literally changed the landscape of the nation.

Last year brought about many new responsibilities, many challenges, and of course, many changes. I am proud to say that the dedicated employees of NRCS and our conservation partners collectively applied their knowledge and abilities to start putting Farm Bill programs to work for our nation's land and people. But more than simply implementing these program, NRCS staff have strived to utilize these tools in creative ways to meet the resource needs of our customers. Just as Hugh Hammond Bennett originally asserted, we are using the programs to meet the greater needs of the land and landowner. Likewise, more than ever, we have strengthened the locally led approach to conservation.

Last year, our employees shared responsibility for the largest Conservation Reserve Program sign-up in the Department's history. They also helped to officially launch the National Conservation Buffer Initiative, which will protect water quality, wildlife habitat, and provide many more environmental benefits and implemented the Environmental Quality Incentives Program (EQIP) which has become one of the most popular conservation programs that is available. And more than its popularity among our customers, our field conservationists are finding it to be the useful tool to help landowners meet their conservation needs.

Thanks to your support and our employees efforts, landowners will share with people in their watersheds a future that has healthier land and cleaner water and air. We've seen tremendous progress where the conservation partnership have engaged communities in resource concerns and priority setting. Our employees and partners have also worked to improve outreach to underserved customers. That work is an example of what can happen when good people set out to achieve a common goal. We've made progress, but we need to accelerate our work with underserved individuals, communities, and groups and ensure that our legacy of conservation and stewardship includes everyone.

Nineteen ninety-eight is shaping up to be an exciting year in natural resource conservation. There are several programs being implemented—Wildlife Habitat Incentives Program (WHIP) and Conservation Farm Option (CFO). There are a lot of issues of concern to be addressed, including animal agriculture and the environment, water quality, wetlands, natural disasters, air quality, and farmland protection—to name just a few. We in NRCS are also putting a strong emphasis on continuing to enhance our technical capability. Our employees need to have the best technical skills available to provide quality service. As a result, we're providing additional training to employees and exploring new technology. It is important that as we focus upon new program activities and adapt to changes in producers needs, that we continue to address the needs of our employees. The goal is to make sure on all accounts that our staff have the best training and resources they need to serve our customers.

One of the goals of our agency-wide reorganization was to place a higher share of staff resources in the field to maintain and enhance service to our customers. This goal continues to be a high priority. We've recently given direction to agency leaders at all levels to maintain or, if possible, increase the number of field employees as

positions become vacant elsewhere in the agency. We're also making every effort to reduce the administrative workload of our field employees to increase the time they devote to getting conservation on the land working directly with landowners.

Throughout the agency, our focus is to maximize conservation benefits with the funds that are available. Therefore, the fiscal year 1999 budget proposes to increase support for the vital technical assistance that our field staff provide. You will note that the budget contains a renamed account entitled America's Private Lands Conservation. The funds for this program represent the support that is needed to get conservation activities on the ground. And while we have strived to give our field staff the tools they need to assist landowners, we also anticipate increased returns through cooperative efforts with federal and non-federal partners as well. Our participation in the President's Clean Water Initiative will help to improve the health of watersheds, restore wetlands, and help communities meet water quality goals.

The fiscal year 1999 budget proposal for NRCS will help to ensure protection and improvement of our natural resources for future generations. As the Under Secretary outlined, we have made much progress and the success of our many conservation programs is a testament to the commitment of so many landowners across the nation who want to help themselves. It is also proof that the heritage left behind by our predecessors can become a legacy of land stewardship if we are willing to take on the task. I believe that we can take on this task, and I am confident that the employees of NRCS and its conservation partners can meet the challenges for 1998 and beyond.

STATEMENT OF THOMAS A. WEBER

Senator COCHRAN. Chief, you are recognized. Welcome.

Mr. WEBER. Thank you, Mr. Chairman. It gives me a great deal of pride to be here today to represent the Natural Resources Conservation Service. It has been said so many times that the whole is greater than the sum of its parts. I feel this is especially true of the Natural Resources Conservation Service. It has value far beyond the conservation programs, cost-share dollars, or even the staff that comprise it.

It is a unique combination of technical skills, partnerships, dedication to public service, and commitment to working with people on the land that are the key to its values. Therefore, rather than focusing on numbers and budgets, I want to highlight partnerships, the accomplishments of our employees, and the challenges ahead in the few minutes I have here.

Meeting the enormous challenges and tasks of performing conservation work on the Nation's private lands entails far more work than an individual agency or person can accomplish. It is instead, through a partnership of a Federal agency, local conservation districts, State conservation agencies and others, and the hard work of local people that we are able to accomplish what we do.

We refer to this as the conservation partnership. It is a unique and effective delivery system that has been in place for over 60 years and is geared to meeting the needs of local people on the land. And it has literally changed the landscape of this Nation.

Last year brought many new responsibilities, challenges, and of course many changes. I am proud to say that our dedicated employees and our partners have collectively applied their knowledge and their abilities to put the farm bill programs on the land and to put them to work for the Nation's land and people.

We are using these programs as tools to meet the greater needs of the land and the landowners. And likewise, more than ever, we have strengthened what we call the locally led approach to conservation.

Last year our employees shared responsibility for the largest Conservation Reserve Program signup in the Department's history. They also helped to officially launch the national conservation buffer initiative, which will help to protect water quality, enhance wildlife habitat, and provide many of the environmental benefits.

In addition to that, the Environmental Quality Incentives Program was brought on board, which has become one of the most popular conservation programs in this Nation. Our employees and partners have also worked to improve outreach to underserved customers. We have made much progress there, but we need to accelerate our work with underserved individuals, communities, and groups and ensure that our legacy of conservation and stewardship includes everyone.

This is an exciting year in natural resource conservation. There are several programs that we are implementing this year, one mentioned earlier, the Wildlife Habitat Incentives Program.

In addition to that, we have the conservation farm option that will be soon coming out. There are also a lot of issues of concern to be addressed, including animal agriculture and the environment, water quality, wetlands, natural disasters, of which we have certainly had several here recently, air quality, and farmland protection to name just a few.

We have made much progress, and the success of our conservation programs is a testament to the commitment of so many of our landowners across the Nation who want to help themselves. A few examples of our progress: Total erosion on highly erodible cropland has been reduced 47 percent since the 1985 farm bill.

The rate of wetland loss has declined between 1982 and 1992 to approximately 79,000 acres per year.

Senator BUMPERS. Would you repeat that, please?

Mr. WEBER. The annual rate of wetland loss has declined between the periods of 1982 and 1992, based on our current statistical information, to about 79,000 acres per year.

Senator BUMPERS. Thank you.

Mr. WEBER. The number of waterways safe for swimming and fishing has doubled over the last 25 years. This is proof that the heritage left behind by our predecessors can become a legacy of land stewardship, if we are willing to take on the challenge. And the challenge is daunting.

Soil erosion on agricultural land still exceeds 2 billion tons annually. Nineteen percent of the Nation's streams do not meet water quality standards due to the environmental impacts of animal waste alone. There is some evidence that the rate of loss of rural land to urban development has actually begun to increase during the 1990's.

However, with your help I am confident that the employees of the Natural Resources Conservation Service and our conservation partners can meet these challenges in 1998 and beyond.

In closing, I want to share a story with you that portrays the real value of the Natural Resources Conservation Service, its employees. A few weeks ago I had the pleasure of hearing Mr. Jerry Clower, storyteller and entertainer from the State of Mississippi, speak of his land and the special relationship with what he called his conservationist over many years.

Now Mr. Clower spoke eloquently and proudly about conservation on his land and also helped—he was helped by his conservationist. And he talked about the enjoyment his grandchildren had on that land.

He spoke of the land as being America's conservation legacy. Later on Mr. Clower noted that he did not realize his conservationist was a Federal employee because that really never mattered to him.

The story points out the real value of NRCS. It is not the programs, it is not the authorities, and it is not the cost-share funds that are the most critical of America's private land conservation effort.

It is the cadre of highly trained, motivated and skilled individuals and technical people working directly with landowners that truly result in the conservation benefits we all enjoy today.

We must preserve and nurture this national treasure in order to pass on our conservation legacy to future generations.

Thank you, Mr. Chairman.

EQIP

Senator COCHRAN. Thank you, Mr. Weber, for your comments and your testimony.

In connection with the EQIP Program that was mentioned and is also discussed at length in the prepared testimony, you talk about selecting priority areas for attention and the fact that emphasis will be given in providing funds and technical assistance to these priority areas.

Has there been any designation or a map drawn to illustrate where these priority areas are? I am curious to know where the money is really going, where it has gone so far under this program, how much has been spent, and what you intend to do with the money you are asking us to appropriate for this next fiscal year.

Senator BUMPERS. Mr. Chairman, before he answers that question, are you alluding to the Water Resources Assistance Program, where he says they have 40 priority watersheds?

Senator COCHRAN. No; the Environmental Quality Incentives Program [EQIP] that he talks about.

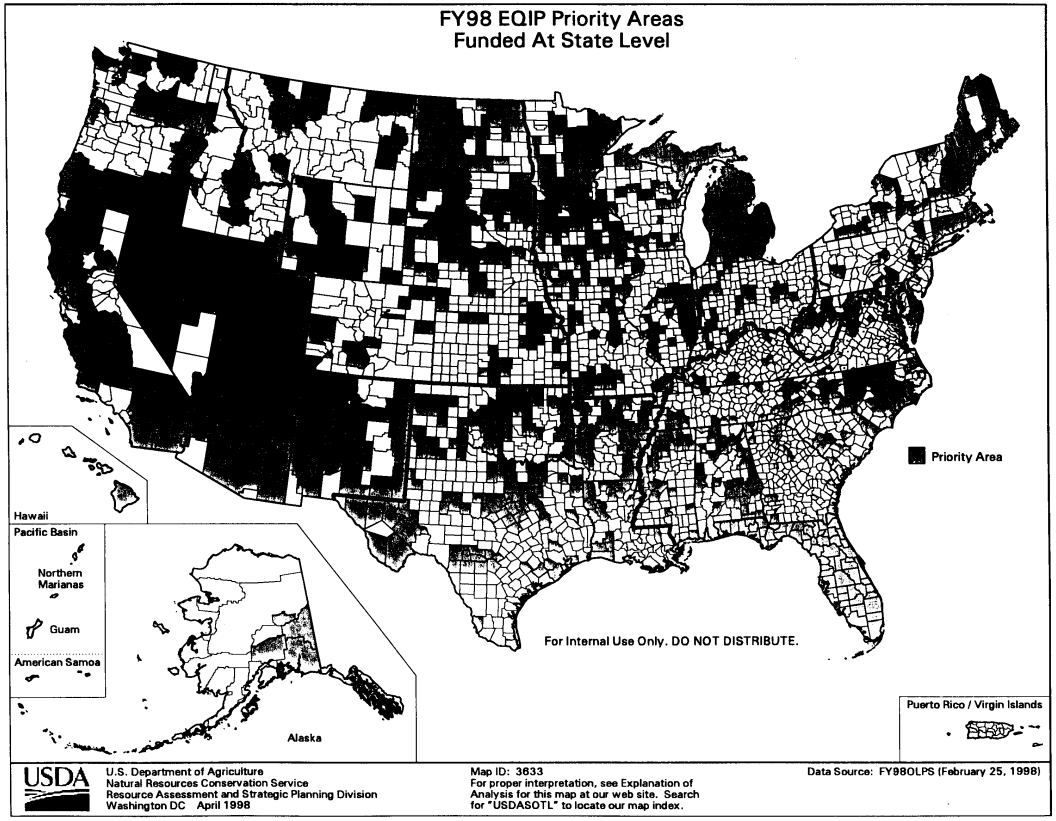
Senator BUMPERS. OK.

Senator COCHRAN. It talks about priority areas recommended to NRCS by local work groups and State conservationists, but then they talk about a national program for selecting priority areas. I am just curious to know, have they selected the priority areas? And if so, where are they?

Mr. LYONS. Mr. Chairman, we could provide for the record a map of the priority areas that have been designated in each State. They are identified. They are identified through a process that really begins from the ground up where local conservation districts and others help to identify these areas.

Then those nominations, if you will, are presented to the State technical committees, who then work to refine and identify those areas of priority. And it is on that basis that we set those priorities for allocations.

[The information follows:]


FY98 EQIP Priority Areas
Funded At State Level
Priority Area
For Internal Use Only. DO NOT DISTRIBUTE.
Hawaii
Pacific Basin
Northern Marianas
Guam
American Samoa
Alaska
Puerto Rico / Virgin Islands
USDA
U.S. Department of Agriculture
Natural Resources Conservation Service
Resource Assessment and Strategic Planning Division
Washington DC April 1998
Map ID: 3633
For proper interpretation, see Explanation of Analysis for this map at our web site. Search for "USDASOTL" to locate our map index.
Data Source: FY98OLPS (February 25, 1998)

Senator COCHRAN. Well, I notice, to follow up on that, that you say in fiscal year 1997 nearly 71 percent of the EQIP financial assistance funding was provided within priority areas. The total amount, as I understand it, that you had to work with was less than $200 million.

And I am just curious to know, are some areas of the country being left out of this priority program? Can you tell us more about where the money is going?

I do not think you have—you have a map. Do we have copies of the maps that we can look at or a table showing where the money has been spent or where you intend to spend it?

Mr. LYONS. Yes; I do not think we have a map with us, Mr. Chairman. We will certainly provide you the EQIP allocations.

Basically the way the process works is, the State technical committees provide oversight in each State. And they include a number of interest in entities chaired by the State conservationist. But this is a locally led effort to identify priority areas.

The additional funds, though, that are allocated beyond the 71 percent address statewide concerns and are not necessarily tiered toward any specific priority area. So it is really an attempt to have those on the ground to understand water quality and conservation concern needs, identify priorities, allocate funds primarily through that process, but then reserving some funds to address other statewide needs, again guided by what individual State technical committees advise.

EQIP PRIORITY AREAS

Senator COCHRAN. Do you leave up to the State technical committees and the State conservationist the authority to decide what areas are priority areas, or do you have regulations that you have promulgated that guide them?

Mr. LYONS. I am going to ask the Chief to offer those details.

Mr. WEBER. Thank you.

As part of the process the State conservationist working with the State technical committee gets the advice from the State technical committee, which is represented by a number of Federal agencies and organizations in the State, including State government.

This committee makes recommendations to the State conservationist in terms of which priority areas in the State should be funded and at what levels. It also makes recommendations in terms of what we are calling statewide concerns, which are issues that may cover a total portion of the remaining part of the State outside of priority areas, such as water quality, where you have perhaps some animal concentration issues you are dealing with. And they recommend the amounts of the allocation that should go toward those efforts.

The total allocation is given to the State based on the State resource needs, but the State conservationist with the input of the State technical committee makes the decisions. And with Farm Service Agency [FSA] concurrence in this process, they make the decisions on where the dollars will go in terms of how much to each priority area and to statewide concerns.

Senator COCHRAN. In the administration of this program, have you found that some States end up having to use all the money

under the program for the priority areas? Does everybody have 29 percent left over to use for local concerns that may be outside this classification scheme?

Tell me how that works as a practical matter.

Mr. WEBER. OK. Thank you.

We allow that discretion to each State. They receive *x* dollars for their allocation. Then, working with the State technical committee, they decide what are the best and highest priority uses for those dollars.

In some cases we may have States that are allocating 50 percent to the priority areas, and 50 percent to the areas of statewide concern. So it is going to vary from State to State what that percentage is. But they do have discretion within the dollars they have.

EQIP ALLOCATIONS

Senator COCHRAN. Well, I am a little bit confused in trying to figure out where the money is going. I guess you are going to show us a table where the money is going.

Mr. WEBER. Yes.

Senator COCHRAN. Can you tell us anything about that, or are you just going to furnish that for the record, referring to the earlier question that I asked?

Mr. LYONS. We will furnish that for the record, Mr. Chairman.

[The information follows:]

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (1998)

State	Technical assistance	Education assistance	Financial assistance	Totals
Alabama	$620,000	.....	$2,580,000	$3,200,000
Alaska	82,000	$8,000	342,000	432,000
Arizona	981,000	197,200	3,890,800	5,069,000
Arkansas	1,092,000	120,000	5,278,000	6,490,000
California	1,448,000	611,000	5,499,000	7,558,000
Colorado	1,348,000	135,162	4,902,838	6,386,000
Connecticut	117,000	473,150	24,850	615,000
Delaware	212,000	9,000	892,000	1,113,000
Florida	925,000	5,400	3,843,600	4,774,000
Georgia	811,000	57,450	3,398,550	4,267,000
Hawaii	224,000	40,000	787,000	1,051,000
Idaho	787,000	50,000	3,306,000	4,143,000
Illinois	798,000	52,379	3,347,621	4,198,000
Indiana	655,000	.....	2,525,000	3,180,000
Iowa	1,106,000	211,000	4,173,000	5,490,000
Kansas	1,053,000	25,000	4,110,000	5,188,000
Kentucky	549,000	35,130	2,306,870	2,891,000
Louisiana	832,000	144,700	4,334,300	5,311,000
Maine	544,000	104,450	1,896,550	2,545,000
Maryland	451,000	24,000	1,774,000	2,249,000
Massachusetts	175,000	20,000	665,000	860,000
Michigan	790,000	.....	3,367,000	4,157,000
Minnesota	1,082,000	224,000	4,263,000	5,569,000
Mississippi	865,000	99,550	4,426,450	5,391,000
Missouri	957,000	121,000	3,897,000	4,975,000
Montana	1,208,000	.....	5,056,000	6,264,000
Nebraska	954,000	64,100	4,004,900	5,023,000
Nevada	286,000	8,000	1,213,000	1,507,000

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (1998)—Continued

State	Technical assistance	Education assistance	Financial assistance	Totals
New Hampshire	71,000	15,050	285,950	372,000
New Jersey	203,000	35,000	832,000	1,070,000
New Mexico	734,000	42,575	3,088,425	3,865,000
New York	929,000	37,728	3,593,272	4,560,000
North Carolina	1,123,000	.....	4,597,000	5,720,000
North Dakota	851,000	164,676	3,463,324	4,479,000
Ohio	660,000	50,000	2,574,000	3,284,000
Oklahoma	1,060,000	126,471	4,204,529	5,391,000
Oregon	802,000	244,000	3,173,000	4,219,000
Pacific Basin	110,000	82,000	324,000	516,000
Pennsylvania	845,000	33,800	3,301,200	4,180,000
Puerto Rico	232,000	11,000	916,000	1,159,000
Rhode Island	48,000	9,000	190,000	247,000
South Carolina	395,000	.....	1,685,000	2,080,000
South Dakota	826,000	84,400	3,437,600	4,348,000
Tennessee	581,000	23,513	2,451,487	3,056,000
Texas	3,122,000	264,260	12,948,740	16,335,000
Utah	783,000	80,000	2,975,000	3,838,000
Vermont	276,000	.....	942,000	1,218,000
Virginia	500,000	15,000	2,116,000	2,631,000
Washington	950,000	172,612	3,876,388	4,999,000
West Virginia	344,000	10,000	1,455,000	1,809,000
Wisconsin	840,000	.....	3,517,000	4,357,000
Wyoming	763,000	21,500	3,090,500	3,875,000
Total	38,000,000	4,362,256	155,141,744	197,504,000
Undistributed	.....	.....	2,496,000	.....

Senator COCHRAN. Well, let us just pick out a few States. Tell us about Wisconsin, Arkansas, Mississippi, and Montana. [Laughter.]

Mr. LYONS. Just to pick four States.

Senator COCHRAN. Just to pick four States at random.

Senator BURNS. And if you are having any trouble remembering the details in Montana, I will enlighten you.

Mr. LYONS. OK. Which States? [Laughter.]

Senator COCHRAN. Wisconsin, Arkansas, Mississippi, and Montana.

Mr. WEBER. Mississippi. OK.

Mr. LYONS. While Tom is looking at the allocations overall, I guess what I should explain, Mr. Chairman, is of course one of the problems we have with EQIP is it is oversubscribed. We estimate there is $600 million in demand out there.

So not all producers are able to get the assistance and the financial support they seek. We only have $200 million to allocate. And of course this year we are seeking an additional $100 million to give us $300 million overall.

So we have established this system to try and come up with an orderly way to make allocations based on what people on the group perceive to be priority conservation concerns. It puts the State technical committees in a tough position. They have to make tough calls.

But candidly, our view was it is better for them to make the calls there than for us inside the beltway to be making those calls.

Senator COCHRAN. Well, there are some decisions that are made in Washington though about the national priorities. And you talked about how this money was going to be used to support the President's clean water initiative and all these other new initiatives, which we think are important.

But what worries me is, you have made decisions as to how to spend this money nationally, and when you get right down to it, the State conservationists and the State committees are being given what is left over. And it is very, very little to do the conventional and the traditional things, to protect watersheds and protect farmland.

Mr. LYONS. I guess I would need to understand that more clearly, Mr. Chairman. But I see it differently. And of course——

Senator COCHRAN. Well, tell us what the facts are then.

Mr. LYONS. Well, the facts are——

Senator COCHRAN. What are the facts? Where does the money go? Where is the decision made as to the allocation of the funds. Can we find that out?

Mr. LYONS. Sure.

Senator COCHRAN. I have asked it about three or four times, and I have not heard a word about it yet. I have not heard a responsive answer to that question.

Mr. LYONS. Well, I will let Tom give you the details. And if that does not do it, we will go at it again.

Senator COCHRAN. OK.

Mr. WEBER. For fiscal year 1998, allocations for EQIP in Arkansas is $6.49 million; the State of Mississippi is $5.391 million; Wisconsin is $4.357 million; and Montana is $6.264 million.

Senator BURNS. What was Montana again?

Mr. WEBER. $6.264 million. And those are based on——

Senator BURNS. Where did it go?

Senator COCHRAN. Let me finish my question, if I could, Senator.

Senator BURNS. OK.

Senator COCHRAN. Are these funds allocated to the States to spend in the national priority areas, or are these funds allocated for the States to spend based on decisions made by the State conservationist and the State committee?

Mr. LYONS. The allocations are made to the State for the State conservationist with the concurrence of the Farm Service Agency and the involvement of the State technical committee to decide where those dollars are spent.

Senator COCHRAN. And this is out of a total amount of $200 million, these States got that much? Is that what you are telling me?

Mr. WEBER. Correct.

CLEAN WATER INITIATIVE

Mr. LYONS. The role of Washington is the initial allocation to the States. But once the States have those funds that Tom has described, then it is the State's role to determine where those moneys should go and how those allocations should be made.

And let me just clarify, Mr. Chairman. For an initiative, like this clean water initiative that I referenced, as we are attempting to

formulate that, our intent is not to create a new allocation formula or the like. We really are trying to determine ways in which we can mirror the most efficient delivery system out there.

And we may, in fact, simply elect to use something akin to what we are doing now with the EQIP allocation formula, because we certainly want those decisions to be made at a State and local level.

WILDLIFE HABITAT INCENTIVES PROGRAM

Senator COCHRAN. I am glad that you are going to be implementing the Wildlife Habitat Incentives Program. We think that it is a new initiative, as you pointed out, that may very well lead to the protection of habitat for wildlife, endangered species, migratory waterfowl, and other game animals and fowl as well.

We hope that you will continue to monitor that carefully and give us a report on participation and how it is going. If there are any changes that need to be made legislatively, we hope you will communicate those to us.

We also appreciate the fact that you have established conservation centers where farmers and landowners can come and find out how they can take advantage of the Federal programs. We know that you have established one which we attended together, the ribbon cutting in Mississippi.

Tell me how that is working out. Do you think that is going to be a wise investment of Federal funds? Will farmers and landowners be better able to take advantage of the Federal programs, like Jerry Clower talked about in your testimony, Chief?

Mr. LYONS. Let me offer my perspective on that, Mr. Chairman. I think the value of those institutes—and we have established several across the country. Of course the one you refer to is the Wildlife Habitat Institute that Pete Heard is heading up—is that is a mechanism to translate current research information and current technology into ways that can be rapidly used by State conservationists in applying that knowledge on the ground.

For example, with the Wildlife Habitat Institute, although housed in Mississippi, we have individuals in the Pacific Northwest, in Colorado, in New England, in several places across the country, who are in a position to work directly with the State conservationists or with conservation districts to help in accelerating and facilitating the use of that information to make sure that it is applied in a rapid way.

And we think it is going to pay off tremendously. It is a small investment, but I think it is, using modern communications technology, an opportunity to facilitate a national dialog by getting information to the ground very quickly.

SMALL WATERSHED PROGRAM

Senator COCHRAN. Let me conclude my questioning in this round with an observation and ask you to give me your reaction.

The suspicion is out in the farmland area of my State, the Mississippi Delta specifically and some other areas too, that the Soil Conservation Service approaches of the past by the new NRCS is to let low-lying areas flood, that this is good for the environment, good for the country, and that traditional watershed flood control

protection measures are out of date, out of favor, and are not being funded by this administration.

Is that true? And if that is true, why is that?

Mr. WEBER. OK. As you know, in the budget proposal the funding for the Public Law 566, Small Watershed Program, for the financial assistance side, which is to invest in contracts with landowners or build structures, is $49 million. This is comparable approximately to what it was last year.

I would say the answer to the question is that we are supporting good conservation. And we have tools at our disposal to enhance conservation. The Wetlands Reserve Program certainly is applicable where there are needs and interested landowners in preserving wetlands and restoring wetlands.

The watershed program has been—we have gone through a review of the backlog on that program trying to ensure we have those projects that are really—that people are interested in continuing to work with us to put into place. We have done that. We are taking a look at the program to broaden it, to allow people to participate on land treatment aspects versus structural aspects.

But I would not say the agency prefers one over the other. We are simply trying to provide all the tools we can within the means that we have to deal with the natural resource issues.

And I would just share with you, we are also taking a look at the infrastructure issue on our old watershed projects, and we will share this with you as well, so you get a concept of that.

Senator COCHRAN. Thank you very much.

Senator Bumpers.

WETLANDS

Senator BUMPERS. Thank you, Mr. Chairman.

Chief, what role do you have in the 404 permitting process? Do you make the determinations of what are wetlands in this country?

Mr. WEBER. Part of our responsibility under the memorandum of agreement with Fish and Wildlife and the Corps of Engineers, is that we do wetland determinations on agricultural lands.

We are continuing to work with the Corps on revising the memorandum of agreement to allow greater flexibility on wetlands and the acceptance of wetland determinations that we make for those purposes.

Senator BUMPERS. You do not have to sign off on the plan. Let us assume that I am a farmer and I apply for 404 permitting process on 40 acres of my farm. You have previously determined that 40 acres to be wetlands, right?

Mr. WEBER. We may have, yes.

Senator BUMPERS. And it goes to the Corps for permission to do something with that.

Mr. WEBER. Yes.

Senator BUMPERS. Which it will also include some alternative plan to make up for the loss of that 40 acres, is that correct?

Mr. WEBER. A mitigation plan.

Senator BUMPERS. Yes; mitigation plan. So once that is submitted to the Corps, we are talking about this 40-acre plan, he says, Well, I will convert another 40 acres on my farm to wetlands, or

whatever plan he submits. Do you have any further signoff responsibility on that?

Mr. WEBER. I do not believe so.

Senator BUMPERS. That is solely with the Corps' discretion.

Mr. WEBER. That is solely the discretion of the Corps.

Senator BUMPERS. How are we doing on our preservation of wetlands in this country through the 404 permitting process?

Mr. WEBER. I am not familiar with what their accomplishments are. But overall——

Senator BUMPERS. I admit—I know that is not really your responsibility. Do you add anything to this from time to time? Do you add any wetlands to the national plan?

Mr. WEBER. Oh, absolutely. Well, the Wetlands Reserve Program is a wonderful example of——

Senator BUMPERS. I am not talking about the Wetlands Reserve Program. I am talking about coastal areas and so on. Do you find that you have overlooked lands or did you decide that lands should be added to the wetlands determination, or do you just do it one time and that is the end of it?

Mr. WEBER. We continue to work with landowners on their requests to do redeterminations or new determinations of wetlands on their lands. We are not doing——

Senator BUMPERS. But you are talking about working with owners to determine whether or not you made a mistake in the first place.

Mr. WEBER. Sometimes, yes.

Senator BUMPERS. He said you have declared this wetlands and it should not be. I can see how you work with them on something like that. But I am talking about any additional acreage that has not been determined to be wetlands.

Do you review the areas constantly, or does the State agency review and recommend to you that a certain area be declared a wetlands, even until this day?

Mr. WEBER. No; let me——

Senator BUMPERS. You said, I think you said this, Chief, that we have reduced the loss of wetlands by 79,000 acres a year in the period 1982 to 1992, is that correct?

Mr. WEBER. That is correct, based on our national resource inventory data.

Senator BUMPERS. How are we losing that 79,000 acres? I mean, how are we—let me rephrase the question. That is not a correct question.

You say we have reduced the loss by 79,000, right?

Mr. WEBER. We are——

Senator BUMPERS. How much are we still losing? That is the question.

Mr. WEBER. We are losing a net of 79,000 acres per year.

Senator BUMPERS. I think we are talking about two separate things. You said we have reduced the loss on an annual basis. So if we were losing 179,000 acres in 1982 and we are losing 100,000 acres now, we have reduced the loss by 79,000 acres, right?

Mr. WEBER. You could look at it that way, Senator Bumpers.

Senator BUMPERS. Over the 10-year period, we have cut 179,000 acres to 100,000. No.

Mr. WEBER. Yes.

Senator BUMPERS. Let me see, am I saying that right? You are saying we have reduced the loss. My question is: How much are we still losing?

Mr. WEBER. The answer to that is, we are still losing about 79,000 acres a year. If you set as a goal—of course, this was a Bush administration goal, no net loss, originally stated—then in relation to that goal, we are still 79,000 acres a year short. That is what we are losing every year.

Senator BUMPERS. How are we losing it?

Mr. WEBER. Various forms of conversion and development.

Senator BUMPERS. If a developer comes in and says, I want to use this 80-acre tract to build a subdivision, I understood that he had to come up with some mitigation plan. Does the mitigation plan have to be on an acre-per-acre basis?

Mr. WEBER. I think you are going to go well beyond my area of expertise, Senator.

Senator BUMPERS. Well, maybe——

Mr. WEBER. The Corps would play that role.

SOIL LOST

Senator BUMPERS. I ought to wait until the Energy and Water Committee meets, and we will ask the Corps of Engineers those questions. But you said that we were still losing 2 billion tons of topsoil a year.

Mr. WEBER. Yes.

Senator BUMPERS. What were we losing 10 years ago?

Mr. WEBER. About 3 billion.

Senator BUMPERS. Three billion?

Mr. WEBER. Yes.

Senator BUMPERS. How are you stemming the loss of topsoil? Well, I know that Iowa used to lose 16 tons of topsoil an acre per year. Now I understand they have done, through State laws out there, some fairly dramatic things to stem that kind of erosion. But how do you plan to stop the 2 billion tons that we are still losing?

Mr. WEBER. The Congress needs to take credit for the outstanding progress we have made, based on the 1985 farm bill. A lot of that reduction has come about because of the conservation lands provisions of that bill.

We continue to work with landowners on a voluntary basis to adopt different tillage practices that reduce erosion. We are working with them on the conservation buffers that were mentioned here.

We continue to work with them on the traditional practices of terraces and tillage and wind strips and those kinds of things. We are basically focusing on working with them on a one-on-one basis and trying to encourage additional conservation practices to go the next step versus any other option that we may have available to us right now.

BUFFER ZONES

Senator BUMPERS. You stated that you have identified 2 million miles of buffer zones along streams that you want to acquire, either by easement or some other way, is that correct?

Mr. LYONS. That is actually part of the CRP program, so it would be 10-year contracts.

Senator BUMPERS. Have you identified the 2 million miles?

Mr. LYONS. No; the way we have administered the program, Senator, is each State is in the process of promoting those enrollments. And again——

Senator BUMPERS. So that is just a ballpark figure.

Mr. LYONS. No; that is our goal. Two million miles is our goal.

Senator BUMPERS. Is that just a goal?

Mr. LYONS. Yes.

Senator BUMPERS. So you have not identified the areas.

Mr. LYONS. No; we are letting—again, we are having that determination made at the local level and working with landowners, because, again, it is a voluntary program.

WATERSHEDS

Senator BUMPERS. On page 20 at the bottom on water resources assistance, you state that the funding level would enable approximately 92 Federal watershed coordinators to develop project work plans, coordinate volunteers, projects from watershed council activities, and 40 priority watersheds.

Do you have a list of those 40 priority watersheds?

Mr. LYONS. Not at this point.

Senator BUMPERS. You do not?

Mr. LYONS. Not at this point, Senator.

Senator BUMPERS. How do you know there are 40?

Mr. LYONS. Well, that is what we will have funding for.

Senator BUMPERS. You do not know what they are, but you will have funding for 40.

Mr. LYONS. Yes.

Senator BUMPERS. When do you expect to have that?

Mr. LYONS. Well, part of what we have proposed in this clean water action plan is to go through a process where the States would lead us in identifying critical watersheds.

We have national information and on a gross basis have a rough assessment of watersheds that are relatively healthy, those that are at risk, and those that are maybe beyond our ability to restore.

As we develop that process, we would work with the States to identify priority watersheds. And then this funding would help us address at least 40 of those priority watersheds. But we still have to go through the process to actually identify what those watersheds would be.

PLANT MATERIAL CENTERS

Senator BUMPERS. We have a plant material center in Booneville, AR. You have 26 plant material centers in the country.

Mr. LYONS. That is correct.

Senator BUMPERS. The one in Arkansas, Senator Bond got very interested in the Booneville facility and came down and spent a day with me at their plant a couple of years ago. And he was interested in it for a reason that I did not realize they were working on. It was called agro-forestry, where they plant trees on pasture lands, and you cannot even plant trees on row cropping lands.

And I did not know I had the program going over there, but, I mean, they were planting pecan trees. A walnut tree full grown is worth something like $20,000 or $30,000. They were planting those kinds of trees.

Are you familiar with that program, anybody on this panel?

AGRO-FORESTRY

Mr. LYONS. I guess I am, Senator. There is actually an agro-forestry research center in Lincoln that helps develop that technology. I think the Forest Service has been a key player in that.

Senator BUMPERS. But does Senator Bond not have a facility? Are they not doing some work at the University of Missouri on that?

Mr. LYONS. The University of Missouri has been one of the universities that has provided some leadership in developing that technology.

Senator BUMPERS. Can you give me any idea as to how successful that has all been so far?

Mr. LYONS. I would have to provide that for the record, Senator.

Senator BUMPERS. I would like for you to do that, if you would.

Mr. Chairman, I have maybe three or four questions that I will submit in writing.

Senator COCHRAN. Thank you, Senator.

We have a vote on the floor. I am going to stay here as long as Senators want to ask questions, and then we will come back. I think there are two votes back to back. I would like both Senators here who have questions to ask them, if they would like.

Senator Burns.

WATERSHEDS

Senator BURNS. I really do not have that many questions. I just—the last answer really bothers me on these 40 areas. It has not been identified, and you want money for a program that you do not know what it is going to do. That bothers me.

And I want to tell private landowners and agriculture today that this is—we see a movement here of managing their farms to the point where it is going to be almost unbearable, if it is anything like living in a State where you have public lands.

I just want to tell American agriculture that today this is going way beyond what our responsibilities should be in the Department of Agriculture.

In the CRP this last time, I want to—in the signup—well, you wrinkle up your head, but the farmers out there—I was raised on a little old bitty 160 acres with 2 rocks and 1 dirt, and I can see that right now as the man that farms that will have no more rights to what he wants to do with that farm than he can fly to the Moon in a bucket. And I mean that, because of what happened in EQIP in Montana. And we worked with you and got that straightened out.

Where people were not—and every time you talk about we are going to make this decision on watersheds, it is a matter of decision made among agencies and maybe not among landowners. And I just see a creep here that is unbelievable.

I have some questions that I want to submit for the record. I would like an answer on them. But I am going to go through this budget very, very closely, very closely. Here we are cutting back on ARS and then flying out of here on programs that we do not even know what they are going to do than we can fly to the Moon in a bucket.

And that is—in other words, we are making our investment of hard-earned dollars in what I believe is in some wrong areas. And I am going to work with the chairman very closely on this.

I have some questions. We will go vote, and then I have some other things that I have to do. And I thank the chairman for his indulgence.

Senator COCHRAN. Thank you, Senator.

Senator Kohl.

WETLANDS RESERVE PROGRAM

Senator KOHL. Thank you. I have several questions for the record. I will just hit on one that is of particular interest to me. I understand that the Wetland Reserve Program has enrolled 9,800 acres since 1994 in my own State of Wisconsin. The State NRCS expects to spend $6 million to enroll another 6,000 acres in 1998.

The last farm bill changed the WRP and created three programs: 30-year easements, permanent easements, and cost-share agreements. The permanent easements are very popular in Wisconsin.

My question is: Can the State NRCS supply all of its money to permanent easements?

They are concerned because they understand, or they have heard, that they must divide the money equally among the three options that I have just described. Can they spent all their money on permanent easements?

Mr. LYONS. We can work with the State of Wisconsin NRCS to allow that to happen. We are limited nationwide to the one-third, one-third, one-third. But we can work with them to make that work.

Senator KOHL. You can.

Mr. LYONS. Yes.

Senator KOHL. I appreciate that very much.

Thank you very much, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Kohl.

I have other questions, too. I was going to come back and ask some of them, but I think in view of the fact that we have two votes, it is going to require a lot of time away from the committee.

SUBMITTED QUESTIONS

I am going to close this hearing simply thanking you all again for your cooperation with our committee. We appreciate your being here. And we appreciate your responding to the questions that will be submitted in a timely fashion.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM DESIGNATION OF NATIONAL PRIORITY AREAS

Question. Authority exists under the Environmental Quality Incentives Program (EQIP) for the designation of national priority areas. Have regulations been promulgated to designate these priority areas? If yes, then have priority areas been designated?

Answer. Yes. On May 22, 1997, the final rule for the Environmental Quality Incentives Program (EQIP) was promulgated (7 CFR Part 1466). Included in the final rule are regulations relating to the designation of national conservation priority areas. No national conservation priority areas have been designated as of February 26, 1998.

Question. Has the agency evaluated any applications and provided funding for one or more national priority areas? If not, why?

Answer. The Natural Resources Conservation Service (NRCS) has received several requests for designation of national conservation priority areas. Requests have been received for areas such as the Mississippi Delta, Colorado River Basin, Great Lakes Basin, Illinois River (Illinois), and the Chesapeake Bay Basin.

At this time, we are not planning to designate national conservation priority areas because we feel it is important to continue our focus on addressing State priority areas and State natural resource concerns that have been identified through the locally led conservation process. NRCS will be evaluating the progress of locally led efforts, including later this year, to determine the desirability of designating national conservation priority areas in the future.

Question. What is the difference in a state priority area and a national priority area? How many state and national priority areas does the agency have the authority to designate?

Answer. A priority area, whether designated at a state level or at a national level, could be a watershed, a subwatershed, an area, or a region that can be geographically described and has specific environmental sensitivities or significant soil, water, or related natural resource concerns. The purposes and criteria for designating a priority area at the national level are not much different than those used at the state level. The general differences between a state-designated and a national-designated priority area would be the scope and the significance of the impacted natural resource. National conservation priority areas may be designated because the contributing or impacted area is multi-state or international in scope, and the impacted natural resource is determined to be of national or international importance. Currently, State level priority areas are appropriately addressing these identified priority needs. As mentioned above, we are continually evaluating this process to ensure this new program remains focused.

There is no statutory or regulatory limit to the number of state and national priority areas which may be designated. The major limitation is monetary. Focusing the program funds to areas with the most significant natural resource needs will assure that significant improvement can be made in the environmental conditions in those areas thereby maximizing environmental benefits per dollar expended.

Question. How much money is estimated for Mississippi's participation in EQIP in the fiscal year 1999 budget request?

Answer. NRCS has just begun the deliberation process for making EQIP funding decisions for fiscal year 1999. Local work groups and stakeholders at the local level are beginning to consider the natural resource and program needs in their local area. These recommendations will be forwarded to NRCS State Conservationist later this spring, who will involve State Technical Committees in the review and recommendation process. Designation of priority areas and natural resource concerns at the state level are not expected until August, 1998, after which national funding decisions recommendations will be made to the Regional Conservationists. Mississippi received $5.3 million for EQIP in fiscal year 1998, and we do not anticipate at this time that the fiscal year 1999 funding level will significantly change if EQIP remains at $200 million.

Question. Should the Mississippi Delta be designated as a national priority area, how much funding would be required to carry out this EQIP program?

Answer. A proposal submitted by the Delta Council, Stoneville, Mississippi, based on information developed by NRCS and other conservation partners in June, 1997, indicated a combined need of $129 million (estimated) for water quality and water quantity measures in the Mississippi portion of the Delta alone. No such proposal or estimates have been submitted for the Louisiana and Arkansas portions of the Mississippi Delta. The Mississippi proposal requests an EQIP funding level of $4

million per year for 7 years, for a total $28 million. This would be matched with $9.3 million local cost-share for a total of $37.3 million. This would provide sufficient funding to implement conservation practices to reach an estimated 30 percent of the water quality and quantity goals for the Mississippi portion of the Delta.

EQIP TECHNICAL ASSISTANCE

Question. Does the agency have adequate technical assistance to carry out the activities that would be funded if the fiscal year 1999 budget request to increase EQIP by $100 million is adopted?

Answer. While NRCS currently has sufficient staff and expertise to perform the technical requirements associated with a $300 million EQIP in fiscal year 1999, the budget proposal assumes that technical assistance will be supported with Conservation Operations funds. In fiscal year 1997, NRCS implemented a direct time charge work measurement system for EQIP which helped document NRCS EQIP technical assistance costs of $44.3 million or 22 percent of a $200 million program. For fiscal year 1998, a 19 percent technical assistance level was approved by OMB. The fiscal year 1999 budget assumes a 10 percent technical assistance level or $30 million from EQIP program funding, while the remaining estimated $36 million costs would be absorbed within the Conservation Operations appropriations.

Question. How much money for EQIP technical assistance is assumed in the fiscal year 1999 request and how does this compare to the fiscal year 1998 level?

Answer. Technical assistance for fiscal year 1999 is assumed at a 10 percent level based on the proposed $300 million request. Technical assistance for fiscal year 1998 was apportioned at a 19 percent level based on the $200 million spending authority.

Question. What amount of this technical assistance, if any, will come from carry-over balances from previous fiscal years?

Answer. None. No carry-over may occur with Commodity Credit Corporation funds.

Question. Will any of the fiscal year 1999 budget request of $100 million be used for technical assistance? If so, how much?

Answer. Yes. The budget assumes that technical assistance for fiscal year 1999 will be apportioned at a 10 percent level.

EQIP ASSISTANCE TO MINORITY AND LIMITED RESOURCE FARMERS

Question. What type of assistance to minority and limited resource farmers will the agency provide to increase their participation in the EQIP program? How will this differ from that provided in previous years?

Answer. There are several ideas being considered as we develop strategies for providing enhanced education, technical, and financial assistance to minority, limited resource, and socially disadvantaged farmers and ranchers. Under consideration are items such as:

a. Information and Outreach—Special efforts have been made to incorporate specific outreach actions and measurable goals into agency strategic plans at the national, state, and local level. Actions and measurable goals may be made for:

—informational meetings with members of the targeted audiences;
—news releases and fact sheets, including those through media sources which focus on the targeted audiences;
—involvement of other agencies and groups, including Cooperative Extension Service, 1890 and 1994 institutions, Hispanic servicing institutions, Research Education Access Program institutions, other agricultural and land grant institutions;
—involvement of churches and other community based organizations which represent or assist the target audiences;
—news releases to targeted media;
—assuring that local work groups will involve and obtain input from target audiences; and
—use of NRCS field guidance which includes reference materials, techniques, and methods for providing outreach, overcoming barriers, and assisting limited-resource producers, minorities, and Indian nations.

b. Education Assistance—Special efforts have been made to provide training and education assistance to target producers. Education may include:

—program requirements;
—how to apply;
—how to make assignment of payments to contractors and vendors;
—how to recognize natural resource conditions and environmental problems;
—understanding which conservation practices address natural resource and environmental concerns;

—how to install, establish, operate, and maintain conservation practices;
—how to use own equipment and labor to establish conservation practices;
—how to account for use of own labor and equipment when establishing practices; and
—how to submit expenses for establishing practices to receive payment.

c. Technical and Financial Assistance—Emphasizing the use of low-cost conservation practices that are effective and affordable to the target audiences. This will also help to meet the overall program objective of maximizing environmental benefits per dollar expended. NRCS, working with other agencies and private industry, should develop conservation practice standards and specifications for low-cost conservation practices. If the funding level is increased to $300 million, there will be increased assistance in these activities as well.

d. Farmer Mentoring—Assist with the establishment and sponsoring a farmer mentoring network. The initiative could be a coalition of farmers, farmer and commodity organizations, natural resource and environmental organizations, private industry, and government, whose purpose is to provide voluntary mentoring and help limited resource and socially disadvantaged farmers and ranchers who need special assistance to overcome their limitations and disadvantages.

Most of the ideas under consideration are not new or different than types of assistance provided in previous years. The primary difference is that many of these types of assistance were not widely or comprehensively used in conservation cost-share programs. The activities will be used in a concentrated manner and accountability will be vigorously upheld to assure the activities are implemented.

CONSERVATION PLANNING FOR EQIP

Question. Please explain what the conservation planning requirements will be for those who receive contracts, and how you intend to assure those requirements are not more comprehensive than the statute requires.

Answer. The conservation planning requirements for all EQIP participants will be the same. A conservation plan must be submitted by a participant that emphasizes sustainability of natural resources, is based on ecological, economic, and social considerations, and includes the producer's decisions and objectives for the farm or ranch. The plan must allow the participant to achieve a cost-effective resource management system, or some appropriate portion of that system, identified in the applicable NRCS field office technical guide, for the priority natural resource condition in the priority area or the significant statewide natural resource concern outside a funded priority area. To comply with the statutory provisions that a participant may implement only one conservation practice using EQIP, we believe that a whole farm or ranch conservation plan is not required. The program is flexible and although it encourages participants to voluntarily develop a conservation plan that is comprehensive and addresses multiple natural resource concerns, it is not a requirement. The likelihood of being assigned a higher priority for selection as a program participant depends on whether the conservation plan will result in significant environmental benefits to justify its priority. NRCS intends to regularly monitor and evaluate the manner in which the program is implemented to assure the statutory, regulatory, and program guidance requirements are carried-out and not involuntarily exceeded.

FLOOD PLAIN EASEMENTS

Question. In July 1997, the NRCS notified District Conservationists of the Department of Agriculture's new position on the purchase of flood plain easements rather than providing conventional measures for emergency conservation and watershed protection. The Mississippi Delta has survived because of the aggressive flood prevention and watershed practices carried on throughout the area. Should NRCS allow nature to take its course, the Mississippi Delta would be characterized by impassable roads, washed out bridges, sediment-laden streams, non-productive crop lands, and dead bottomland hardwoods all due to long-standing floods. What spurred this "new" policy change?

Answer. Section 382, Title III, of the 1996 Farm Bill Public Law 104–127 authorized the Secretary of Agriculture to purchase flood plain easements as another technique of assisting local communities devastated by a watershed impairment through the Public Law 566, the Small Watersheds Program. Some sites have been repaired several times with traditional techniques and easements offer a more permanent solution to flood devastation in some situations. This change did not eliminate traditional watershed activities, it only provided the opportunity for the use of easements when and where desired.

Question. Please provide more definitive explanations of incidences where flood easements would be preferred over repair.

Answer. The most obvious example is where the cost of the easement is less than the cost of the repair. Another would be where the damage happens too often for the landowner and he/she decides they want a more permanent solution. Participation is entirely voluntary so that no one is forced to sell an easement.

WETLANDS RESERVE PROGRAM

Question. People who own land adjacent to tracts of land under easement restrictions in the Wetlands Reserve Program (WRP) have experienced adverse impacts from the water management plans. Has the agency given any consideration to the terms of Wetlands Reserve Program contracts which affect the adjacent landowners?

Answer. The current easement provides the Secretary with the authority to determine the future vegetative and hydrology conditions of the easement. Before any wetland practice is implemented by NRCS or by the landowner, NRCS has the opportunity to evaluate if there will be an impact on the rights of adjacent landowners. This present authority in the easement, coupled with the NRCS engineering capability, makes it possible for NRCS to preclude activities on the easement that would impact the rights of adjacent landowners. Although we are not aware that this problem currently exists, if we learn of specific instances where it is occurring appropriate corrective action can be initiated.

Question. Does the agency have the ability to give high priority on the adjacent landowner's considerations when structuring the terms of the participant's contract regarding the maintenance of watershed protection?

Answer. The agency has the ability and does place a high priority to ensuring that the rights of adjacent landowners are not adversely impacted by restoration activities on the Wetlands Reserve Program easement. The NRCS does not implement or approve the implementation by others of wetland practices on Wetlands Reserve Program easements that would exceed the legal rights inherent in the easement. If a situation arises where an adjacent landowner's rights have the potential to be impacted as a result of actions taken on easement lands, NRCS will work with the impacted adjacent landowner and the fee owner of the easement area to assure that no adverse impact occurs. If an impact does inadvertently occur as a result of activities on the easement, (e.g., a man induced development or a less controllable event such as a beaver dam encroachment) NRCS will work with the adjacent landowner and fee landowner to resolve the problem.

Question. Why is the fiscal year 1999 budget request proposing a decrease in mandatory funding for the Wetlands Reserve Program from $219 million in fiscal year 1998 to $124 million in fiscal year 1999?

Answer. The Wetlands Reserve Program has a maximum acreage cap of 975,000 acres. At the end of fiscal year 1998, we will have approximately 320,000 acres yet to be enrolled under this cap. We are proposing to enroll essentially one-half of the remaining acres in fiscal year 1999 and fiscal year 2000 respectively. The fiscal year 1998 sign-up is estimated to enroll approximately 212,000 additional acres. The funding request for fiscal year 1999 will provide for the enrollment of 164,214 acres.

Question. What amount of money is needed in fiscal year 1999 to fund the technical assistance required to carry out this program? Is this amount included in the fiscal year 1999 request?

Answer. The projected amount of technical assistance funding needed to carry out the program in fiscal year 1999 is $15,089,000. This amount is included in the request. This includes $11.089 million through CCC under CCC Charter Act Section 11 and $4 million will be provided from unobligated balances from prior year WRP appropriated funds.

Question. What amount of money from carryover balances in previous fiscal years is going to be used for technical assistance for WRP in each of fiscal years 1998 and 1999? What are the available carryover balances in each of these years?

Answer. We plan to spend $18.2 million of carryover funds for technical assistance in fiscal year 1998 and $4 million of carryover funds for technical assistance in fiscal year 1999.

Question. Mr. Undersecretary, you state that technical assistance funding for fiscal year 1999 will include unobligated appropriated funds ($4 million) and CCC funds ($11,089,000). Please explain.

Answer. The projected amount of technical assistance funding needed to carry out the program in fiscal year 1999 is $15,089,000. We project that we will have approximately $4,000,000 of appropriated funds that will not be obligated at the beginning of fiscal year 1999. We propose to utilize these funds along with $11,059,000

of funds from the CCC to meet the total technical assistance funding need for the Wetlands Reserve Program in fiscal year 1999.

USE OF OTHER AGENCY RESEARCH

Question. Mr. Weber, in your statement you indicated that erosion still occurs by two billion tons per year. Does the agency use the research that CSREES, ARS, and land grant universities do on soil erosion to improve conservation practices by farmers?

Answer. NRCS works closely with CSREES, ARS, and other agencies at the national level in identifying research and extension needs and in setting priorities. We also work with ARS and land grant university scientists in conducting field research on erosion and other natural resource issues, and with Extension Specialists in training programs for staff and in extension educational programs for clients. Research results are used by NRCS in developing guidelines for conservation practices at the national and state levels. Extension programs help NRCS deliver technology to clients and to inform the public about resource issues. Examples of current cooperative efforts that are paying significant dividends to address soil erosion problems include work on erosion prediction models, conservation buffers, conservation tillage, and grazing land management.

URBAN RESOURCES PARTNERSHIP

Question. The administration initiated Urban Resources Partnership (URP) as an interagency, cooperative Federal partnership in 13 major cities and metropolitan areas. NRCS projects that $2.5 million will be expended for URP in fiscal year 1998. This includes $2 million for project activity and $500,000 for staff costs. What does the agency project to spend in fiscal year 1999?

Answer. It is estimated that NRCS will allocate $2 million for project activity for URP in fiscal year 1999. Staff cost are estimated at $500,000 for URP in fiscal year 1999.

Question. How many matching non-federal dollars is NRCS expecting to receive in fiscal year 1998?

Answer. NRCS is estimating that the non-federal match for URP in fiscal year 1998 will be $500,000.

AMERICAN HERITAGE RIVERS

Question. The Administration established the American Heritage Rivers (AHR) in 1997 to help communities restore and protect their communities. Ten rivers will be designated by the President. NRCS participated in the design of the AHR initiative. NRCS provided $94,000 in fiscal year 1997 for staff time in designing the initiative. During fiscal year 1998, NRCS projects $225,000 will be provided for staff time until the ten rivers are designated. When will the ten rivers be designated?

Answer. It is expected that the ten rivers will be designated by the President in April 1998.

Question. How much more money does the NRCS anticipate needing for fiscal year 1998? In fiscal year 1999?

Answer. Future support for this initiative will not be known until the ten rivers are designated. It is expected that the level of support in fiscal year 1999 will be comparable to fiscal year 1998.

Question. In fiscal year 1997, 60 percent of the funds came from the NRCS Conservation Operations account, and forty percent from the Watershed Surveys and Planning Account. What is the breakdown in percentages from these accounts in each of fiscal years 1998 and 1999?

Answer. Until the rivers are designated and the specific work that must be undertaken is known, an estimate of the breakdown is not possible.

NORTHWEST SALMON RECOVERY

Question. In fiscal year 1998 no funds will be allocated specifically for the Northwest Salmon Initiative from the Conservation Operations Account. However, there are 10 small watershed projects that included salmon as an integral part of their natural resource concerns. The fiscal year 1998 funding for the salmon recovery effort will be funded primarily through these projects. Where are these 10 small watershed projects located? How much money in fiscal year 1998 are each of these 10 small watershed projects receiving?

Answer. The fiscal year 1998 funds for the Public Law 566 program could only support nine Small Watershed Projects that included salmon as an integral part of their natural resource concerns.

The list is as follows:

Northwest salmon initiative projects

State/project name/county(s)	*Fiscal year 1998 allowance*
California: Hayfork Creek: Trinity	$65,000
Oregon: Buck Hollow: Wasco and Sherman	180,000
Idaho:	
Mission-Lapwai: Nez Perce and Lewis	200,000
Tammany: Nez Perce	.....
Bedrock: Clearwater and Nez Perce	.....
Washington:	
Omak Creek: Okanagan	50,000
Tucannon Creek: Columbia/Garfield	60,000
Moxee Creek: Yakima	210,000
Tenmile Creek: Whatcom	100,000
Total	1,115,000

These projects consist largely of land treatment measures that indirectly benefit salmon habitat as well as directly improve water quality through reduced erosion and sediment, improved animal waste management, and increase the efficient of irrigation water.

Question. In the fiscal year 1999 budget request, how much money is designated for the Northwest Salmon Recovery program? From which accounts will the funds come and how much from each account?

Answer. Funds have not been designated at this time for the Northwest Salmon Recovery Program for fiscal year 1999. It is expected that funds spent for this purpose will come from the Watershed Surveys and Planning Program in the Conservation Operations account.

URBAN ENVIRONMENTAL RESOURCES INITIATIVE

Question. The Urban Environmental Resources Initiative is an environmental protection strategy for the citizens of the District of Columbia to help make the urban forests and related natural resources healthier. How much did NRCS contribute in fiscal year 1998 to this challenge cost-share initiative program?

Answer. NRCS contributed $50,000 to the challenge cost-share initiative.

Question. From which account did this money come?

Answer. Conservation Technical Assistance under the Conservation Operations program funded this activity.

Question. How much does the NRCS plan to contribute in fiscal year 1999 and from which account?

Answer. NRCS plans to contribute $50,000 in fiscal year 1999 to the challenge cost-share initiative; funds will come from the Conservation Operations Technical Assistance account under the Conservation Operations program.

Question. Does NRCS contribute to this program in other ways besides the challenge cost-share initiative program? Please explain and provide all moneys used and the accounts from which they come.

Answer. NRCS also provides technical assistance to the Initiative. In fiscal year 1998 a Resource Conservationist and a part time Administrative Assistant were brought in to provide the day-to-day management for the Initiative. In fiscal year 1998 $200,000 was set aside for technical assistance to cover the cost of salaries and associated administrative expenses such as office space rental and equipment.

CONSERVATION OPERATIONS

Question. In the fiscal year 1999 President's Budget request, language is proposed to provide the authority to expand the use of Conservation Operations funds to support the technical assistance activities of other programs administered by NRCS such as EQIP, WRP, and CRP. Why has the Administration proposed this new language?

Answer. The Administration has proposed this new language to clarify the authority for NRCS to use funds appropriated under the Conservation Operations account for technical assistance and administrative activities in support of natural resource conservation programs, in addition to the conservation assistance authorized by the Soil Conservation and Domestic Allotment Act of April 27, 1935 (16 U.S.C. 590a–590f), for which responsibility has been delegated to NRCS. These would include the conservation of highly erodible land and wetlands under the Food Security Act of 1985, technical assistance under the Watershed Protection and Flood Prevention Act

(16 U.S.C. 1001–1009) and the Flood Control Act (33 U.S.C. 701), and technical assistance for some of the conservation programs funded by the Commodity Credit Corporation.

Question. Isn't this current practice?

Answer. NRCS is currently providing technical assistance through the Conservation Operations program for conservation of highly erodible land and wetlands (conservation compliance, sodbuster, and swampbuster) under the Food Security Act of 1985 and for some conservation programs funded by the CCC (Conservation Reserve Program and Environmental Quality Incentives Program). Congress noted this technical assistance support in the legislative reports accompanying the appropriations for fiscal year 1998. We have not used Conservation Operations account funds for technical assistance for the Watershed Protection Program or for the Flood Control Program.

Question. The fiscal year 1999 budget proposes to establish the America's Private Land Conservation Legacy (APLC) program by redirecting the appropriated resources formerly used for Conservation Technical Assistance (CTA). Please explain the need for the America's Private Land Conservation Legacy (APLC) program and how this program will differ from the Conservation Technical Assistance (CTA) program?

Answer. Nearly 70 percent of the United States, excluding Alaska, is private land—the single largest portion of our country's landscape. We believe that by renaming the CTA program, we are able to more properly identify the focus of our work. America's Private Lands Conservation Legacy program will increase the significance of conservation on private lands for environmental and economic benefits. The program will continue the 60 year conservation technical assistance support activities that have provided individuals, groups and communities with assistance in solving their conservation problems and achieving local and national conservation objectives. In addition, America's Private Lands Conservation Legacy program focuses conservation technical assistance on enhancing Locally Led Conservation efforts, expanding partnerships, achieving leveraging objectives, enhancing natural resource assessments for decision-makers, developing appropriate technologies and maintaining a readiness to respond to natural disasters.

The America's Private Lands Conservation Legacy program being refocused and rearticulated delivers to our conservation partners an integrated conservation process consisting of five basic products: technological innovation, information, conservation partnerships, conservation planning, and implementation of the conservation plans. The former traditional framework for delivering conservation are components of this approach.

Question. Does this proposed program require authorization?

Answer. Conservation technical assistance activities were authorized under the 1935 Soil Conservation and Domestic Allotment Act. Changing the name of these activities to America's Private Lands Conservation Legacy program does not require authorization.

Question. The fiscal year 1999 budget also proposes an increase of $20,000,000 to encourage the States to increase their share of contributions to "designated programs" in support of the President's Clean Water Initiative. Which programs are designated for this increase in cost-share funds?

Answer. This funding can support the President's Clean Water Initiative and other efforts to strengthen locally led conservation and voluntary conservation efforts by encouraging more leveraging of limited Federal resources. This funding is part of the America's Private Land Conservation allocation, and will be used to support NRCS's efforts to help state and local entities who increase their contributions to the conservation effort. Programs supported by increased state and local contributions will be the ones to benefit from this funding.

Question. When would the "to be determined threshold level of contributions" from the States be announced? How will these levels be determined?

Answer. It has not been determined when these levels of contributions will be announced. They will be determined as the amount of state and local funding dollars are identified. Based on the total number of dollars identified per state, a percentage for each state will be decided by the NRCS America's Private Land Conservation program manager. The threshold levels of contributions will be determined at this same time.

Question. Currently in fiscal year 1998, what total amount of funds is given to the States for these activities? How are these funds determined?

Answer. Currently America's Private Land Conservation base funding is provided to NRCS managers to carry out various programs. This program would provide increased levels of support for NRCS in providing assistance under the programs receiving additional state and local contributions.

Question. Is this proposed $20 million an increase to the fiscal year 1998 Conservation Operations budget?

Answer. Yes. The $20 million is a component of the net $47.371 million increase in America's Private Land Conservation Legacy Program.

Question. Please explain the proposed competitive partnership grants in the fiscal year 1999 budget request.

Answer. Federal, state, and tribal programs can help produce clean water and healthy watersheds, but the commitment and resources of local communities, private landowners, and citizens are essential to improving and maintaining lake, river, coastal, and wetland resources. Effective and strong partnerships are the foundation for both restoring impaired watersheds and sustaining watersheds that are currently healthy. The benefits of watershed partnerships, which typically involve those who live and work in the watershed, are multiple. They build grassroot constituencies with a commitment to long-term improvements. The watershed partnerships can generate new ideas and information and lead to a common understanding of individual roles, priorities, and responsibilities. They can promote a more efficient use of limited financial and human resources.

The competitive partnership grants are intended to be used to hire non-Federal, local watershed coordinators to identify and engage local watershed partners in the process of identifying natural resource problems, setting goals, and developing watershed restoration plans. These grants would be offered on a competitive basis to such groups as conservation districts, watershed districts, Resource Conservation and Development councils, land trusts and other non-profit and community action groups.

Question. If these grants are used to hire non-Federal, locally-based watershed coordinators, how many full-time equivalents (FTE) will be displaced? Are these displaced FTE's in the field?

Answer. The primary objective of the grants will be to hire non-Federal watershed coordinators. No full-time equivalents will be displaced. These non-Federal staff will complement any NRCS staff who are performing watershed coordination-type duties and functions.

NATIONAL RESOURCES INVENTORY COSTS

Question. An increase of $3 million is proposed for additional land health monitoring and assessment and to enhance the National Resources Inventory (NRI). In fiscal year 1998, how much money is allocated for the NRI?

Answer. NRCS has allocated approximately $30 million to support the 1997 baseline National Resources Inventory (NRI) and related activities in fiscal year 1998. This includes approximately $26 million being used for field data collection.

Question. Does this come out of the Conservation Operations account currently?

Answer. These funds come out of the Conservation Operations account.

Question. How much money is estimated for fiscal year 1999?

Answer. The total estimated cost for the NRI for fiscal year 1999 is approximately $33 million. The additional $3 million is needed to evaluate soil quality and resource health, assess nutrient load, and integrate NRCS NRI data on private lands with Forest Service data on public lands. Inventory, monitoring and assessments will include the initiation of a continuous foundation NRI, the special NRI, and land health monitoring studies. Partnerships efforts include the integration of the NRI with the Forest Service's Forest Inventory Assessment and the National Agricultural Statistics Service's Agricultural Resource Management Study and the Mid-Atlantic Pilot of the Committee on Environment and Natural Resources Environmental Monitoring Initiative.

TRANSFER OF OUTREACH PROGRAM TO DEPARTMENTAL ADMINISTRATION

Question. At the Administration's request, in the fiscal year 1998 budget the Committee moved $193,000 from the Farm Services Agency for the Outreach Program for Socially Disadvantaged Farmers and Ranchers to NRCS Conservation Operations account. Now I note that the Secretary has moved this program account to the Departmental Administration account, and further, has transferred $566,000, a difference of $373,000, associated with administration of that Outreach program from Conservation Operations to the Departmental Administration account. Under what authority did you move this account and funding?

Answer. This account and funding were transferred under the Secretary's delegation of authority as provided in the Department of Agriculture Reorganization Act of 1994, Public Law 103–354, Section 212 (d)(1)(B).

Question. Why was this funding transferred from Conservation Operations to Departmental Administration?

Answer. The USDA Civil Rights Action Team report recommended the establishment of an Office of Outreach . . . "Assign responsibility for the Outreach and Technical Assistance to Socially Disadvantaged Farmers (2501) program to this new office to assure Department-wide implementation." The funds were transferred to Departmental Administration to cover the costs of salaries and related expenses of the eight FTE's operating the program in response to this recommendation.

GRAZING LANDS

Question. In each of fiscal year 1997 and fiscal year 1998, $15 million was earmarked for the continuation of the grazing lands conservation initiative. Please update the Committee on this initiative and include any money in the fiscal year 1999 President's budget request for this project.

Answer. The Grazing Land Conservation Initiative (GLCI) has produced significant accomplishments over the past 2 years as a result of directing funds specifically to this activity. Technical assistance available to private grazing lands has increased by 160 staff years. Over 2,000 Natural Resources Conservation Service staff have received formal training in various aspects of grazing lands management. More than 11,000 individuals received technical assistance on 40 million acres of private grazing lands in 1997. Over 100 special grazing lands projects were established in partnership with State GLCI Coalition. An active marketing and outreach plan was implemented in each region of the Country.

In fiscal year 1997, $10 million was earmarked for this effort. In fiscal year 1998, $15 million is being directed to this activity. The fiscal year 1999 President's budget contains $15 million this activity which is included in the base program.

STATUS OF SPECIFIC EARMARKS

Question. Please provide the Subcommittee with a status report on the activities and funding for fiscal year 1998 and the level of funding in the fiscal year 1999 budget request, if any, for the following projects and programs:

—agricultural development and resource conservation in native Hawaiian communities serviced by the Molokai Agriculture Community Committee,
—Great Lakes Basin Program for soil and erosion sediment control,
—ground water activities in eastern Arkansas, including Boeuf-Tensas, and Bayou Meto, and Kuhn Bayou,
—Great Lakes watershed initiative,
—Chesapeake Bay,
—GIS Center for Advanced Spatial Technology and the National Digital Orthophotography Program,
—Multi-year Rural Recycling and Water Resources Initiative in AR, LA, and MS,
—Indian Creek Watershed, MS,
—loess hills erosion problem, IA,
—Poinsett Channel main ditch no. 1, AR,
—alien weed pests in Hawaii,
—grazing lands initiative, WV,
—water treatment practices for wastewater from aquaculture in WV,
—poultry litter composting project in WV,
—feasibility study for watershed in Waianae, HI, and
—poultry-related pollution of the South Branch of the Potomac, including the poultry waste energy recovery project in Moorefield, and resource recovery at Franklin, WV.

Answer. The status of each follows.

MOLOKAI AGRICULTURE COMMUNITY COMMITTEE

The $250,000 earmarked in fiscal year 1998 are targeted to addressing conservation and agricultural development needs of the Island of Molokai and its Hawaiian population. NRCS oversees the earmarked funds through an agreement with the Molokai-Lanai Soil and Water Conservation District. Most of the funds to date have been used for on-farm/ranch projects for irrigation and fencing. NRCS technical assistance provided through the ongoing Conservation Operations program is over and above the earmark. A decrease of $250,000 is proposed for this item in fiscal year 1999.

GREAT LAKES BASIN PROGRAM FOR SOIL AND EROSION SEDIMENT CONTROL

This project has been active since its inception in 1991. No other federal agency contributes funding for this project. NRCS is contributing $350,000 in fiscal year 1998. The project is expected to continue through the year 2002. $750,000 will be

needed in each fiscal year through the year 2002 to complete this project. $750,000 is included in the fiscal year 1999 budget request for this project. A decrease of $350,000 is proposed for this item in fiscal year 1999.

EASTERN ARKANSAS GROUND WATER ACTIVITIES

Boeuf/Tensas.—To date the local sponsors continue to inform the public of water decline and water quality status as well as promoting solutions to the problems. The Arkansas NRCS irrigation team is developing critical aspects of the project which include digitized soils and data layers through the University of Arkansas for use in the NRCS Geographic Information System (GIS), inventories of streams, canals, reservoirs, utilities, farms, cultural resources, wildlife, and other important land use features and resource concerns are being identified. Approximately 50 percent of the inventory has been completed. A 3-party memorandum of understanding between NRCS, Arkansas Soil and Water Conservation Council (ASWCC), and the local irrigation district is being jointly developed.

It is anticipated NRCS will spend $400,000 of Conservation Technical Assistance funds in fiscal year 1998 to provide assistance in support of the Boeuf Tensas project.

Goals for fiscal year 1998 include publishing maps of soils information for the 1.2 million acres within the project area, completion of data inventory for on-farm portions of the project area, completion of a water budget calculation for each tract of the 1.2 million acres with the project area, completion of the preliminary irrigation canal and/or pipeline delivery system for the entire 1.2 million acre project area, development of public information maps and fact sheets for project sponsor local information/education efforts, and coordination with the Corps of Engineers (COE) to proceed with planning efforts. No specific funding was included in the fiscal year 1999 budget for this project.

Bayou Meto.—To date the Natural Resources Inventory has been completed that includes GIS soils data layers, water quality and water quantity analysis, irrigation water needs analysis for more than 3000 tracts, wildlife, cultural resources, and a completed environmental assessment for the on-farm portion of the project plan. NRCS has completed a final areawide Natural Resource Conservation Plan for on-farm conservation practices and delivered the plan to the project sponsors. The COE has received authorization to proceed with planning for flood control and irrigation water supply and other purposes in this watershed. An initial coordination meeting was held in February between the COE, NRCS, and local sponsors and the details were agreed to as to the roles and responsibilities in the 1998 planning activities of each agency.

It is anticipated NRCS will spend $200,000 of Conservation Technical Assistance funds in fiscal year 1998 to provide assistance in support of the Basin Wide Resource Assessment for the Bayou Meto project.

This project has been identified as a priority area for the Environmental Quality Incentives Program (EQIP). Financial assistance funding has been made available through EQIP to begin the land treatment phase for this project.

Goals for fiscal year 1998 include coordination and transfer of data and information from the completed on-farm portion of the areawide Natural Resources Conservation Plan to the COE to assist them with their efforts in moving into the planning phase of the delivery portion of this project and development of a cooperative agreement and work plan in cooperation with COE, Memphis District, to refine and complete the total Resource Conservation Plan for this project. No specific funding was included in the fiscal year 1999 budget for this project.

Kuhn Bayou.—To date the local sponsors continue to inform the public of water decline and water quality status as well as promoting solutions to the problems. The Natural Resources Conservation Plan has been completed. NRCS is currently performing some of the surveying and design functions for this project. A public meeting was held on August 19, 1997, and a decision was made by the local sponsors to complete the design phase of this project. Local sponsors and NRCS have entered into a Cooperative Agreement to complete the design with some funding provided by the local sponsors. Design completion is scheduled for August 1998.

It is anticipated NRCS will spend $100,000 of Conservation Technical Assistance funds in fiscal year 1998 to provide design, surveying, and inventory work in the Kuhn Bayou project.

Goals for fiscal year 1998 include completion of the structural design for one large water control structure, completion of the design of the irrigation delivery canals and relift stations, incorporation of the irrigation pipeline design to assure water delivery to each tract, completion of 100 percent of the land rights work maps and provide to the local sponsors for land rights/easements acquisition, and preparation

of final cost and information/education package for local sponsor efforts in providing information to their clients. No specific funding was included in the fiscal year 1999 budget for this project.

GREAT LAKES WATERSHED INITIATIVE

Twelve demonstration farms, six in the Lake Erie drainage and six in the Lake Ontario drainage, are currently being established. The next phase of compiling data and analyzing results on practices such as integrated pest management, constructed wetlands for dairy facilities, bark bed filter strips, grass filter strips, stabilized livestock crossing systems, chemical mixing and rinsing pads, packed gravel barnyard treatment systems and alternative watering systems is continuing. This initiative is scheduled to run through the year 2002. NRCS technical assistance funds in the amount of $75,000 will be needed each fiscal year through the year 2002. $75,000 is included in the fiscal year 1999 budget request

CHESAPEAKE BAY

NRCS has been providing assistance to the Chesapeake Bay Program for over ten years. In fiscal year 1998, $4.750 million has been allocated to the six States in the Chesapeake Bay area. We actively support and participate in the program by providing training to Conservation District employees, including Bay Technicians and Engineers; developing conservation plans as a basis for bay contracts; technical approval of engineering plans and designs; on-site technical evaluations of complex problem areas and inspections of works in progress. Staff contribute to the overall program of reducing erosion and sedimentation, nutrients, and improving water quality. Chesapeake Bay contracts for Best Management Practices treating thousands of acres and providing nutrient reductions of nitrogen, phosphorus, and potash.

During the past year, over 900 systems were planned with waste management components, over 3,200 conservation systems were planned, over 117 thousand acres benefited from the application of conservation practices, and riparian area protection and use of conservation buffers were actively planned and installed. No specific funding was included in the fiscal year 1999 budget for this project.

GIS CENTER FOR ADVANCED SPATIAL TECHNOLOGY

Work at the Center for Advanced Spatial Technology continues. Currently support is being given to an initiative to place completed Arkansas soil surveys on the Internet including the one for Woodruff County. Activities also include supporting the implementation of Field Office Computer Systems (FOCS) Geographic Information (FGI) at high priority NRCS Field Service Centers. The goal is to have FGI implemented in four Field Service Centers by the end of fiscal year 1998. In fiscal year 1998, $48,000 has been provided to support the activities of the Center for Advanced Spatial Technology. No specific funding was included in the fiscal year 1999 budget for this project.

NATIONAL DIGITAL ORTHOPHOTOGRAPHY PROGRAM

The NRCS contributed $6,225,000 to the National Digital Orthophoto Program in fiscal year 1998, and anticipates use of $6,250,000 in fiscal year 1999. Approximately 30 percent (about 760 counties) of the conterminous US is now complete with high resolution digital orthoimagery. Another 40 percent of the country is in production. By the end of fiscal year 1998, orthoimagery for an additional 10 percent of the country is planned for production.

The success of this program is directly related to Federal, State and local agencies need for an up-to-date digital picture of the landscape to be used in a geographic information system. Good progress is also being made as a result of agencies willingness to cost-share and cooperate in the development and sharing of the data. The orthoimage provides a rich source of information for business activities like natural resource planning, transportation management, pipeline routing, urban planning, parcel mapping and delineation of wetlands and soils. The National Digital Orthophoto Program goal is to have orthoimagery in production over all private lands by the year 2000, and all Federal lands by 2002.

MULTI-YEAR RURAL RECYCLING AND WATER RESOURCES INITIATIVE

The data collection phase for the Mississippi Delta Water Resources Study has been completed with the final draft being compiled and completion of the draft anticipated by June 1, 1998.

Plans are being made to implement practices for the Mississippi Delta Recycling and Water Project within the Environmental Quality Incentives Program (EQIP) priority area during fiscal year 1998. No specific funding was included in the fiscal year 1999 budget for this project.

INDIAN CREEK WATERSHED

The Indian Creek Watershed Project is in the design stage and scheduled to be contracted for construction during fiscal year 1998. No specific funding was included in the fiscal year 1999 budget for this project.

LOESS HILLS EROSION PROBLEM, IOWA

Project sponsors plan to install thirty-eight erosion control structures during fiscal year 1998. These are in addition to the fifty-seven structures in fifteen counties in western Iowa that have been installed since the inception of this project in 1992.

This is a cooperative project involving support from all levels of government. In fiscal year 1998, the Federal government, through NRCS, contributed $400,000 to this project. The State of Iowa contributed $1 million (compared with $400,000 in 1997), while county contributions were approximately $575,000 (up from $460,000 in 1997). NRCS has contributed $400,000 annually since the project began.

In fiscal year 1997, a total of $1.29 million was spent on this project. As a result, an estimated $4,966,785 of local infrastructure and land was protected. Thus every dollar spent on the project during 1997 resulted in the prevention of almost $4 in damages. Throughout the life of the project, $4.3 million has been spent to prevent $21 million in damages.

Project sponsors are seeking $1 million from the Federal government in fiscal year 1999 for this project. It is estimated that a total of $30.3 million is needed to complete this effort. At present levels of funding, it is estimated that it will require 18 years to complete this project. If the Federal government provided $1 million annually, this figure would drop to 12 years.

During fiscal year 1997, $400,000 of Federal funds were combined with $400,000 in State funds and $460,000 in local funds to build 13 stream stabilization (channel degradation) projects in 12 western Iowa counties. These projects will keep these streams from cutting deeper into the landscape and prevent an estimated $5 million in damages to farmland, roads, bridges, and other infrastructure.

For fiscal year 1998, $400,000 of Federal funds will be combined with $1 million in state funds and $740,000 in local funds to build 24 projects in 14 western Iowa counties. These projects will provide benefits roughly proportional to those listed above, preventing approximately $8.5 million in damages to farmland and rural infrastructure. A decrease of $400,000 is proposed for this item in fiscal year 1999.

POINSETT CHANNEL MAIN DITCH NO. 1, ARKANSAS

Technical assistance funding continues to be provided for channel improvement in the Poinsett Watershed Project located in Craighead and Poinsett Counties. To date, 31 of 36 floodwater retarding structures have been constructed. The five remaining structures have an estimated construction cost of $1.5 million in financial assistance. Two channel improvement contracts for a water control structure and 1.3 miles of channel improvement have been constructed at a cost of $954,511. The remaining approximate 17.7 miles of channel improvements have an estimated construction cost of $4.1 million in financial assistance. Work is planned to be completed over several years. No specific funding was included in the fiscal year 1999 budget for this project.

ALIEN WEED PESTS IN HAWAII

NRCS has allocated $20,000 in fiscal year 1998 to begin to address the alien weed pests in Hawaii. To date, NRCS has met and is working with the Big Island RC&D Council, Soil and Water Conservation Districts, and the Gorse Committee to formulate a plan to address the gorse problem on the Big Island. No specific funding was included in the fiscal year 1999 budget for this project.

GRAZING LANDS INITIATIVE IN WEST VIRGINIA

In fiscal year 1998 $300,000 of appropriated funds are being used to support technical staff, the collection of forage and fecal samples and to provide education assistance to grassland farmers. Two grazingland specialists and field office staffs are providing direct on-farm assistance to farmers to improve their pasture management systems using both forage and economic analysis. Along with on-going assistance the goal is to improve over 65,000 acres of pasture for 125 farmers. In addition, 30

farmers will attend a 3-day forage and livestock school to improve their management and marketing skills. Over 500 forage and livestock fecal samplings indicate low quality forages due to mis-management resulting in lost income. Estimated economic benefits is $15/ac/year once an improved grazing system is fully implemented by the farmer. This will result in an annual increased return of $990,000 at existing funding levels. A decrease of $300,000 is proposed for this item in fiscal year 1999.

WATER TREATMENT PRACTICES FOR WASTEWATER FROM AQUACULTURE IN WV

In fiscal year 1998 no funding was provided for this activity, however, two weeks of engineering time was spent developing Field Office Tech Guide standards for the treatment of waste-water from aquacultural activities. The development of these standards is an interagency effort and the participants comprise a part of the State Technical Committee. No specific funding was included in the fiscal year 1999 budget for this project.

POULTRY LITTER COMPOSTING IN WEST VIRGINIA

Investigations and contacts have been made on five sites outside the Potomac River Watershed. Currently this project is in the planning stage with application to start in early summer of fiscal year 1998. NRCS has allocated $120,000 to fund the technical assistance needed for this project. A decrease of $120,000 is proposed for this item in fiscal year 1999.

FEASIBILITY STUDY OF WATERSHED IN WAIANAE, HAWAII

This study was directed as a result of damage caused by heavy rains to this and other watersheds in November of 1996. An assessment of the feasibility of flood control projects or mitigative measures which would reduce the reoccurrence of damages was necessary. Through an agreement with the Corps of Engineers, Honolulu District, the Corps will carry out the assessment under the direction and coordination of NRCS. NRCS is spending $200,000 for this item in fiscal year 1998. A decrease of $200,000 is proposed for this item in fiscal year 1999.

POULTRY RELATED POLLUTION ON THE SOUTH BRANCH OF THE POTOMAC

NRCS has entered into a cooperative agreement with the West Virginia Department of Agriculture (WVDA) and Franklin, WV, to do the second phase of a feasibility study for a poultry waste digester. In fiscal year 1998, NRCS will provide $90,000. NRCS has also entered into an agreement between WVDA and Moorefield, WV, for the operational expenses of the digester located in Moorefield. NRCS will provide $50,000 in fiscal year 1998 for this effort. No specific funding was included in the fiscal year 1999 budget for this project.

POULTRY WASTE PROBLEM IN WEST VIRGINIA

Question. Several projects in West Virginia address the poultry waste problem in West Virginia. Are any of these projects repetitive in nature?

Answer. No, the various projects underway in West Virginia are not repetitive, though several are commonly directed toward meeting our goals relative to the Chesapeake Bay. For instance, five sites within the Potomac River Basin are receiving additional technical assistance to develop composting as an alternative utilization of poultry litter. In a separate cooperative agreement with the West Virginia Department of Agriculture, we are also supporting feasibility and operational assistance of separate projects in Franklin and Moorefield, West Virginia, the latter of which is focused on the utilization of poultry litter as an alternative energy source. We believe that the work associated with these activities will contribute to our overall efforts to address animal waste problems across the country.

Question. Are all of these projects related? If yes, does NRCS have a plan for these activities so that a common goal is reached to minimize the poultry waste problem in West Virginia? Which account under NRCS would this work be done?

Answer. These projects are related in the sense they are all focused on alternative uses of poultry litter. We expect that as we learn more about these technologies, and as they are better understood at the local level, our current progress relative to conservation programs and technical assistance will be enhanced. All of these activities are currently funded from our Conservation Operations and Technical Assistance funds.

COLORADO RIVER SALINITY CONTROL PROGRAM

Question. Are all current balances expended for the Colorado River Basin Salinity Control Program? If not, how much is available and in which fiscal year will it all be expended?

Answer. The Colorado River Basin Salinity Control Program has approximately $5,661,000 left in obligated funds for contracts to be expended on installation of salinity control practices. It is expected that these funds will be expended by the year 2004.

Question. How many projects that once received funding through the Colorado River Basin Salinity Control Program are continued with funding through EQIP? Which projects are these?

Answer. There are 5 projects that once received CRBSCP funding that are currently receiving EQIP funding. These projects are Grand Valley, Colorado; Lower Gunnison Basin, Colorado; McElmo Creek, Colorado; Uinta Basin, Utah and Big Sandy River, Wyoming.

PLANT MATERIALS CENTERS

Question. The fiscal year 1999 budget request indicates a decrease of $1 million for Plant Materials Centers because of the completion of renovation and modification work. Please list the renovations and modifications work which will be completed by fiscal year 1999, yielding this $1 million in savings, and specify the completion date of each project.

Answer. A partial list of projects scheduled for completion in fiscal year 1998 can be found in the table provided. Their cost is about $1 million.

Fiscal year 1998 plant materials renovation completions

Plant center	*Project: Maintenance, renovation, equipment*
Lockeford, CA	Heating-AC system.
Hoolehoa, HI and Pacific Basin	Re-roof equipment building.
Aberdeen, ID	Combine 10-ft header.
	Irrigation system at PMC office/greenhouse.
	Swather.
Corvallis, OR	Safety upgrade and expand existing storage shed.
Booneville, AR	Plot harvester.
Golden Meadow, LA	Machinery storage bldg. canopy.
	Grass drill.
Nacodoches, TX	No-till seeder.
Kingsville, TX	100 HP tractor.
Knox City, TX	¾-ton truck stakebed.
Manhattan, KS	Upgrade flood irrigation well number 3.
Bridger, MT	Dust collection system (safety need).
	Forage dryer.
Bismarck, ND	Tractor.
Ellsberry, MO	Renovation of electrical system.
Brooksville, FL	New roof two pump houses, paint all buildings.
Americus, GA	Irrigation pump and motor.
Coffeeville, MS	Plot combine.
	Laboratory operations.
Beltsville, MD	Irrigation hydrant for remote field.
	Greenhouse—Reskin and new heat system to improve efficiency.
Cape May, NJ	Office modification for handicap.
	Upgrade degraded facilities (paint, siding, gutters).
Alderson, WV	PMC development (in part) of physical facilities.

PLANT MATERIALS CENTERS

Question. Is any renovation and modification work scheduled for fiscal year 1999 or future fiscal years? Please provide for the record, by center and project, the work

needed, when the renovation/modification is scheduled to be done, and the amount of funding required.

Answer. Renovation and modification work is scheduled for fiscal year 1999 through fiscal year 2002 according to plant center needs that are now identified. In order to identify needs effectively, the program has a 5-year plan (1998–2002) that is updated annually. For the period fiscal year 1999–2002, a total of $4.8 million, or about $1.2 million/year, is needed. As with any farm operation, regular maintenance, facility renovation, and equipment replacement are important and key elements to avoid larger cumulative expenses in the future. In addition, the program is able to operate more productively and have safe and healthy working conditions with continued regular maintenance.

With 26 centers in the Plant Materials Program, needs vary from one location to another, by year, and according to the condition of buildings, roads, property, and equipment. A list of specific project needs is presented in the table below. The diversity of needs identified in the table illustrates the scope of operations in the program.

PROJECTED PLANT CENTER NEEDS: MAINTENANCE, RENOVATION, NEW CONSTRUCTION, AND EQUIPMENT ACQUISITION

Plant center/item project description	Fiscal year when planned with costs			
	1999	2000	2001	2002
Booneville, AR:				
New office building			$200,000	
Items (3) less than $10,000 each	$12,500			
Tucson, AZ:				
Phase 3-PMC rehabilitation	56,700			
Brush machine (commercial size)	11,500			
Seed drill (Truax no-till drill)			12,000	
3/4-ton pickup				$20,000
Items (2) less than $10,000 each		$3,000		8,000
Lockeford, CA:				
Panel van	20,000			
4-row bed shaper with rototiller	15,000			
Soil mixer		12,000		
Administration building roof			20,000	
Paint buildings				20,000
Seal asphalt				15,000
Bldg. area water pump				10,000
Seed bldg. dust system				10,000
Fire alarm				10,000
Item (3) less than $10,000 each				14,000
Meeker, CO: No long-range update submitted in 1997				
Brooksville, FL:				
4-wheel ATV	12,000			
Plot vacuum harvester	35,000			
Upgrade office elect., heat/AC		18,000		
Expand conference and educational building		48,000		
Re-pave parking lots and driveway		65,000		
½-ton pickup truck			14,000	
Hydro seeder				15,000
Up-grade irrigation system				52,000
Items (7) less than $10,000 each	7,000	22,000	4,000	
Americus, GA:				
Large scale (digital)	1,000			
Grass drill	10,000			
One row tractor	15,000			
Pave driveway	25,000			
Tractor 50–60 hp		25,000		
Hy-cycle sprayer		25,000		
Tractor 80–90 hp			35,000	
Greenhouse			30,000	
Seed germinator			10,000	
Van				18,000
Walk-in seed storage unit				30,000
Items (6) less than $10,000 each	4,000	12,500	5,000	

PROJECTED PLANT CENTER NEEDS: MAINTENANCE, RENOVATION, NEW CONSTRUCTION, AND EQUIPMENT ACQUISITION—Continued

Plant center/item project description	Fiscal year when planned with costs			
	1999	2000	2001	2002
Houehua, HI:				
Tractor, 42 HP	35,000			
Front end loader attachment for 595 tractor	10,000			
Paint/repair bldgs. (shop /seed)	30,000			
Parking lot/driveway paving	75,000			
Potable water hook-up	45,000			
Seed storage walk-in unit		27,000		
Paint PMC seed/equipment building		30,000		
Seed dryer/dust ventilation			25,000	
Paint office			10,000	
Items (2) less than $10,000 each	9,000			
Aberdeen, ID: No long-range update submitted in 1997				
Manhattan, KS:				
Pickup truck ½-ton	14,000			
Tractor with loader (65 HP and 4 WD)	27,000			
Flail vac seed stripper		18,000		
Binocular microscope with camera attachment		10,000		
Pickup truck ½-ton (4 WD)			18,000	
Tractor (40 HP and 2 WD)			25,000	
Weed badger tree cultivator				20,000
Gated irrigation pipe for flood irrigation				17,000
Replace oil storage building				10,000
Items (2) less than $10,000 each		9,000	9,000	
Galliano, LA:				
Pond cell construction (field D)	25,000			
Pickup truck ¾-ton				15,000
Air boat	20,000			
Items (3) less than $10,000 each	12,900			
Beltsville, MD:				
Small row crop tractor plus implements	26,000			
Replace 1976 Dodge ½-ton pickup	16,000			
Replace pavement around PMC	20,000			
Removal of nonfunctional solar panels	10,000			
New office building				200,000
Rose Lake, MI:				
Pickup truck		20,000		
Single row planter			15,000	
Items (9) less than $10,000 each	9,500			5,000
Ellsberry, MO:				
Pickup ¾-ton offset	12,600			
Combine (partial support)	50,000			
Pickup ½-ton offset		12,600		
Tractor, 65 HP		30,000		
Tractor, 18 HP		13,000		
Vehicle offset			12,600	
Computer update			20,000	
Items (12) less than $10,000 each	30,700	6,500	12,000	
Coffeeville, MS:				
Tractor 75 hp w/cab and loader		50,000		
Seed cleaner (gravity table)			12,000	
Van (Suburban type)				28,000
Items (2) less than $10,000 each	12,000			
Bridger, MT:				
Combine	100,000			
Wheel row sprinkler system	75,000			
Windrower		25,000		
4×4 ¾-ton pickup			18,000	
Metal storage shed			20,000	
Baler			12,000	
Fork lift			20,000	
Land plane			10,000	

PROJECTED PLANT CENTER NEEDS: MAINTENANCE, RENOVATION, NEW CONSTRUCTION, AND EQUIPMENT ACQUISITION—Continued

Plant center/item project description	Fiscal year when planned with costs			
	1999	2000	2001	2002
Greenhouse glass replacement			22,000	
Items (11) less than $10,000 each	9,000	32,000	16,000	
Bismarck, ND:				
Van (4 WD suburban type)	35,000			
Greenhouse/lathhouse		75,000		
Computer equipment			20,000	
Tractor				45,000
Las Cruces, NM (fiscal year 1999 list only):				
Complete headhouse/lab interior	15,000			
Well for greenhouse area (6″ × 200′)	10,000			
20-ft. gooseneck trailer	15,000			
Renovate well #2	30,000			
Renovate seed storage bldg	30,000			
Hay swather	35,000			
Big Flats, NY:				
Re-roof seed barn and shop	14,000			
New pole barn	60,000			
Test plot planter	12,000			
Ford mower		11,000		
Tractor (50–60 hp)		38,000		
Pickup truck		16,000		
Computer equipment		15,000		
New office building			150,000	
Items (2) less than $10,000 each	9,000		9,000	
Corvallis, OR:				
Expand existing storage shed	38,000			
Lab brush machine w/12 cages	15,000			
Flail-vac seed stripper	18,000			
Pond fencing and retrofit inlets	15,000			
Precision drill w/carbon banding	14,000			
Expand headhouse		75,000		
Van		19,500		
1½-ton truck		32,000		
Tractor 60 hp diesel			22,000	
Roof and paint office complex			11,600	
Items (16) less than $10,000 each	7,700	26,700	7,600	19,000
Kingsville, TX:				
Mezzanine		30,000		
Road renovation		10,000		
Combine		100,000		
1-ton pickup			20,000	
20 HP tractor			15,000	
Irrigation pond renovation				10,000
Seed cleaner				20,000
Items (4) less than $10,000 each	8,000	7,000	5,000	5,000
Knox City, TX				
Round hay baler	24,000			
Lawn tractor w/tiller		15,000		
Phone system			12,000	
Office/conference complex				160,000
Nacogdoches, TX:				
¾-ton heavy duty pickup				20,000
Small tractor			15,400	
Items (8) less than $10,000 each	16,500	11,500	12,500	1,800
Pullman, WA (fiscal year 1999 list only):				
1-ton 4 WD extended cab pickup	30,000			
80–85 hp tractor w/cab and 4 WD	65,000			
Items (2) less than $10,000 each	9,000			
Alderson, WV:				
Combine				110,000
Farm tractor—85 horsepower	60,000			

PROJECTED PLANT CENTER NEEDS: MAINTENANCE, RENOVATION, NEW CONSTRUCTION, AND EQUIPMENT ACQUISITION—Continued

Plant center/item project description	Fiscal year when planned with costs			
	1999	2000	2001	2002
Hay baler	10,000			
Seed cleaner	15,000			
Irrigation pump		10,000		
Fork lift		20,000		
4×4 pickup		22,000		
Facility development (bldg. construction)	155,000	250,000		
Items (9) less than $10,000 each	35,500			
Totals by year	1,699,100	1,297,300	906,700	907,800
Grand total: Fiscal years 1999–2002	4,810,900			

WATER RESOURCES ASSISTANCE

Question. The fiscal year 1999 budget request proposes $6.9 million to provide technical assistance to watershed and rangeland coordinators. Currently in fiscal year 1998, how much technical assistance is provided to the 40 high-priority watersheds?

Answer. This is a new initiative in fiscal year 1999 and was therefore not funded in fiscal year 1998. These 40 high priority watersheds will be identified as those areas with the greatest water quality problems in line with the President's Clean Water Action Initiative and will, upon approval of this initiative, be selected through a locally driven, competitive process. The $6.998 million under the Watershed Surveys and Planning Program would fund 92 federal watershed and rangeland coordinators in these watersheds. These coordinators would assist local people to identify problems, develop alternatives, write plans, coordinate volunteers, and implement projects in watersheds and grazing lands assistance at risk.

In addition, they would facilitate access to all USDA conservation financial assistance programs that can be used to support watershed restoration and clean water goals and to target the most critical sources of pollution in the watershed. Finally, these coordinators would enhance the technical capability of locally led watershed partnerships, particularly for problem identification, development of watershed restoration and pollution prevention plans, and monitoring progress.

Question. How many dollars are being spent on technical assistance for grazing lands assistance in 1998? How many FTE's are supported by this funding?

Answer. The agency earmark for grazing lands technical assistance increased to $15 million for fiscal year 1998. Grazing lands specialists positions have been increased in the last two years by more than 160 FTE's, including the establishment of grazing lands specialists positions in 14 states previously with no qualified grazing lands specialists. All states are now receiving allocations in support of their workload associated with the Conservation of Private Grazing Lands Program. These increases were achieved through a combination of new hires, reassignments, and changes in job responsibilities. NRCS now has 360 staff assigned to provide grazing lands technical assistance.

Question. NRCS has installed over 15,000 individual watershed systems since 1944. Many of these aging structures are nearing their life span and possibly could require environmental restoration. The fiscal year 1999 budget request proposes $1 million to provide educational assistance to watershed sponsors to inform them of repairs needed to old systems. Is there any educational assistance being provided to watershed sponsors in fiscal year 1998?

Answer. Through the Small Watershed Program, Public Law 534 and Public Law 566, NRCS has assisted local communities as well as individual farmers and ranchers install conservation systems in approximately 1,700 authorized watershed projects, in every state. Of most serious concern to this aging infrastructure is the 10,400 federally assisted project dams that are owned by the local communities (legal project sponsors). More than half of the project dams are more than 30 years old and in the next 10 years, almost 1000 of them will reach the end of their evaluated life. While most of the sponsor's dams are in acceptable condition we are aware of some that present hazards which could result to loss of life and property due to collapse or failure. Currently, there are no dedicated funds being provided for educational assistance to watershed sponsors in fiscal year 1998.

Question. How many individual watershed systems in need of environmental restoration have been identified to date?

Answer. Since the structures are considered to be "federally assisted" and are owned by the sponsors, who are bound by the Operations and Maintenance Agreement to keep the structures in good condition, we must rely on the sponsors to provide the data on the number or location of structures that are in need of rehabilitation or modification.

Question. Will the proposed $1 million support educational assistance to watershed sponsors for all of these old systems?

Answer. Since this is a serious problem, we feel at a minimum, an educational effort with all sponsors should take place in order to increase awareness and affect sponsor action. We envision fact sheets, training workshops, and videos provided through a cadre of experts in the field. As part this budget item NRCS would utilize the "Training Aids for Dam Safety" package of workbooks and videotapes prepared by the Interagency Committee on Dam Safety. The package was professionally prepared and translated into several languages. It includes modules ranging from technical aspects of site inspections to safety program development.

USER FEES

Question. The fiscal year 1999 President's budget request proposes the implementation and collection of $10 million in user fees for certain types or areas of technical services and products. How will these user fees be implemented? Please list the type of services and products that are proposed to be financed by user fees collections.

Answer. Although we have not fully developed the appropriate fee schedules or implementation details, we anticipate the following types of services may be included under the proposed user fee program:

—Conservation Plans exceeding 16 hours of work;
—Foundation seeds—initial supply;
—Foundation plants;
—Testing for animal waste storage lagoons;
—Inspection and testing of dams;
—Water supply forecasts;
—Climate data;
—SNOTEL data;
—Soil survey publications;
—Wetland delineations; and
—Irrigation systems.

Question. Which constituent groups will be impacted by this proposal?

Answer. We expect all constituent groups to be affected, although some more directly than others.

Question. What is the estimated cost of these services currently?

Answer. We do not know the exact cost of the services affected, however, the President's budget estimates the cost to be $10 million. This amount currently supports about 133 FTE's.

Question. What legislative authority is required and has the Administration submitted its legislative proposal to the Congress for consideration?

Answer. We have requested authority under the USDA Omnibus User Fee legislative package (AG 228, Title IV, Sec. 401) to prescribe and collect fees to cover the costs of providing information, technical assistance, and other services for all NRCS programs where the Secretary determines they are feasible. This package is under review at OMB and should be sent to the Congress shortly.

Question. How will NRCS assure that technical assistance maximizes the amount landowners actually have available to spend on conservation practices?

Answer. NRCS will do everything possible to assure this including reducing costs wherever possible.

CONGRESSIONAL EARMARKS

Question. The fiscal year 1999 President's budget proposes a decrease of $6.9 million for earmarked projects funded in the fiscal year 1998 Appropriations Act. Please list the projects and funding levels for each project affected by the proposed decrease of $6.9 million for Conservation Operations.

Answer. The list of earmarks follows.

Hawaii:	
Feasibility Study—Waianae Watershed	$200,000
Molokai Agriculture Community Committee	250,000

Iowa:	
Loess Hills Erosion/Western Iowa	400,000
Trees Forever Program	100,000
Louisiana: Crowley Rice Research Station	125,000
Mississippi:	
Franklin County	3,000,000
Mississippi Delta Water Resources Study	350,000
New York:	
Westchester County SWCD	300,000
Pastureland Management/Rotational Grazing	300,000
Skaneateles and Owasco Watersheds	250,000
Oklahoma: Deer Creek Watershed	750,000
West Virginia:	
Poultry Litter Composting	120,000
Long-Range Grazing Land Initiative	300,000
Not Specified:	
Great Lakes Basin Program for Soil and Erosion Sediment Control	350,000
Community Leadership Alliance for Sustainable Development Program	100,000
Total, Selected Earmarks	6,895,000

Question. What is the justification for not continuing funding for each of these projects in fiscal year 1999?

Answer. Earmarks for specific local projects are actions that go outside the ordinary allocation process. Most of them focus on issues which are local in nature and do not provide benefits to regional or national priorities.

FORESTRY INCENTIVES PROGRAM

Question. The Forestry Incentives Program is very popular among my landowners in Mississippi. Why does the President's budget request propose to terminate funding for this program for fiscal year 1999?

Answer. The President's budget does not propose funding for the Forestry Incentives Program (FIP) for fiscal year 1999. We recognize the important goals of the program and the many indirect benefits that reforestation provides including water quality and wildlife habitat. However, in the interim, NRCS will continue to support landowners with FIP contracts as well as provide technical assistance with respect to vegetative cover, including trees on private lands. The agency also notes that programs such as the Wildlife Habitat Incentives Program (WHIP) and the Conservation Reserve Program (CRP) also encourage practices that include planting trees.

Question. How many participants receive funding from this program? Please list the number of participants, by state.

Answer. Totals on the number of participants who received funding for FIP in fiscal year 1997 will be provided for the record.

[The list follows:]

Fiscal year 1997 FIP participants

State	*No. of participants who installed practices*
Alabama	62
Alaska	1
Arizona	.....
Arkansas	100
California	18
Colorado	6
Connecticut	2
Delaware	11
Florida	120
Georgia	635
Guam	.....
Hawaii	.....
Idaho	7
Illinois	23
Indiana	55
Iowa	21
Kansas	.....
Kentucky	34
Louisiana	164

State	*No. of participants who installed practices*
Maine	36
Maryland	29
Massachusetts	8
Michigan	46
Minnesota	36
Mississippi	754
Missouri	14
Montana	6
Nebraska	2
New Hampshire	21
New Jersey	.....
New Mexico	.....
New York	32
North Carolina	166
North Dakota	.....
Ohio	36
Oklahoma	16
Oregon	100
Pennsylvania	14
Puerto Rico	3
Rhode Island	.....
South Carolina	489
South Dakota	6
Tennessee	16
Texas	334
Utah	.....
Vermont	8
Virginia	375
Washington	57
West Virginia	27
Wisconsin	34
Wyoming	29
Total	3,953

WILDLIFE HABITAT INCENTIVES PROGRAM

Question. The Wildlife Habitat Incentives Program (WHIP) is a voluntary program that will provide a wide array of wildlife practices to address wildlife habitat issues throughout the nation. The budget assumes 3,400 contracts in fiscal year 1998 and 2,300 in fiscal year 1999. Have all of the assumed fiscal year 1998 3,400 contracts been awarded?

Answer. No. WHIP applications are accepted on a continuous sign-up basis. Most States initiated the program sign-up after February 1, with many waiting until the Secretary officially announced the release of funds on February 27. We anticipate the majority of the selections being made in late spring/early summer.

Question. Is the demand greater than the number of contracts which can be awarded with the funds available for this program in each of fiscal years 1998 and 1999?

Answer. Yes. When NRCS State Conservationists submitted their projected funding needs in 1997 in the State WHIP plan, instructions from the National office requested they submit estimated funding needs for a six month period. Requests were received from all 50 States, Puerto Rico and the Pacific Basin. The total amount of these requests was in excess of $35 million. As news about the program has spread to many persons who would be eligible for WHIP but who have not historically participated in USDA programs, many of the NRCS State Conservationists have recognized that the original estimates were too conservative.

Question. How much funding is needed to provide adequate technical assistance to the WHIP program in each of fiscal years 1998 and 1999? What level of funding is currently available to provide needed technical assistance for this program and what level is included in the fiscal year 1999 request?

Answer. The budget assumes $5 million for technical assistance in both 1998 and 1999. It is our belief that 25 percent of the total program level is needed for technical assistance for WHIP.

Question. Are any carryover balances from previous fiscal years proposed to be used for technical assistance for WHIP? What level is assumed, by fiscal year?

Answer. There are no carryover balances from previous fiscal years. 1998 is the first year of the program.

WATERSHED AND FLOOD PREVENTION OPERATIONS

Question. The fiscal year 1999 budget request proposes to fund high priority flood prevention projects under small watershed authority. Should this proposal be implemented, how many small watershed projects would not be eligible for funding under the flood prevention authority?

Answer. The total number of projects has not been estimated at this time. The high priority watersheds will be based on their ranking on a regional basis, since the ranking for 1999 will not be carried out until later summer based upon the funding received, the size and complexity will determine how far the dollars will stretch.

Question. Why has the Administration proposed to allow funds to be used to offer subsidized loans through the Rural Utility Service or Rural Business Cooperative Service to new and existing approved small watershed projects? How many loans does the agency assume to administer under this proposed provision?

Answer. There is an unfunded commitment of approximately $1.5 billion for Public Law 78–534 and Public Law 83–566 projects. With an annual allocation of approximately $50 million for construction, this unfunded commitment will not decline, since local communities request a greater dollar amount in new projects each year. Therefore, the subsidized loan program was developed to allow local sponsors to bear a greater part of the burden through loans. NRCS would not administer the loan program; it would be the responsibility of the Rural Utility Service. It is extremely difficult to estimate usage of these loans since this is a new concept. The budget request could fund approximately $300,000,000 in loans.

Question. The fiscal year 1999 budget explanatory notes indicate that in 1954 the Watershed and Flood Prevention Act amended the flood prevention program, making it possible to administer the flood prevention program along the same lines as the Small Watershed Program. If the authority has existed since 1954 why is the Administration proposing a change in the funding accounts of Watershed and Flood Prevention and Conservation Operations now?

Answer. The Public Law 566 and Public Law 534 flood prevention programs are very similar in nature with the major exception of how they are authorized. NRCS has very little control over the selection of the broad Public Law 534 river basin in which is authorized by Congress, as opposed to Public Law 566 where planning starts are granted by NRCS under Public Law 566 at the request of local communities. There are many minor differences between the two as shown on the attached table. Over the years both programs have been managed using the National Watersheds Manual for policy guidance. It is prudent to operate these programs as similarly as possible to make government easier to understand by our clients.

COMPARISON OF DIFFERENCES BETWEEN PUBLIC LAW 566 AND PUBLIC LAW 534

Attribute	Public Law 566	Public Law 534
Scope	Nation-wide	Specific geographic areas approved by Congress.
Application	Specific request for federal assistance	None once authorized by Congress.
Initiation of Planning	Authorized by Chief	Authorized by Federal Legislation.
Plan Approval	<$5 million—Chief/STC	Flood Prevention proj.—STC.
	>$5 Million—Congress	Other than Flood Prevention—OMB.
Benefits and Costs	Analysis required by legislation	Not required by law, but by NRCS policy.
Financial Assist	Constr, Admin, Eng, LR for Rec and F&W	Same but also for any LR for single purpose FP structures and LT on National Forest Land.
Installation	Project Agreement Required	PA not req if NRCS does work.
Project Size	250,000 acre limit	May go above 250,000 if Congress deems it prudent.
Operation and Maintenance	Sponsor must have taxing authority	No special requirements.

Question. 414 watershed structures built in Mississippi over the last 50 years are greatly in need of repair and renovation. The Mississippi Conservation Partnership worked with the Mississippi Legislature in acquiring authorization for the Mississippi Soil and Water Conservation Commission to administer a program which addresses rehabilitation of these structures. The Commission is also lobbying the Mississippi Legislature to provide funding for this program. These State funds may

be provided only if matching Federal funds are appropriated. Does the NRCS have the authority to provide matching Federal funds for this type of rehabilitative work?

Answer. Our Office of General Council advises us that NRCS has no statutory authority to provide federal funds for rehabilitation of federally assisted dams.

Question. Does the fiscal year 1999 budget request contain funding specifically for this maintenance work? If yes, which account is it in?

Answer. The fiscal year 1999 proposed budget has no funds for rehabilitation or modification of watershed dams since NRCS does not have statutory authority to conduct such work. One hundred percent of the maintenance of the dams was assumed by the legal sponsors through an Operations and Maintenance Agreement executed with the federal government.

Question. Does the fiscal year 1999 budget request include funding for the following projects: Little Sioux and Mosquito Creek, IA; Little Auglaize Watershed, OH; Bush River, VA; and Potomac Headwaters, WV? If so, what amount of funding is included?

Answer. The budget is not built on named watersheds or projects, because of an unfunded commitment of approximately $1.5 billion. Funds are allocated to NRCS regions who then use a formula to fund the highest priority projects. Therefore, funding for the Little Sioux and Potomac Headwaters (Public Law 78–534), and Little Auglaize, Bush River, and Mosquito Creek (Public Law 83–566) ranking will depend upon the other projects they are competing against. Construction on the Little Auglaize will be completed this fiscal year (1998). Funding needed for 1999 for the remaining three projects is $3.0 million.

Question. Please list any small watershed projects and their proposed amount of funding in the fiscal year 1999 President's budget request.

Answer. There are no Small Watershed Projects specifically proposed for funding in the fiscal year 1999 budget. Beginning in fiscal year 1999, the $1.5 billion backlog in authorized projects will be ranked in priority based on their net economic, environmental, and social benefits.

Question. Has the agency completed work on the following projects: Lower Otter and Dead Creak, VT; Lower Winooski River, VT; Barton and Clyde River projects, VT; Park River Dam, ND; and South Delta watershed project, MS? If not, please explain.

Answer. Work is continuing on all the watersheds this fiscal year 1998. However, there are no Small Watershed Projects specifically proposed for funding in the fiscal year 1999 budget. Beginning in fiscal year 1999, the $1.5 billion backlog in authorized projects will be ranked by each Regional Conservationist in priority of their net economic, environmental, and social benefits.

Question. Please discuss the agency's role in assisting the Devils Lake Basin, ND, in locally coordinated flood response and water management activities.

Answer. The agency considers the impacted part of the Devil's Lake Basin to be a high priority area for implementation of wetlands easements through the Wetlands Reserve Program and floodplain easements under the Emergency Watershed Protection Program. The goal is to provide landowners an opportunity to place impacted lands that qualify for these two programs under an easement. We hope to be able to establish additional water retention capacity in the upper basin areas through the restoration of wetland basins. Although, this is unlikely to make a substantial contribution to lake levels, it is a step in the right direction.

Question. Does the NRCS continue to utilize conservation programs in providing water holding and storage areas on private land as necessary intermediate measures in watershed management? If not, please explain.

Answer. Land treatment practices continue to be an integral part of all watershed projects. In fact, approximately 50 percent of all new projects are for watershed management and composed entirely of land treatment rather than a combination of structural and land treatment practices.

Question. Please discuss the repercussions of and the Agency's position on the following limitations: (1) $15 million on Public Law 534 projects, and (2) $50 million on technical assistance.

Answer. The limitation on Public Law 78–534 projects has had no repercussions on the agency in 1998. That is about the amount of money that can be spent during the year. As for the Public Law 83–566 program, the reduction of $10 million has seriously effected the capability that the agency has to provide technical assistance needed by sponsors to carry out the mission of the watershed program. There will be 125 fewer FTE's available to assist the sponsors, but on the plus side an additional $10 million is now available for financial assistance against the $1.5 billion unfunded commitment.

Question. Please explain how the Department has raised the priority of developing a storage capacity and improving the efficiency of delivery systems as the Senate Committee Report accompanying the fiscal year 1998 Appropriations Act directed.

Answer. Work to address limited water storage and inefficient delivery systems in Hawaii, noted in the Senate Committee report accompanying the fiscal year 1998 Appropriations Act, has progressed on three projects. Planning and the Environmental Impact Statement (EIS) has been completed on the Upcountry Maui project. The project was authorized for operations in August of 1997 by the Chief of the Natural Resources Conservation Service. NRCS is currently working on the designs and coordinating with the Hawaii Department of Agriculture and the Maui County Department of Water Supply on the land rights requirements for installation. NRCS anticipates that the project will be ready for construction in fiscal year 1999.

The Waimea-Paauilo watershed project has been replanned and a new reservoir site has been selected. The watershed plan and EIS work has been completed and NRCS is now preparing to begin the design phase and coordinating land rights and funding with the Department of Hawaiian Homelands and the Hawaii Department of Agriculture. The first phase of this project is expected to be ready for construction in two years.

NRCS is working closely with the Hawaii Department of Agriculture, the Hamakua Soil and Water Conservation District and local landowners in completing planning on the Hamakua Ditch Project. This is the top watershed planning priority for the NRCS staff in Hawaii, and they expect the planning to be completed by the end of this year.

Question. Please update the Subcommittee on the work to complete innovative community-based comprehensive resource management plans for West Virginia communities devastated by floods.

Answer. NRCS has focused community based assistance efforts to three areas heavily impacted by the flood of 1996. These are the North Fork of the South Branch River, Grant and Pendleton Counties; Upper Tygarts Valley River, Randolph County; and Knapps Creek, Pocahontas County. These efforts are led by local watershed groups consisting of landowners, interest groups, local governments, and other stakeholders. A holistic planning effort is underway with the North Fork Watershed Association assessing alternatives for flood protection; water supply; streambank erosion; forest land use and protection; wetland development and protection and soil erosion on upland areas. The plan should be completed by July 1998. The NRCS is pursuing cooperative efforts with the State of WV to develop a holistic plan for the South Branch Potomac Watershed (Grant/Hardy/Pendleton Counties). The Knapps Creek Watershed Association with NRCS assistance is assessing similar alternatives for flood protection and severe streambank erosion. They are currently seeking funding to carry out a geomorphology study for the watershed. A water resource plan has been developed for the Upper Tygarts Watershed which focused primarily on water supply needs. The Upper Tygart Watershed Partnership is currently preparing a Public Law 566 watershed application seeking assistance to develop a holistic watershed plan which would incorporate the results of the water supply study. Similar efforts are underway with the Inwood Watershed Association, Berkeley County; and the Dunlop Creek Watershed Association in Fayette County. NRCS is working with these groups to assist them in assessing alternatives and taking actions to address their land and water resource needs.

Question. Please update the Subcommittee on the need and plans made for a cost-share pilot flood plain project for the Tygart River basin in West Virginia.

Answer. The fiscal year 1998 Senate Appropriation Bill contained language that NRCS would pursue a pilot flood plain relocation program for the Tygarts River Basin, West Virginia. This pilot project would assess the effectiveness of a relocation project where home and business owners could elect to relocate from the floodplain over a five to ten year period. As owners move or relocate from the area, estate sales, or others as they desire could sell their homes or businesses to the government at their convenience. The project would assess the participation rate over the long term. Limited planning will continue in fiscal year 1998. No other activity is planned.

Question. The Secretary stated in his testimony before this Committee that the Department "will also continue to examine approved watershed plans to eliminate those projects that are now infeasible in order to reduce the backlog of unfunded work." What did the Secretary mean when he used the word "infeasible?"

Answer. Infeasible projects are those where there is little hope of ever getting the project installed due to a lack of sponsor interest, insurmountable environmental concerns, low benefit to cost ratio, changes in land use which precludes constructing a key component, lack of ability to obtain land rights, long term litigation, or other significant barriers.

Question. How does the agency plan to eliminate these projects?

Answer. In those projects where the sponsors agree that nothing further can be done, a supplement to the watershed plan will be prepared to eliminate the remaining works of improvement and the project closed. In cases where the sponsors are not willing to sign a supplement, the project will be put on the inactive list. A project on the inactive list cannot be reactivated until all the problems which caused it to be declared inactive are overcome by the sponsors. NRCS is constantly reviewing projects to reaffirm feasibility before proceeding further.

Question. Which projects have been determined to be "infeasible" by the Department to date? Please provide list by state.

Answer. The following projects have been determined to be unfeasible to date:

List of infeasible projects

South Fork Watershed	Arkansas.
Middle Fork Anderson River	Indiana.
Upper Big Blue Watershed	Do.
West Carroll Watershed	Louisiana.
Big Creek Watershed	Mississippi.
Brown's Creek	Do.
Dry Creek	Do.
Sowashee Creek	Do.
Town Fork Creek	North Carolina.
Starkweather Watershed	North Dakota.
Sebastion Martin-Black Mesa Watershed	New Mexico.
McKinney-Buzzard Watershed	Oklahoma.
Waterford-Guilford Creek Watershed	Do.
Cross Creek Watershed	Pennsylvania.
Little Shenango Watershed	Do.
Buffalo River Watershed	Virginia.

STAFF REDUCTIONS

Question. In your statement, Mr. Weber, you indicate that one of the goals of the agency-wide reorganization "was to place a higher share of staff resources in the field to maintain and enhance service to our customers." Was this goal achieved after the reorganization? If so, what was the increase in number of employees that were placed in the field?

Answer. At the end of fiscal year 1993, approximately 70 percent of the NRCS work force was located in offices below the State office. Currently, approximately 75 percent of the work force is located in offices below the State office.

Question. Mr. Undersecretary, you state in your testimony that currently 9,000 staff are at the local level. Is this number based on the fiscal year 1998 Conservation Operations appropriations?

Answer. This number is based on funding for all accounts administered by NRCS.

Question. Will this number be reduced under the fiscal year 1999 President's budget request?

Answer. If staff reductions occur in total, inevitably some loss will occur at the field level. However, we are trying to maintain the level of staff at the field level at 75 percent or better of the total NRCS work force.

Question. During the Department's streamlining initiative, how many NRCS full-time equivalents (FTE) have been reduced in the field and at headquarters? Please give the number of FTE's by fiscal year.

Answer. Since fiscal year 1993, NRCS has reduced FTE's for the agency by 1,896 FTE's. Of this amount, NRCS has reduced 159 FTE's from National Headquarters (NHQ) and 1,173 FTE's from the field staff. A more detailed breakdown follows:

Fiscal year	Total FTE	NHQ	All other [1]
1993 (Baseline)	13,790	537	13,253
1994	13,317	527	12,790
1995	12,163	502	11,661
1996	11,839	392	11,447
1997	11,894	378	11,516

[1] Includes State, regional, area, and all other offices except headquarters.

Question. How will the proposed administrative convergence affect the field staff in each States' county offices?

Answer. Convergence will produce a modern information technology infrastructure that the NRCS, Farm Service Agency and Rural Development Agency can share, thereby, making the field office staff more productive. In conjunction with convergence, various efforts are underway to re-engineer administrative and program delivery systems to lessen the administrative workload on field staffs.

Question. Will the field employees' administrative workload be lessened so that they can spend more time with the landowners?

Answer. The convergence of administrative and information technology functions in the Service Center agencies, when fully implemented, will reduce the time spent on administrative overhead and will free time up for program delivery.

Question. How will proposed administrative convergence affect service center staffing?

Answer. Administrative and information technology convergence will not directly affect offices below the State level. Overall, the State level administrative staffing will be reduced when the plan is fully implemented in fiscal year 2002. This reduction in administrative staffing would make more time available to program related activities at the State and field office level.

Question. How many FTE's are supported by the fiscal year 1999 budget request?

Answer. The fiscal year 1999 President's budget request will support approximately 11,412 FTE's.

Question. What is the fiscal year 1998 funded FTE level?

Answer. NRCS can support an estimated 11,944 FTE's with appropriated and carryover balances available in fiscal year 1998.

Question. What is the total staff reduction expected in fiscal year 1999?

Answer. The total anticipated staff reduction for fiscal year 1999 is 532 FTE's. However, this assumed there would be no additional funding for emergency watershed programs.

Question. How much funding is needed in fiscal year 1999 to prevent staff reductions at the Headquarters level and in the field?

Answer. $40.6 million would be required to prevent the reduction of 532 FTE's.

Question. Does the agency expect to cut any more FTE's in the coming fiscal years?

Answer. NRCS anticipates no additional cuts in staffing if the requested funding level for fiscal year 1999 is received and maintained.

COUNTY BASED WORKLOAD STUDY

Question. USDA has an outside consulting firm conducting a workload study of the farm and rural program delivery system of county-based agencies (FSA, NRCS, and RD) to be completed on September 18, 1998. What has the consulting firm been told to look at specifically regarding NRCS?

Answer. Since the USDA County based study is an independent study, the consulting firm is directed by the USDA Contract (based on the original Request for Proposals as printed in the Federal Register) to examine the following: existing legislative authorities, regulations to actual activities; evaluation of the workload implied by the program responsibilities to be carried out under the charge; developing a business process map(s) for each NRCS program; and, developing a profile report of the USDA customer base.

The goal of the study is the articulation of alternative approaches to organizing and staffing USDA's county-based operations in delivering services that are clearly linked to Federal policy and program priorities and that can be managed to meet Federal budget targets. The key objectives in meeting the goal of identifying alternative field service delivery systems include: the articulation of the charge to agencies as mandated by legislation and regulation; evaluation of the workload implied by the program responsibilities to be carried out under the charge; identification of options for organizing agency resources to meet customer needs and preferences; and, conceptualization of organizational structures that can effectively and efficiently match USDA resources with its customer base.

Question. Are streamlining and collocation of NRCS offices postponed until the study is completed?

Answer. NRCS continues to implement the Secretary's Streamlining initiative, started in 1994, with co-locating field offices into approximately 2,556 USDA Service Centers.

Question. As a result of this study, do you anticipate more office closings, centralization, or consolidation with the Farm Service Agency?

Answer. The study is just beginning and approximately 20 percent complete. Upon completion, appropriate policy makers will review the effort to identify any possible findings that may improve the Agency's service to farmers, ranchers, and other customers.

SUPPLEMENTAL APPROPRIATIONS

Question. Do you expect that you will submit a request for supplemental funds for emergency watershed projects, particularly in view of the flooding and the other problems that have arisen as a result of El Niño?

Answer. Preliminary estimates for disasters to date reflect a $40 million need. However, an average for disaster activities in a typical year would be closer to $150 million based upon an average annual expenditure over the past four years.

Question. What specific needs have been identified?

Answer. Immediate anticipated needs are estimated at $25 million for California, although until the weather breaks, it is difficult to determine the exact need; $10 million for Florida tornadoes; and $5 million for the Northeast states hit by the January ice storm.

Question. Previous emergency projects identified in earlier years were repaired because of the lack of funds, or there were insufficient funds to cover all of the projects that were identified. Will fiscal year 1998 Emergency Supplemental funds be available for requests to meet these unfounded non-exigency needs?

Answer. All previously reported needs that are eligible for the Emergency Watershed Protection Program have been met and we have no projects awaiting funding at this time.

Question. What unfunded needs have been identified by the state conservationists around the country? Please provide a breakdown of the unfunded needs by State, and how you plan to distribute any supplemental funds that might be requested to the States for emergency watershed protection activities.

Answer. Anticipated needs are estimated at $25 million for California, although until the weather breaks, it is difficult to determine the exact need; $10 million for Florida; and $5 million for the Northeast states hit by the January ice storm and an amount yet to be identified by the March 7–8, 1998, storm in the Southeast states. Other needs are anticipated, but cannot be identified until an emergency occurs.

Question. What unfunded Mississippi needs are outstanding from past fiscal years and what funding is estimated to be needed to meet these needs?

Answer. Mississippi requested no additional funds for unfunded needs at this time.

RESOURCE CONSERVATION AND DEVELOPMENT

Question. The fiscal year 1999 budget request for the Resource Conservation and Development (RC&D) is the same as the fiscal year 1998 funding level, $34.4 million. According to the RC&D operation plan submitted to the Committees on Appropriations, the base funding of $29.4 million would be used to provide technical assistance to the existing 290 RC&D Councils, and administrative and overhead support costs of the program. The additional $5 million would be to authorize up to 25 new areas and increase base-level funding and provide financial assistance for the RC&D Councils. Does the agency again plan to implement this in fiscal year 1999 if the fund is provided? If not, how will the agency use this funding?

Answer. The President's Budget for fiscal year 1999 calls for an appropriation of $34,377,000, the same as the fiscal year 1998 funding level. The RC&D operating plan submitted to the Subcommittees on Agriculture Appropriations covers fiscal year 1998. In fiscal year 1999, the Agency will use the funding to provide technical assistance through coordinators to 315 RC&D Councils, along with administrative and overhead costs of the program. This will allow the agency to maintain a level of funding for direct support and core technical assistance to authorized areas.

Question. The goal of the RC&D coordinator is to assist the Council in its activities and to become an empowered, self-sufficient Council that has the capacity to build effective public private partnerships. How many Councils have reached this goal since the inception of the program?

Answer. The coordinator provides technical assistance to the Council and in many cases functions as its only full-time staff. The coordinator provides access to USDA and other Federal programs. He or she aids the Council in the complexity of dealing with access to knowledge, information and resources, and a frequently changing council organizational structure. The structure change is due to Council sponsor members changing frequently, since many are local elected officials. Such changes often affect a Council's dynamics and effectiveness. The RC&D Councils are non-

profit entities made up of volunteer boards. The coordinator plays a pivotal role in bridging the transitions in Council membership, focus, and priorities.

Although many Councils have become very efficient at obtaining funding for specific projects, we have not assessed how many are "self-sufficient" without the assistance of a coordinator.

Question. Does the agency have an operating plan "to wean the Council off" of the use of a RC&D coordinator once it has reached this goal? If not, does the agency plan to implement one?

Answer. There is no proposal or plan to de-authorize or de-fund RC&D councils.

OKATOMA RIVER PROJECT

Question. I have been told that the Okatoma River needs the completion of work referred to as "desnagging". Could you explain the nature of this work?

Answer. Clearing and snagging is a process where fallen and badly leaning trees are removed from a water course. Much of the work is done by hand to minimize damage to the environment.

Question. Does the fiscal year 1999 budget request include any funding for the Okatoma River project in Covington County, Mississippi?

Answer. The budget is not built on named watersheds or projects, because of an unfunded commitment of approximately $1.5 billion. Funds are allocated to NRCS regional conservationists who then use a formula to determine the highest priority projects to fund. Okatoma River's scoring will depend upon it's ranking with other projects in the region.

Question. How much funding is needed to complete the "desnagging" of the Okatoma River? Can the agency finish this project within one fiscal year given that the needed amount of funding is provided by the Committee?

Answer. Approximately $1.0 to $1.5 million is needed. The project is presently in the final design phase and it is anticipated that the work could be completed in less than a year.

Question. How much money, by fiscal year, has the NRCS made available for this project?

Answer. Approximately $50,000 of technical assistance funds for the survey and design has been expended during the last year. However, no financial assistance has been needed thus far.

SECTION 11 CAP

Question. Under current law, reimbursement for NRCS technical assistance for WRP is limited to available funds under the section 11 cap. The FAIR Act amended the Commodity Credit Corporation (CCC) Charter Act, section 11, to limit the total amount of CCC funds made available for reimbursement to the 1995 spending level, affecting reimbursement agreements of all other agencies competing for the limited funding source available. In addition to the section 11 cap, the FAIR Act prevents the use of reimbursable funds for purposes other than salary. CCC funds cannot be used for supplies, equipment, transportation expenses, etc., thus these funds will have to be absorbed through the Conservation Operations Account. What is the estimated amount of funds needed for those purposes not covered by CCC funds?

Answer. The technical assistance rate charged for the WRP is approximately $80.00 per acre. The technical assistance activities under the WRP includes such items as eligibility determinations, wetlands restoration planning, development of detailed engineering designs, working with appraisers, surveyors, closing agents, attorneys, and construction contractors, and monitoring of prior, current and future WRP acres. The technical assistance rate was developed over time for the WRP. This charge is sufficient to fund the WRP technical assistance needs.

The FAIR Act of 1996 imposed restrictions on the uses of CCC funds, beginning in fiscal year 1997 with respect to certain activities. Funding for the WRP was made available through the Commodity Credit Corporation (CCC). Funding for NRCS technical assistance costs is authorized under the CCC Charter Act section 11 funds transfers.

Unobligated appropriated funds of approximately $31.5 million were used to fund the technical assistance needs for the WRP for fiscal year 1997 and fiscal year 1998. For fiscal year 1999 approximately $15.089 million is needed for WRP technical assistance activities. Of the total amount, $4.0 million is anticipated from unobligated carry-over appropriated funds. The remainder, approximately $11.089 million is expected to be transferred from CCC through the CCC Charter Act section 11 authorities.

Question. What available CCC funds and prior-year balances will be used and in what amounts by program?

Answer. For fiscal year 1999 approximately $15.089 million is requested for WRP technical assistance activities. Of the total request approximately $4.0 million are unobligated carry-over funds from the old appropriated WRP program. The remainder approximately $11.089 million, of the total technical assistance funds needed for fiscal year 1999 are requested through CCC. For fiscal year 1999 the $11.089 million in CCC funds are expected to be used to deliver the WRP program.

Question. Will appropriated funds be necessary to supplement available CCC funding? If so, how much, by program? What appropriated funds are included in the fiscal year 1999 request, by program?

Answer. The CCC Charter Act Section 11, as amended, does not guarantee that funds will be available for transfer or allotment to other government entities to assist it in the conduct of its business. Rather, the section 11 transfer is limited to an amount established on pre-1996 Farm Bill work activities. Technical assistance costs associated with CRP, WRP, FPP and CFO all fall within the Section 11 limitations. In order to deliver the WRP in fiscal year 1999, $4 million in unobligated carryover appropriations will be used to fund technical assistance. For CRP, $22 million in unobligated carryover appropriations will be used for NRCS technical assistance costs. In addition, approximately $36 million in appropriated Conservation Operations account funding will be used to support technical assistance costs associated with the proposed EQIP level.

Question. Have agency lawyers revisited the section 11 cap and made a reinterpretation?

Answer. The Office of General Council (OGC) has not altered its initial position on its interpretation of the section 11 of the Commodity Credit Charter Act with respect to the provision of technical assistance under any CCC program including conservation programs.

RESEARCH STUDIES

Question. Does NRCS have research studies budgeted in the NRCS account? If so, how much funding has been used in past fiscal years for these studies?

Answer. NRCS does not have research studies built into the budget. We do, however, have cooperative agreements with other agencies and land grant institutions who conduct research from which NRCS customers benefit.

Question. Does the fiscal year 1999 budget request contain any funding for NRCS research studies, and if so, how much? Under what account can this request be found?

Answer. The fiscal year 1999 budget request does not contain any funding requests for NRCS research studies.

Question. How many FTE's that work on research studies are supported by the fiscal year 1999 budget request?

Answer. There are no FTE's in NRCS that work on research studies.

FRANKLIN COUNTY LAKE

Question. This Committee appropriated approximately $3 million in fiscal year 1998 for technical assistance for Franklin County Lake. What is being done currently with the $3 million appropriated for fiscal year 1998 to NRCS for Franklin County Lake?

Answer. A portion of the funds are presently being used to provide technical assistance to complete the necessary survey and design work for the Franklin County dam. Funds remaining at the end of this fiscal year will be carried over to provide technical assistance related to the construction of the dam, when construction funds become available.

Question. What authority under Conservation Operations, Watershed and Flood Prevention Operations, and Resource Conservation and Development does NRCS have to provide technical and financial assistance for the construction of the dam?

Answer. NRCS does have authority under the Watershed and Flood Prevention Operations and Resource Conservation and Development program to provide both technical and financial assistance for dams such as the one proposed in Franklin County. However, the fiscal year 1999 budget does not include a request for financial assistance in the RC&D program. Under Conservation Operations, we have the authority to provide technical assistance related to soil erosion and sediment control both functional elements of most dam construction.

Question. Is Franklin County designated as a watershed area? Would Franklin County be eligible for such designation?

Answer. Franklin County is not a designed watershed under the Small Watershed Protection and Flood Prevention Program. It could be eligible for such designation.

Question. Does the fiscal year 1999 budget request have any funds designated for Franklin County?

Answer. The fiscal year 1999 budget for Conservation Operations reflects a decrease of $3 million for Franklin County.

Question. Should the Forest Service have available funds to provide financial assistance to the construction of the dam in fiscal year 1999, will the technical assistance appropriated in fiscal year 1998 be available?

Answer. If financial assistance is available for construction of the dam in fiscal year 1999, NRCS will use the funds appropriated in fiscal year 1998 to provide the necessary technical assistance.

MISSISSIPPI DELTA WATER RESOURCES STUDY

Question. In the fiscal year 1998 Appropriations Act, the Committee provided $800,000 in Conservation Operations for the Mississippi Delta Water Resources Study. Is the total amount in the fiscal year 1998 Appropriations Act used by the State Conservationist of Mississippi on the Mississippi Delta Water Resources Study?

Answer. The fiscal year 1998 Appropriations directed $350,000 to be used in the Mississippi Delta Water Resources Study and the total amount will be used to complete the Study.

Question. What activities were funded with the money provided for this study in each of fiscal years 1996, 1997, and 1998?

Answer. In fiscal year 1996 and fiscal year 1997, the activities funded included data collection and assimilation. These included water quality sampling collection, and testing; fish tissue collection and testing, and landowner interviews for crop budget generation as well as other economic data collection. In fiscal year 1998, activities included competing the design of conveyance systems, completing economic evaluations, and completing the final study reports.

Question. Does the fiscal year 1999 budget request propose any funds for this study, and if so, how much? In which account is this proposed request?

Answer. The Natural Resources Conservation Service plans to have this study completed during fiscal year 1998, and no funds will be needed to carry on this study beyond this fiscal year. The fiscal year 1999 budget for Conservation Operations reflects a decrease of $350,000 for this item.

Question. Does NRCS have the authority under Conservation Operations to carry out the next phase of this project or would that funding have to come under the Watershed and Flood Prevention Operations account?

Answer. It was the intention of the Natural Resources Conservation Service to conduct the water supply study and report the finding back to the sponsors. The sponsors would have the responsibility of concurring with and implementing the findings. If the Natural Resources Conservation Service would have the responsibility of providing assistance in this endeavor, the sponsors would have to request assistance from the NRCS to plan the desired activity. Then we would have to request the authority to expend funds to the project. This should be an activity of the Watershed and Flood Prevention Operations Division and planned and implemented as an organized watershed.

FARMLAND PROTECTION PROGRAM

Question. The Farmland Protection Program's (FPP) authorization has expired. No funding for this program is requested for fiscal year 1999. Is all work completed in the Farmland Protection Program?

Answer. No. Work for the Farmland Protection Program (FPP) just started. The 1996 Farm Bill authorized $35 million to establish a farmland protection program. A total of $16.2 million was obligated to States and local government entities in fiscal years 1996 and 1997. As of January 31, 1998, more than 10,000 acres on 47 farms with a total easement value of $18 million were acquired. Federal FPP funds contributed $4.5 million (25 percent) and State and local government funds accounted for $13.5 million (75 percent). Thus, only about 13 percent of the funds have been expended so far. This is due to the lag time the State and local entities have in order to process easement appraisals, surveys, and other procedures needed to record the easement deed. $17.3 million will be obligated in fiscal year 1998. At the end of fiscal year 1998, the $35 million will be exhausted, including technical assistance funds earned.

Question. Do carry over balances exist so that the technical assistance work can be completed? If yes, how much exists, by fiscal year?

Answer. The Farmland Protection Program implementation operates with few technical assistance funds, especially when we consider the cost of preparing con-

servation plans that are required for each farm for which an easement is acquired. A maximum of 4 percent of the appropriated funds is allocated for technical assistance. Technical assistance funds earned for fiscal years 1996 and 1997 were $575,000 and $80,000, respectively. $720,000, four percent of the $18 million appropriated, is reserved for technical assistance for fiscal year 1998. Since the funding for this program is provided through CCC, any unobligated funds do not carry over.

CIVIL RIGHTS ACTIVITIES

Question. Mr. Lyons, in your statement you say that the "NRCS will continue to seek proactive ways to better serve minority and low income customers." What proactive ways will the agency seek to better serve these customers?

Answer. Some of the proactive ways NRCS is using to better serve minority customers are: designation of a staff position in each state to serve as the program outreach manager; establishing a data base on minority customer groups and their location; development in each state of a program outreach plan targeted to minority and low-income customers; and, finalization of a multi-year strategic plan to address the conservation needs of minority and low-income producers.

GRAZING LANDS

Question. In fiscal year 1998, NRCS is able to continue support for a Grazing Lands Conservation Coordinator in each of the 50 States. Will the fiscal year 1999 budget request continue to support these coordinators in all 50 states?

Answer. The agency earmark increased to $15 million for fiscal year 1998. All states are now receiving allocations in support of their workload associated with the Grazing Lands Conservation Initiative. The fiscal year 1999 budget does not request specific funding for grazing lands conservation coordinators, however, they would be supported in the Conservation Operations base funding.

SHARKEY SOILS

In response to the Sharkey Soils Study requested by the Committee in fiscal year 1998, our specialists in this area have raised pertinent and very important questions which I feel should be addressed. Please provide your response to these promptly.

SHARKEY SOILS COMMITTEE OPERATIONS

Question. Given the importance and complexity of the issues, would it not have been scientifically prudent to meet and discuss the technical issues in open debate?

Answer. In retrospect, it might have been prudent to physically meet, however, the co-chairs debated this and considering the short time line and the committee members individual circumstances, decided the electronic resource was best. Through the electronic venue, issues were discussed in open debate via e-mail. Every committee member had ample opportunity to express his opinion to any or all other committee members. Some members took advantage of this, while others did not. Informal face-to-face meetings were held at the Soil Science Society of America's (SSSA) Annual Meeting in Anaheim, CA. These were used informally because the entire committee could not come to the SSSA Annual Meeting. The committee chairmen both agreed that the scientific issues were addressed completely, scientifically, and critically by the procedures used. There is no apparent reason why more progress would have been made in a formal, debate-oriented meeting. The procedures used for the Sharkey Committee had precedence in that they were similar to those used to originally develop and to continue to develop the soil classification system—*Soil Taxonomy*. The system of e-mail exchanges used here followed a question, answer, debate format that has proven effective in dealing with complex scientific issues.

Question. Are e-mail and faxes the best method to address the complex issues in a scientific manner?

Answer. The committee co-chairs decided that for this committees deliberations e-mail and faxes were the best methods to use to address the complex issues involved. Issues could be stated in writing so that all committee members knew exactly what issues were "on the table" at a given time. In addition, committee members could evaluate the issues by examining their own data, consulting reference materials in their libraries, examining scientific literature, or personally seeking clarification. The committee chairmen feel there would have been no apparent advantage to additional direct, face-to-face formal meetings. Finally, e-mail and faxes allowed the committee to keep a written record of all correspondence, questions, and debate. The record has been supplied to committee members who have requested it.

Question. Would it have been appropriate for members to have access to materials provided by others and have the opportunity to vote on issues?

Answer. Yes. The co-chairs made a diligent effort to keep all members fully informed of information supplied by others. In addition, key issues were voted on by the members. Unfortunately, not all members chose to vote on all issues. It should be noted that the full Sharkey Committee, which consisted of 22 individuals, was broken into subcommittees to address specific charges. Subcommittees were assembled by the co-chairs who selected members with particular expertise to address specific charges on a subcommittee. This was the only practical way to address all of the charges in the time allotted to the committee. Thus, subcommittees were sent correspondence related to their charges. If a member wanted to see correspondence related to another subcommittee it was sent to him whenever possible.

Question. Were conclusions based on opinions of various members or objective data relevant to Sharkey soils?

Answer. Both opinions and data relevant to Sharkey soils were used to make conclusions. Whether opinions or data were used depended on the specific charge. For example, charge 1 was to agree on the "concept and classification of the Sharkey series". The conclusions for this charge were based on data. Charges 4, 6, and 7 asked for definitions, and these were based largely on collective opinion or historical precedence. Charges 2, 3, and 5 were fulfilled by considering data and personal opinions of subcommittee members who had examined their data or who had extensive expertise in the subject.

Question. Would it have been appropriate for committee members to have had an opportunity to see and review the report before it was released?

Answer. It would have been desirable for committee members to have had an opportunity to see and review the report before it was released. This was not done because there was not time. Oral presentations on the report were presented in Washington, DC on December 8, 1997 to the Natural Resources Conservation Service's (NRCS) top staff. Reports were sent to the full committee on December 9, 1997. It is stated in the report (page 3) that ". . . individual committee members may not agree with all recommendations made here". Because the co-chairs made a diligent effort to keep the subcommittees focused on key issues via e-mail, subcommittee members should not have been surprised by the final recommendations made in the report. To the best of our knowledge, no committee member was surprised by the final recommendations.

MAJOR CONCERNS

Question. Why was the Sharkey series not correctly classified in the Vertisol Order since the adoption of *Soil Taxonomy* in 1965? It is one of the most extensively occurring soil series in the nation. What was the scientific basis for incorrect classification as Inceptisols?

Answer. When *Soil Taxonomy* was adopted in 1965, the Sharkey series, like other soil series, was classified based on existing data and the best collective judgment of soil correlators and other experts of the National Cooperative Soil Survey (NCSS). At that time, it was felt that Inceptisols was the best classification for the Sharkey series. As extensive research data have become available in recent years for soils of the Sharkey series, it has become apparent, and agreed to by experts of the NCSS, that the best classification for this series is Vertisols.

Question. Recommendations B, page 6. Recommendations 1 and 2 seem to conflict with each other. Recommendation 1 states two classifications must be given for the series and 2 states if one classification must be used, then it should be taken from the micro-low. What is the justification for this statement?

Answer. Vertisols within a single landscape can consist of two different, but paired soils—one occurring on a small ridge, and the second in an adjacent bowl-shaped depression. This pattern is regular, frequently occurring, and is produced by shrinking and swelling processes that occur in the soil. The most accurate way to describe this natural variability is with two soil classifications, because the committee agreed that a single classification does not fully describe the soil. It may not be practical to use two classifications for a single series in all cases. Therefore, if only one classification is used, the committee suggested the depression or micro-low be used to represent the soil's properties. The micro-low will tend to be wetter and its properties probably will have the greatest impact on how the soil is used.

Question. Was the Committee charged to redefine saturation? Does the attempt to redefine saturation mean Sharkey soils are not saturated according to the scientific definition of saturation? What effect would the proposed redefinition have on these soils; and would it apply to other soils as Mollisols, Inceptisols, Entisols? How will land owners react when told they are now going to redefine saturation?

Answer. The committee's charge was to: "Agree on a method of monitoring saturation". In order to monitor saturation, the term must be clearly defined to show exactly what is being monitored. The term "saturation" was not redefined in the report. Rather, the report recommends a method to monitor soil water using equipment that is commonly used to assess soil-water potentials in Vertisols. The report also recommends a new way to interpret soil-water data that can be used to determine natural saturation. This is not a new concept, and citations for its use in the scientific literature were included in the report (page 11). The method recommended for interpreting natural saturation applies only to Vertisols like the Sharkey series. It could be adapted to other soils but that was not the intent of the committee. The committee does not know how land owners will react to the recommendations of this report. The report describes a workable method to collect and interpret soil-water data.

Question. There appears to be no scientific basis for the 14 day wetting period suggested in Charge 2. Is this science or arbitrary choices between some who want 7 days and others 21 days despite data indicating months might be required? If data indicates 4 months why 14 days?

Answer. The 14-day wetting period was a suggested compromise based on best professional judgment. We state in the report that members of the committee who have made measurements of soil-water potentials in Vertisols were split on the duration of the recommended wetting periods, and estimates ranged from 7 to 21 days. It is pointed out in bold type (see page 18) in the report that further research may show the duration of the wetting period will have to be adjusted for different regions. We encourage more research on this topic.

Question. Define anaerobic—Does it mean zero oxygen?

Answer. The Glossary of Soil Science Terms (1996) defines anaerobic as "The absence of molecular oxygen".

Question. Does what happened in the past matter for modern usage, should it take precedence over the present?

Answer. Interpreting what has happened in the past is important "for modern usage" if it is the only way we can predict what will happen in the future. For example, a soil is considered to be a hydric soil if it contains one or more of the "Field Indicators of Hydric Soils". The Field Indicators are signs that the soil was anaerobic at some point in the past, and it is assumed that the soil will again become anaerobic.

Question. Can uniform, scientifically correct assumptions be made on conditions in the past; how far in the past?

Answer. Interpretations regarding whether the soil was anaerobic in the past can be made uniformly and scientifically if a uniform set of criteria are applied to the soil. Such a uniform set of criteria are the "Field Indicators of Hydric Soils" which were published by the NRCS in 1996. We do not know how far into the past, in terms of years, that interpretations can be made using the Field Indicators.

Question. Can one assume ancient soils were frequently flooded and saturated?

Answer. Relative to "ancient soil", if there are indicators in the soil that the soil was flooded or saturated, then presumably it was. Geomorphic processes occurring today such as flooding and saturation leave indicators in soils. When those same indicators are seen in ancient or relic soils then the processes that left those indicators are inferred to be the same processes that are occurring today.

Question. Should soil classification be useful in the present or the past?

Answer. Soils are classified, in our opinion, to help make assessments as to how well soils are suited for a given use and to communicate concepts about characteristics of soils. Classification should be useful for the present in order for us to predict how soils will function, and this includes a prediction as to whether the soil is a hydric soil.

Question. What is the water table depth in Sharkey soils?

Answer. The concept of a water table cannot be easily applied to Vertisols such as the Sharkey. The report recommends that water tables not be measured and that wells not be used to assess the soil-water conditions in Vertisols. Instead, measurements of natural saturation should be made using piezometers.

Question. Is the proposed "natural saturation" scientifically defined and justified?

Answer. Natural saturation is defined in the Soil Science Society of America's monograph "Methods of Soil Analysis. Part 1. Physical and Mineralogical Methods, Second Ed., 1986". This is the standard reference work that describes accepted ways of measuring soil properties. The complete reference citation is given for Klute (1986) on page 43 of the report. The concept of natural saturation is justified not only for use in Vertisols, but for all soils as is discussed in the above reference.

Question. Would criterion for classification of Vertisols in a wetland be the same as in upland landscapes?

Answer. In general, yes, the same criteria are applied to Vertisols for classification purposes, regardless of whether the soil is in an upland or wetland. We classify soils on the basis of properties that occur in the soil. We do not make an interpretation as to whether the soil is in a wetland or upland before the soil is classified.

Question. If only the ped surface is used to determine reduction, would this not leave most of the soil volume unused?

Answer. A portion of the matrix in Vertisols is considered "unused" if roots have not penetrated into it. Without roots the soil volume will probably not contain enough dissolved organic materials or microorganisms to produce the biochemical reactions (e.g., reducing chemical reactions) that must occur in hydric soils. The volume of space that is "unused" probably increases with depth. Within 30 cm of the surface, the volume of "unused space" is expected to be small because roots should be spaced closely, but the actual volume is not known at this time.

Question. Item 3, page 18 states, "the scientists who contributed to this report suggest that a wetting period of 14 days be adopted . . . ." Are there not scientists who contributed to the report who strongly felt otherwise?

Answer. One of the 22 scientists who contributed to this report openly stated that the wetting period concept was not appropriate. The objections of this individual were debated within the subcommittee, and the best procedure that could be proposed is the one described in the report. As noted in our response to a previous question, the 14-day duration for the wetting period may have to be modified for some regions. This will only be determined after the concept is tested against data.

Question. Page 28, C3. If no positive reaction with a, a1-dipyridyl occurs why can't a simple statement be made that it is not reduced? Does any research or literature indicate any Vertisols have no Iron? You can't have it both ways.

Answer. The a, a'-dipyridyl dye only reacts with reduced forms of iron. Some soils do not contain enough iron for them to produce a reaction to the dye. It is not known that every single Vertisol contains sufficient iron to produce a reaction to the dye. From a practical standpoint, most Vertisols will probably contain sufficient iron for them to react to the dye when reduced. Nevertheless, the scientists who contributed to the report felt the possibility of a soil not having sufficient iron must be recognized.

Question. Can you have gray, clayey parent material that is not anaerobic?

Answer. Yes, this condition can exist.

Question. How do you interpret gray, clayey alluvial parent material that was previously eroded from soils that may have been located hundreds or thousands of miles away. What is the basis for inference of anaerobic conditions? Do all alluvial and coastal plain soils form under anaerobic conditions at some stage of their evolvement?

Answer. We look for hydric soil Field Indicators that are composed of organic soil materials. Field Indicators made of iron are not reliable indicators to use to identify hydric soils in materials that do not contain iron. On the other hand, organic material accumulates in such anaerobic soils and a number of indicators have been identified for use. These have been published in the NRCS's publication: "Field Indicators of Hydric Soils in the United States", published in 1996. Alternatively, an odor of hydrogen sulfide gas may also be used as an indicator that the soil is anaerobic and reduced. We cannot say categorically that all alluvial and coastal plain soils formed under anaerobic conditions; however, we will assume that many did. These soils will be considered hydric soil today only if they contain Field Indicators of Hydric Soils. The coastal plain sediments can be very old, on the order of hundreds of thousands of years. Those coastal plain soils that are not hydric have changed color since they were deposited and do not contain the hydric soil Field Indicators.

Question. What are relic soil colors? Do they have meaning in current land use?

Answer. Relic or relict soil colors are colors that formed in the past and which persist in places where they could not form today. Such colors might have a use in determining whether the soil hydrology has been altered, if the colors could be accurately identified as relict. In our opinion, there is no simple, reliable way to identify relict colors. Making an interpretation that colors in a given soil are relict is no more than guesswork at the present time.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. In our strategic plan, we established two overall General Goals that state the outcomes that would fulfill our mission. These outcomes are:

—Individuals and their neighbors working together as effective and willing stewards of the natural resources on their property and in their communities.

—A healthy and productive land that sustains food and fiber production, sustains functioning watersheds and natural systems, enhances the environment, and improves urban and rural landscapes.

We then established a series of strategic objectives that identify the components of each goal that are of highest priority for the immediate future. For each objective, we identified long-term performance goals that set measurable targets for accomplishment. Goals and objectives and most performance goals are stated in outcome-related terms. That is, they refer to the condition of the land or to improved management practiced by non-federal individuals or entities. These performance goals are the basis for the performance goals in our annual performance plan. The objectives correspond to authorized purposes of one or more of the program activities in our budget.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The process drew on the technical and program experience of a team of headquarters and regional staff. This team drew on a wider circle of state and field level employees and national program managers. The team studied each of the performance goals for 2002 that are established in the strategic plan and identified program activities that contribute to meeting the long-term goal. The team determined which activities were most clearly outcome related and recommended those be used as performance measures for fiscal year 1999. The main problems that we encountered were in the area of data availability. For some natural resources objectives, such as water quality, there are not currently reliable annual data sources to support an annual performance goal.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The agency's Performance Plan includes several tables that map the linkage between the performance measures and the budget. Tables 3a and 3b in the plan show the relationships between the objectives in the strategic plan and the long-term and annual performance measures. Tables 4a and 4b in the plan then show the relationship between programs and strategic objectives. Table 5 in the plan presents information on the amount of funds from each budget activity that support each objective.

The performance plan includes measures that can be used as measures for each program. The measures, however, are designed to fit our larger programs. Some but not all activities of smaller programs are covered by the current set of measures. For example, activities of the RC&D Program that directly relate to resource conservation are covered by performance measures in the plan. RC&D activities that relate to community development are not.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Our budget provides funds through a structure of 13 accounts and activities. These programs are delivered through a single work force to customers who may participate in several programs. We are using the performance planning process as a means to integrate management of our program activities. Our performance planning structure, therefore, is natural-resource driven and very closely follows the structure of the outcome-related objectives in our strategic plan. We have very few single-program performance measures in our performance plan.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. At present we do not anticipate proposing changes to our account structure for fiscal year 2000.

Question. How were performance measures chosen?

Answer. The annual performance measures that support our strategic goal for a healthy land are measures of conservation on the land achieved with direct technical assistance provided by NRCS employees at the field level. A team that included representation of all regions identified possible measures and recommended those that most closely related to the long-term goals established in the strategic plan. We selected predominantly measures that we can now collect data on, or for which we expect to be able to collect data by the beginning of fiscal year 1999.

Performance measures for the goal for stewardship are primarily internal measures, such as training levels, that measure our capacity to provide quality assistance and customer satisfaction measures.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. We have implemented a reporting system that draws on the data stored in automated case files in the Service Centers. The intent of this Field Office Com-

puting System is that detailed information can be transmitted from the Service Centers to managers in state and regional offices and NHQ without employees at the field level doing anything other than that required to keep the records that they need to do their job in the field. Initially populating the data fields in the system is labor intensive, however. Not all field offices are fully utilizing the system at present. We have developed the concept that we call Future Directions that will utilize newer, more user-friendly information management technology to streamline the essential record-keeping at the field level.

We are also planning to use the National Resources Inventory to collect annual information on several key outcomes. We are evaluating use of a series of annual inventories on specific resource issues, with the intensity of sampling and therefore the cost, determined by the performance issue.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. We expect to have data for the current performance measures by March 2000. Work is underway to finalize definitions and determine data sources for those few measures for which we are not currently collecting data. We do, however, intend to continue refining measures over the next several years. This means that there likely will be some measures in the plan for any given year for which we may not have reliable baseline data or consistent current-year data.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The annual performance measures that support our strategic goal for a healthy land are key outcome-related measures that the committee can use to track the effectiveness of our combined programs.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. We tied our annual performance goals directly to the two outcome goals of our strategic plan. The annual performance measures for resource condition are all at least intermediate outcomes that measure improvements in natural resource management implemented by resources managers with NRCS assistance. We have included relatively few measures of internal processes in our performance plan.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcomes)?

Answer. Yes, most NRCS managers at all levels have a general understanding of the difference between outputs and outcomes. Because we are a field agency in which most of our employees are front line staff providing services directly to the public, most managers have first-hand knowledge of the results our customers want and can distinguish between the activities that employees perform and the changes on the land that result from that assistance to land users.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The performance plan includes a goal for external customer satisfaction. We will ask customers not only overall satisfaction with our service, but also their judgment as to how well we met the USDA Service Center customer standards, which relate to courtesy, prompt service, reliable service, clarity and readability of information provided, and ease of use of forms . We will collect adequate demographic data to compare the satisfaction of various customer segments. The performance plan also includes a program-specific customer satisfaction goal for "Percent of water users fully satisfied with usefulness of Snow Survey And Water Supply Forecasting Program information."

The performance plan does not include performance measures specifically related to internal customer satisfaction nor do we presently plan to add such measures. We do intend to collect data on internal customer satisfaction relating to satisfaction with the appropriateness and timeliness of training in new technology, including both conservation technology and information management technology, and satisfaction with our efforts to ensure that all employees are treated fairly.

Question. How were the measurable goals of your fiscal year 1999 annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. In early 1997 we identified a tentative set of annual performance measures and made the necessary changes in the reporting system to automatically report the data entered in the field level case files. Most of these measures are items that were not reported nationally prior to implementation of the automated case file system. Adequate data for the new measures were not available in early 1997 to

support the initial phases of the budget formulation process for fiscal year 1999. Therefore, the fiscal year 1999 budget was developed with reference primarily to the program-specific performance measures that we have traditionally used. The targets for performance for each of the measures were developed later in the year, on the basis of available data and state-level managers' best judgment.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. If the committee changes a proposed number, we will be able to tell you the impact on the level of program performance in terms of program-specific outputs and the outcome goal most closely related to the program purpose. We could, for example, tell you the change in extent of acreage contracted for the Wetlands Reserve Program corresponding to a change in the WRP budget. This would relate directly to our performance goal for wetlands created or restored. We could not, however, trace with accuracy the impact of that change through all of the other goals that might be affected. To continue the example, a change in the assistance available for protecting wetlands could affect the acreage of cropland and grazing land where conservation systems were fully implemented, the miles of riparian area restored, or the number of watersheds restored to healthy functioning.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Performance information from the field is routinely reported quarterly. We have the capability to report more frequently should it be necessary.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. The difficulty we face in linking dollars to results in a meaningful way stems more from the nature of the results we seek to achieve than from our budget structure. Because natural resources are parts of an interrelated system, program activities that are undertaken primarily to achieve a specific goal will have effects on other components of the system. In our performance plan, we have attempted to show the linkage between programs and the primary performance goal(s) the funds support. However, the goal for any resource objective is based on the assumption that the funds requested to meet other objectives will also be available.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. We have not identified changes in our budget structure that would make the linkages clearer. We have, however, introduced modifications of the reporting system that will enable field staff to record the program that is the funding source for milestones recorded in the case files. When these data are consistently recorded, we will be able to tie activities to dollars more precisely.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Our strategic plan briefly describes key external factors that might influence the ability of the agency to achieve the goals in the plan. Our performance plan, therefore, refers only to the means and strategies by which the agency will achieve the goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. We are strengthening our capability to analyze resource and other data to identify emerging trends in production patterns and resource use to help anticipate changes that might intensify pressures on the resource base. We are also moving to a system of more annual resource inventories for key indicators so that we can identify where change is occurring and revise strategies before severe problems can develop. In addition we are strengthening our working relationships with other natural resources agencies in order to draw on their data and expertise.

Question. What impact might external forces have on your resource estimates?

Answer. The transition to market-driven agriculture could result in changes in land use and cropping patterns that affect the conservation needs on agricultural land, impacting the level of assistance producers need from USDA. Enactment of new requirements for resource protection, at either the national level or by a significant number of states, could greatly affect the level and kind of resources NRCS would need to help landusers meet their responsibilities. Changes in domestic or

international economic conditions could substantially alter agricultural commodity prices, farm incomes, and the ability of private individuals to maintain or enhance their investments in conservation of natural resources. Such changes could also affect the ability of state and local members of the conservation partnership to increase their contributions to joint conservation initiatives. Also, dramatic changes in weather patterns, such as those experienced with El Niño, could have significant impacts on resources needed for protecting natural resources and the environment.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. There is some overlap in the sense that several of our programs are authorized to address a wide range of resource goals. Rather than causing duplication, this overlap creates flexibility that permits us to tailor assistance to meet the wide range of conditions and needs in local areas across the country. In the performance plan, the programs that can be used to address goals are shown in the tables that map programs to resource objectives.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

—To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

—Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Fiscal year 1997 was the first year for which national data were reported for most of our performance measures, and the 1997 data were not available until mid-December. Therefore, we have had little opportunity to thoroughly analyze the new data. In addition, not all field offices are fully using the automated case file system. We expect to correct these weaknesses before early fiscal year 2000, when we begin to develop the first performance report required by the Results Act.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. We do not see any immediate need for substantive revisions. We are continuing to strengthen our reporting systems and to improve information on baseline resource conditions. We may make minor changes to the strategic plan through the fiscal year 2000 performance plan, as the Results Act permits, but we do not anticipate any need to consider substantive changes until the scheduled update that is required by the end of fiscal year 2000.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

ARKANSAS WATER RESOURCE PROJECTS

Question. For the past several years, this subcommittee has directed funds through NRCS to work toward solutions of serious ground water depletion problems in Eastern Arkansas. These areas have included Grand Prairie, Bayou Meto, and Boeuf Tensas. I have also worked through the Energy and Water Subcommittee to engage the U.S. Army Corps of Engineers in these efforts as well. In short, if we don't make better use of our available surface water resources, we will soon deplete the aquifers to the point they will not longer recharge. If there is no solution to this problem, the rice industry in the Mid South will be dead and along with it the economy of the entire region.

Answer. The status of these projects will be provided for the record.

EASTERN ARKANSAS GROUND WATER PROJECTS

Background:

(1) NRCS has been cooperating with the Corps of Engineers (Memphis District and Vicksburg District), State of Arkansas and local sponsors on Eastern Arkansas Ground Water Projects on a routine basis since 1986.

(2) 1986 to 1990: Eastern Arkansas Region Comprehensive Study that included all of eastern Arkansas North of the Arkansas River. Result: Five (5) identified critical ground water decline areas with solutions. NRCS was a partner with COE, ASWCC, and local sponsors.

(3) 1990–1991: Corps of Engineers was directed by Congress to choose one of the identified ground water decline areas as a pilot for further study with planning and implementation anticipated. This was the Grand Prairie area.

(4) 1991–1997: COE, ASWCC, NRCS, local sponsors plan Grand Prairie. NRCS was a partner with the COE, ASWCC and local sponsors in completing this detailed resource plan. NRCS performs the on-farm portion of the planning efforts and the

COE performs the major irrigation canal and pumping plant portion of the planning. Planning has been completed and local sponsors are awaiting funding.

(5) 1990–1991: Corps of Engineers Vicksburg district was directed by Congress to complete a Reconnaissance study for the Boeuf-Tensas Basin. This includes the eastern Arkansas Delta area south of the Arkansas River. This study was completed jointly by COE and NRCS. Result: An identified project but no authorities within the Corps of Engineers to continue planning assistance.

(6) 1992–1993: NRCS was directed by Congress through earmarked funds to begin efforts in planning the eastern Arkansas Water Conservation Projects. Specifically named were Bayou Meto, Boeuf-Tensas and Kuhn Bayou (Kuhn Bayou name has been changed to Point Remove by the local sponsors). NRCS has honored those commitments.

(7) Current situation: Efforts continued for planning on Grand Prairie, Bayou Meto, Boeuf-Tensas and Kuhn Bayou. Detailed accomplishments and goals are provided in the following questions.

GRAND PRAIRIE

Question. The fiscal year 1999 request before the Energy and Water Subcommittee includes $14 million to initiate construction on two of these projects and I will also work to continue the feasibility study on the third. Continued involvement by USDA is also vital: Will you provide an update on NRCS activities related to Grand Prairie?

Answer. NRCS continues to cooperate as a partner with the Corps of Engineers, State of Arkansas and the local sponsors. The Planning document for this project was completed jointly by the Corps of Engineers and NRCS in March of 1997, as scheduled. NRCS completed the on-farm planning portion of this project. NRCS has been working closely during the past year in completing the plan review phase of this project and making additions and corrections as questions and/or issues have arisen.

NRCS provided about $550,000 in financial assistance to landowners within the Grand Prairie and Bayou Meto critical ground water decline area to aid in on-farm water conservation measure installation during 1997 through the Environmental Quality Incentives Program. This program has worked well but available funding through NRCS will meet less than 3 percent of the area's needs. NRCS is looking forward to a continued strong relationship with the Corps of Engineers, State of Arkansas and the local irrigation district as this project moves toward implementation.

BAYOU METO

Question. Will you provide an update on NRCS activities related to Bayou Meto?

Answer. NRCS continues to work with the State of Arkansas and the local Irrigation District to move this project toward implementation. NRCS has completed planning for the on-farm portion of this project. The natural resource inventory has been completed that includes soils data layers, water quality and water quantity analysis, irrigation water needs analysis for more than 3,000 tracts, wildlife inventories, water quality analysis, cultural resources inventory using Geographic Information Systems and a completed environmental assessment for the on-farm portion of the project plan.

This on-farm portion of the plan identified the conservation practice treatment needs for the area as well as additional water diversion needs to support the water needs within the entire basin. NRCS provided about $550,000 in financial assistance to landowners within the Grand Prairie and Bayou Meto critical ground water decline area to aide in on-farm water conservation measure installation during 1997 through the Environmental Quality Incentives Program. This program has worked well but available funding through NRCS will meet less than 3 percent of the area's needs.

Currently, NRCS is establishing a Global Positioning Surveying network across the entire Bayou Meto basin to facilitate future hydrology and hydraulic needs for evaluating irrigation delivery and flood control within the basin. NRCS is looking forward to participating with the Corps of Engineers as they become more actively involved in the Bayou Meto project. Our Arkansas staff is currently transferring data collected by NRCS to the Corps of Engineers to facilitate their work. NRCS and the Corps of Engineers continue to meet for scheduling work and sharing data to help in completing the overall basin plan.

Goals for 1998:

1. Coordination and transfer of data and information from the completed on-farm portion of the area-wide Natural Resource Conservation Plan to the Corps of Engi-

neers to assist the COE with their efforts in moving into the planning phase of the delivery portion of this project.

2. A cooperative agreement and work plan is being developed in cooperation with the Corps of Engineers, Memphis District, to refine and complete the total Resource Conservation Plan for this project. Additional goals for surveying, planning, environmental evaluation, and other data collection and analysis has not been completed at this time. Continued cooperation and teamwork between the COE and NRCS is a certainty.

Anticipated 1998 staffing: 3 staff years and $200,000

Anticipated 1998 EQIP funding: $500,000 for the Grand Prairie/Bayou Meto Basin

BOEUF TENSAS

Question. Will you provide an update on NRCS activities related to Boeuf Tensas?

Answer. To date the local sponsors continue to inform the public of water decline and water quality status as well as promoting solutions to the problems. The Arkansas NRCS irrigation team is developing critical aspects of the project which include digitized soils data layers through the University of Arkansas for use in the NRCS Geographic Information System (GIS), inventories of streams, canals, reservoirs, utilities, farms, cultural resources, wildlife and other important land use features and resource concerns are being identified. A three-party memo of understanding between NRCS, Arkansas Soil and Water Conservation Commission, and the local irrigation district is being jointly developed.

Current Status.—Approximately 50 percent of the inventory has been completed.

Funds spent/obligated and staff time.—A team has been established composed of soil conservationist, GIS specialists, soil scientists, economists and engineers working on various aspects of the project. Approximately 6 staff years will be devoted to this project during the fiscal year. Approximately $400,000 of funding was expended during fiscal year 1997.

1997 Accomplishments

1. Completed compilation of all soils information for 1.2 million acres within the project area.
2. Completed 60 percent of the data inventory for on-farm portions of the project.
3. Completed 30 percent of a preliminary irrigation canal and/or pipeline delivery system for the entire 2 million acre project area.
4. Completed the initial cultural resources inventory.
5. Obtained digital quadrangle sheet map data.
6. Completed draft base map of entire project area.

Goals for 1998

(1) Publish maps of soils information for the 1.2 million acres within the project area.

(2) Complete data inventory for on-farm portions of the project area (60 percent complete now, goal of 100 percent for 1998).

(3) Complete a Water Budget calculation for each tract for the 1.2 million acres within the project area (partially completed, 100 percent goal for 1998).

(4) Complete preliminary Irrigation Canal and/or Pipeline Delivery System for the entire 2 million acre project area (40 percent complete, 100 percent goal for 1998).

(5) Develop public information maps and fact sheets for project sponsor local information/education efforts.

Coordination efforts are underway with the Corps of Engineers for planning activities. Vicksburg District of COE has received authorization to proceed with planning efforts.

Anticipated staffing: 6 staff years and $400,000

COOPERATION WITH OTHER ENTITIES

Question. Will you provide an overview of your ability and willingness to work with the U.S. Army Corps of Engineers, the State of Arkansas, and local sponsors of these projects?

Answer. The partnership formed between the Corps of Engineers and NRCS illustrates how federal agencies should work together, utilizing the strengths of both agencies, to serve the needs of the State of Arkansas, local project sponsors and the citizens within the project area. NRCS will continue to support this strong partnership effort within available resources and funding levels.

NRCS in Arkansas continues to struggle with staffing and funding levels to meet the needs of these critical resource areas. Our current budget projections indicate a reduction in staffing levels as demand for technical assistance increases statewide. This demand for technical assistance is expected to increase.

KUHN BAYOU

Question. On a related matter, will provide an update of NRCS activities related to Kuhn Bayou?

Answer. NRCS has completed the project plan, 100 percent of the field survey needs, identified the land rights and easement acquisition requirements for sponsors to acquire the necessary land rights and easements, reevaluated the cost data and updated information for the local sponsors as they search for funding and completed approximately 30 percent of the project design. The local sponsors and NRCS have entered into a Cooperative Agreement to complete the final design by October of 1998. Coordination continues to occur with the Arkansas Game and Fish Commission.

Design Completion is scheduled for October of 1998.

Funds spent/obligated and staff time: Approximately 1.5 staff year ($100,000) have been expended for technical assistance to the irrigation district during fiscal year 1997. All design activities will be completed prior to the local sponsors acquiring funding for project implementation.

Goals for 1998

1. Complete the structural design for one large water control structure (currently 30 percent, 100 percent fiscal year 1998).
2. Complete the design of the irrigation delivery canals and relift stations (currently 30 percent, 100 percent fiscal year 1998).
3. Incorporate the irrigation pipeline design to assure water delivery to each tract (100 percent completed).
4. Complete 100 percent of the land rights work maps and provide to local sponsors for land rights/easement acquisition (currently 80 percent).
5. Prepare final cost and information/education package for local sponsor efforts in providing information to their clients (20 percent).

Anticipated staffing for 1998: 2 staff years and $100,000.

AGING INFRASTRUCTURE

Question. Your budget includes an increase of $1 million to evaluate the condition of aging infrastructure and you suggest that by fiscal year 2000 you may have identified 2,000 structures in need of significant restoration. In Arkansas, I understand you have identified structures on the Muddy Fork of the Illinois River as part of this aging infrastructure. What other projects in Arkansas have you identified?

Answer. The $1 million in the budget request is not to evaluate the condition of the infrastructure but to provide educational assistance to watershed sponsors concerning their need to examine and repair their older watershed structures. As these dams and structures age, the need for repair or replacement of existing structures becomes critical. The increased funding would enable NRCS to provide important educational assistance to communities and sponsors regarding the safety and status of conditions of existing structures. As part of this budget item, NRCS would utilize the "Training Aids for Dam Safety" package of workbooks and videotapes prepared by the Interagency Committee on Dam Safety. The package was professionally prepared and translated into several languages. It includes modules ranging from technical aspects of site inspections to safety program development. The Interagency Committee has also developed "Federal Guidelines for Hazard Potential Classification of Dams" which could provide the base criteria to classify the most threatening structures. This base criteria is very similar to current NRCS classification criteria and to the Corps of Engineers criteria that was used to inspect the nation's dams in the 1970's.

Regarding the Muddy Fork of the Illinois River Watershed, we recently assisted the sponsors/partners (Washington County Conservation District, City of Lincoln, Arkansas, Arkansas Game and Fish Commission, City of Prairie Grove, Arkansas and the Arkansas Soil and Water Commission) to develop a case study, which takes a snap-shot of the project. The case study examines the benefits planned, benefits realized and future opportunity benefits to encourage the community to take the necessary steps to protect this valuable investment of the infrastructure of which originally utilized a 50/50 local/federal cost-share. Currently, this project provides over $542,000 of annual benefits which include flood prevention, recreation, two municipal and industrial water supplies for the cities of Prairie Grove and Lincoln. Other benefits include fish and wildlife habitat, habitat for endangered species, improved water quality, erosion control, increased employment and fire protection.

This case study conducted on the Muddy Fork did not provide an engineering study/evaluation on the integrity, soundness or remaining life-span of structures in the watershed. Depending on the engineering complexities of the specific structure,

we estimate that it will cost sponsors $30,000 to $50,000 per structure, to conduct a detailed engineering evaluation. This estimate would not include engineering costs for designing the rehabilitation or repair work. We are not aware of any other Small Watershed project sponsors in Arkansas who are considering a similar type of case study.

Question. Could you provide a list of projects in all states already identified?

Answer. Other states where sponsors have developed a similar, snap-shot, case study of which we are aware include California, Georgia, Iowa, Kansas, Mississippi, New Mexico, New York, Ohio, Oklahoma, Tennessee, Texas, Wisconsin and West Virginia. Other sponsors have very likely developed similar fact sheets on their projects to showcase the societal and environmental benefits of other Small Watershed Projects of which we are not aware.

Question. How much of a threat to public health and safety are posed by the structures?

Answer. Dams are classified under the national dam safety hazard criteria and in most states are regulated by state dam safety laws. Not all dams have been classified and some have an increased safety hazard due to development both upstream and downstream of the dams. Dams that do fail, pose a great threat to life and property.

Question. What criteria are you using to classify the most threatened structures?

Answer. There is no classification system which will yield a ranking of which are the most threatened structures. This is very subjective engineering work usually involving risk analysis studies.

Question. Have you initiated actions to correct identified problems and if so, what are they? If not, when do you plan to take corrective action?

Answer. In cases where dam safety problems have been discovered by our field staff, it is our policy to notify the sponsors (owners of the dam) and the state dam safety agency. We have provided technical assistance to the sponsors (owners of the dams) and recommended corrective measures to remove the immediate to life and property. However, beginning October 1, 1998 NRCS will charge sponsors for technical and consultative services for dam rehabilitation or modifications.

Question. When do you plan to initiate action on the Muddy Fork structures?

Answer. We have no plans to initiate any action on the Muddy Fork structures since we have no statutory authority nor funding to take action. The complete responsibility for operations, maintenance, rehabilitation, decommissioning, and modifications is the legal responsibility of the sponsors, owners of the dams. This case study conducted on the Muddy Fork did not provide an engineering study/evaluation on the integrity, soundness or remaining life-span of structures in the watershed. Depending on the engineering complexities of the specific structure, we estimate that it will cost sponsors $30,000 to $50,000 per structure, to conduct a detailed engineering evaluation. This estimate would not include engineering costs for designing the rehabilitation or repair work.

Question. What do you project the ultimate cost may be in bringing these structures up to standard?

Answer. No total cost has been estimated. The first step for the sponsors is to conduct a detailed engineering evaluation on the Muddy Fork structures in order to ascertain an engineer's estimate of the total cost to perform needed remedial work. NRCS has no statutory authority nor funding available for this task.

BACKLOG OF APPROVED WATERSHED INFRASTRUCTURE PROJECTS

Question. You mention there are over $1.5 billion in need for Public Law 566 and Public Law 534 projects. Please provide the number, location, and costs associated with projects in Arkansas on the backlog.

Answer. We will provide that information for the record.

[The information follows:]

ACTIVE PROJECTS IN ARKANSAS WITH THEIR COSTS

Project/name	Obligations to date	Obligation needs
2027, Big Slough	$958,120	.....
2065, Buffalo River Tributaries	698,983	$3,767,700
2052, Flat Rock Creek	10,408,737	1,673,520
2036, Forche Creek	15,711,680	1,121,760
2064, Gould Portion of Grady-Gould	197,422	1,095,540

ACTIVE PROJECTS IN ARKANSAS WITH THEIR COSTS—Continued

Project/name	Obligations to date	Obligation needs
2063, Little Red River	4,005,653	1,254,000
2034, North Fork of Ozan Creek	3,913,758	1,271,100
2053, Ozan Creeks	6,476,273	7,397,460
2042, Poinsett	14,031,395	8,839,560
2054, South Fork	4,386,669	.....
2038, South Fourche	13,858,666	5,823,120
2050, Upper Petit Jean	5,637,321	11,037,480
Total	43,281,240	43,281,240

Question. Could you provide a list of the number of projects by state on the backlog?

Answer. We will provide that list for the record.

[The information follows:]

Number of active Public Law 566 projects by State

Alabama	17
Alaska	1
Arizona	8
Arkansas	12
California	15
Colorado	3
Connecticut	4
Delaware	4
Florida	7
Georgia	20
Hawaii	7
Idaho	14
Illinois	14
Indiana	6
Iowa	20
Kansas	24
Kentucky	21
Louisiana	15
Maine	5
Maryland	4
Massachusetts	3
Michigan	6
Minnesota	4
Mississippi	16
Missouri	17
Montana	4
Nebraska	16
Nevada	1
New Hampshire	1
New Jersey	3
New Mexico	8
New York	7
North Carolina	16
North Dakota	7
Ohio	14
Oklahoma	34
Oregon	5
Pennsylvania	14
PB	3
Puerto Rico	3
Rhode Island	1
South Carolina	20
South Dakota	3
Tennessee	19
Texas	28

Utah	6
Vermont	8
Virginia	14
Washington	12
West Virginia	12
Wisconsin	2
Wyoming	2
Total	530

WATER DISTRICTS BACKLOG

Question. Could you provide information relating to the number of water districts or associations on this backlog who have initiated local tax measures or some similar action in anticipation of the federal share being forthcoming?

Answer. We do not collect information on the number of water districts or associations who have initiated local tax measures or some similar action in anticipation of the federal share being forthcoming.

DIGITIZED SOIL MAPS

Question. You mentioned the need to proceed with categorizing soil types and inputting that information in a digitized format using GIS technologies. Would you please provide an update on the work of the GIS Center for Advanced Spacial Technology in Arkansas in developing soil digitized maps?

Answer. NRCS continues to maintain a strong relationship with the Center for Applied Spatial Technology (CAST) for the development and delivery of digital soil databases and other digital GIS databases for counties in Arkansas. Cooperative efforts between NRCS, CAST, University of Arkansas at Fayetteville, Agronomy Department, and the Arkansas Soil and Water Conservation Commission have resulted in digitizing of sixteen counties in the state. Five additional counties are planned to be completed by the end of calendar year 1998.

NRCS has also developed a cooperative agreement with CAST for placing the Woodruff County, Arkansas Soil Survey on the Internet. This is to be completed by the end of calendar year 1998 and will be the first county in the nation with comprehensive soil information on the Internet.

NRCS is also working with CAST to assist soil and water conservation districts and county governments to implement GIS technology. An example is the Union County Soil and Water Conservation District. GIS specialists from NRCS and CAST are jointly providing assistance to this conservation district to develop a plan to acquire hardware, software, and digital data layers needed to implement a GIS in their office. This GIS will be used by the district to collect and manage water well data for the Sparta/South Arkansas Critical Ground Water Area. NRCS and CAST will work together to provide the district with digital soils data, digital orthophotography, and digital USGS Rastergraphic data for this project.

SUPPLEMENTAL DISASTER ASSISTANCE

Question. El Niño and other storm events in recent months have caused major destruction in many parts of the nation. Does NRCS intend to submit an emergency budget request for disaster assistance?

Answer. The President submitted a budget request of $40 million. NRCS is continuing to gather information on damages.

Question. What, if any, disaster estimates have you received from the affected states?

Answer. At this time we have not received any requests that we have not been able to fund. It is too early to tell in California since the weather has not cleared enough to be able to make any significant estimates. Our people in Florida are just beginning to gain access to various sites struck by tornadoes.

PLANT MATERIALS CENTERS

Question. Could you provide an update on the activities of the Plant Materials Center at Booneville, Arkansas?

Answer. The Booneville plant center has 15 studies that investigate various aspects of using plants for conservation purposes. They include:

1. Evaluation of selected grasses as filter strip cover with applied poultry litter.
2. Improving vegetative cover on reclaimed mined land in Arkansas.
3. Assembly and evaluation of big bluestem *Andropogon gerardi* Vitman.
4. Eastern Gamagrass (*Tripisacum dactyloides*) intercenter evaluation study.

5. Evaluation of 115 plant species for adaptation in West Central Arkansas.
6. Establishment of native warm-season grass species into existing tall fescue sod.
7. Determination of the variation in biomass, yield, and stand persistence among switchgrass breeding lines and standard commercial varieties.
8. Determining biomass dry-matter yields for selected switchgrass breeding lines and standard commercial varieties to be utilized as a bioenergy fuel source. (cooperative with 5 other states and 4 different agencies)
9. Indian grass (*Sorghastrum nutans*) variety evaluation.
10. Native grass establishment and seed increase for the Arkansas Heritage Commission and the White River Irrigation District.
11. Evaluation and selection of a cold hardy Bahiagrass cultivar.
12. Development of a crop residue resource quality database for predicting decomposition in soil erosion models.
13. Roadside establishment of native species for the Arkansas Highway and Transportation Department.
14. Bioengineering stream bank erosion control using plant materials.
15. Hackberry ecotype evaluation for windbreaks and wildlife habitats.

Results and progress in work has been presented at various meetings and conferences. It has also been summarized in technical reports, annual reports, and quarterly newsletters. A big bluestem cultivar release is planned in 2001, and an eastern gamagrass cultivar is planned for 2000.

Question. What is the funding level for the Booneville Center in fiscal year 1998 and what is projected for fiscal year 1999?

Answer. The Booneville Center operates on a budget of $302,000 in fiscal year 1998. $277,000 are from the Plant Materials program and $25,000 are from other sources. A need for $295,000 is projected for fiscal year 1999.

CLEAN WATER ACTION PLAN

Question. USDA and EPA recently announced the Clean Water Action Plan which is designed to carry forward the goals first outlined in the 1972 Clean Water Act. Since more and more attention is given to non-point source pollution, what assurances can you give that this program will not ultimately lead to more federal regulation of farmland?

Answer. The Clean Water Action Plan itself does not propose any new regulations for agriculture beyond what was laid out specifically in the Vice President's directive last October, and those were already underway by EPA before the Action Plan was developed. Further, the Action Plan is limited to what is currently authorized under law. We believe that the Action Plan can help agricultural producers address non-point source pollution through a voluntary, incentive based approach if the necessary funding is made available so USDA can provide the necessary assistance. For example, we believe that technical and financial assistance through EQIP and other farm bill programs can help prevent non-point source pollution at the source, and conservation buffers can help capture sediments and suspended nutrients before they reach surface water bodies.

Question. Similarly, how does your work in the area of Urban Conservation, where there is a tradition of EPA regulation, fit with the more traditional "voluntary" efforts in rural areas?

Answer. NRCS provides technical assistance to clientele in urban areas to address local natural resource concerns. These services are provided on a voluntary basis. While this technical assistance may help our customers address requirements from state, local, or other federal regulations, NRCS is not a regulatory agency and we do not envision any change to this status.

USER FEES

Question. Your budget includes collection of user fees for certain products and services. Please identify the type of fee and amount expected to be collected from each.

Answer. Although we have not fully developed the appropriate fee schedule type details, we anticipate the following types of services may be included under the proposed user fee program:

—Conservation Plans exceeding 16 hours of work;
—Foundation seeds—initial supply;
—Foundation plants;
—Testing for animal waste storage lagoons;
—Inspection and testing of dams;
—Water supply forecasts;
—Climate data;

—SNOTEL data;
—Soil survey publications;
—Wetland delineations; and
—Irrigation systems.

We do not know the exact cost of the services affected, however, the President's budget estimates the cost to be $10 million. This amount currently supports about 133 FTE's.

Question. Which "users" are more likely to be affected?

Answer. Our first priority would be to focus on those customers who profit directly from the services we provide, such as private contracting firms which use our technical interpretations and soil surveys for consultive services. The extent of the customer impact will depend upon the number of fee items that are ultimately implemented.

Question. How do you expect these fees to be received by the conservation community and the farm community?

Answer. Since the majority of our clients have historically received most technical services free of charge from NRCS, we anticipate the new program to be received with some disfavor from constituents. Every effort will be made to collaborate with effected individuals and groups to explain and minimize any adverse impact of the fee for service program.

FARMLAND PROTECTION PROGRAM

Question. I have long been concerned about the loss of farmland to urban conversion and other uses that in time, will greatly reduce the ability to maintain adequate food supplies. You mention that no funds are budgeted for the Farmland Protection Program in fiscal year 1999 due to the fact that the $18 million approved by Congress exhausted the original authorized funds for the program. To what extent has this program been successful in stopping urban conversion of farmland?

Answer. $16.2 million were obligated to 41 programs in 18 States in fiscal years 1996 and 1997. When conservation easement acquisitions are completed, approximately 80,000 acres on 230 farms with an estimated easement value of $134 million will be protected from conversion to nonagricultural uses in part with Federal funds. On an average, Federal matching funds account for about 25 percent of the recorded easement value, and State and local government entities contribute the rest of the 75 percent. State and local government entities also pay for all administrative costs incurred, such as easement acquisition, management, monitoring, and enforcement. As of January 31, 1998, more than 10,000 acres on 47 farms with a total easement value of $18 million were acquired, among which Federal FPP funds contributed $4.5 million (25 percent) and State and local government funds accounted for $13.5 million (75 percent).

Question. If continued, what effect would it have in protecting our long-term ability to produce adequate food supplies?

Answer. One of the most significant features of the Federal Farmland Protection Program is to establish partnerships with State and local government entities. By doing so, the program provides the opportunity to leverage State and local farmland protection efforts. The program has generated lots of discussions as to what the local or State governments can do to better protect their resource base. As of June 1, 1997, about 491,000 acres on 3,321 farms with an easement value of $901 million are permanently protected under various State and local farmland protection programs. If funding for the Farmland Protection Program continued, the benefits would outweigh the costs, not only to ensure long-term food supplies, but also to achieve other goals such as ground water recharge, wildlife benefits, better management of the natural resources, or just for open space and aesthetic values.

Question. What would you project the cost of such a goal might be?

Answer. The Farmland Protection Program (FPP) takes the approach that this is a grass-root effort. It is a locally-led process and FPP funds are used to supplement emerging and existing State, Tribal, and local programs. To continue the same process and at the same rate as in the past few years, we estimate that a minimum of $50 million annually is needed. However, with new State and local programs emerging each year, this program has the potential of being 3 or more times that amount to match State and local funds.

QUESTIONS SUBMITTED BY SENATOR KOHL

CONSERVATION RESERVE PROGRAM

Question. Has the Conservation Reserve Program's wetland restoration option deterred interest in the WRP's 10-year cost share arrangements in Wisconsin and the Nation?

Answer. Specific information on which to base the answer to this question from a Nationwide perspective does not exists. However, in Wisconsin we do have information to show that NRCS personnel and others, while working with landowners, generally find that more landowners turn to the CRP wetlands option than accept the WRP 10-year cost share agreement option. This situation probably occurs throughout the Nation where the landowner has lands that meet the eligibility requirements of both programs. The Wisconsin experience also shows that a landowner may initially seek to enroll in the cost-share agreement option, but when presented with the 30-year and permanent easement option frequently picks one of the easements. In most instances the permanent easement option is the choice.

WETLANDS RESERVE PROGRAM PARTNERSHIPS

Question. Congress has encouraged NRCS to work in partnerships with other conservation entities to implement the WRP. What are the results of your efforts with this directive? Have you identified any program constraints that prevent partnerships?

Answer. The partnership effort continues to be a great success. Private and governmental conservation entities have become a critical factor in successful program delivery. For instance, in Wisconsin the Wisconsin Waterfowl Association is actively assisting with the identification of projects and with planning and completion of restoration activities. The National Fish and Wildlife Foundation has assisted with project identification and funding. The Department of Natural Resources is partnering in the acquisition and implementation of several important restoration projects. The Fish and Wildlife Service is assisting with project identification, design and construction. The Forest Service is providing help in completion of surveys and boundary marking. Throughout the nation a host of other entities are providing assistance (e.g., Ducks Unlimited, The Nature Conservancy, Delta Wildlife Foundation, Pheasants Forever, California Waterfowl Association, Minnesota Waterfowl Association, and a number of state agencies).

The lack of authority under the WRP to provide CCC funds to Federal or State agencies for salaries and expenses is a major program constraint. If we could reimburse these entities with CCC funds the added valuable expertise that we could enlist would greatly increase program effectiveness. The WRP statute does not specifically address the use of cooperative agreements as an aspect of program implementation. This continues to be cause for concern for some who would be more comfortable with specific authority in the statute and not so much reliance on appropriations act report language.

CONSERVATION RESERVE PROGRAM IN WISCONSIN

Question. As I mentioned in my opening statement, the State Department of Natural Resources lent staff to the NRCS offices to help complete the Conservation Reserve Program sign up in Wisconsin. What are you going to do to make sure it doesn't happen again?

Answer. NRCS views the willingness of federal and State wildlife and forestry agencies, and local wildlife organizations to cooperate and work along side with USDA agencies during the 15th CRP sign up, as a good sign that USDA is sincere in its efforts to forge a partnership in improving the environment. It's a true testimony to the locally led process, whereby local people provide input into a USDA program(s). The Federal Agriculture Improvement and Reform Act of 1996 provided a provision for a locally led initiative. The 15th CRP signup proved that other federal and State agencies and organizations stands ready to assist USDA in implementing Farm Bill programs.

Many people, besides staff from the Natural Resources Conservation Service and the Farm Service Agency, assisted during the sign up period for both the 15th and 16th Conservation Reserve Program during 1997. This was a collaborative effort with many State agencies and conservation organizations. We strongly encourage, partnership efforts such as this in the delivery of these programs.

QUESTIONS SUBMITTED BY SENATOR BYRD

STATUS OF POTOMAC HEADWATERS PROJECT

Question. Please provide a status report on the Potomac Headwaters Land Treatment Watershed Project, complete with pertinent timetables and participation rates.

[The information follows:]

Contracts signed 1997	116
Contracts signed 1998	21
Carryover applications 1997	121
New applications 1998	46
Total contracts and applications	304

Federal funds expended in fiscal year 1997 was $2,116,241. Federal funds available for contracts in fiscal year 1998 are $2,230,000.

Recently updated projected funding costs are as follows:

Fiscal year	Federal financial assistance	Federal technical assistance	Total Federal	State	Operator	Total project
1997	$2,116,300	$300,000	$2,416,300	$423,260	$1,693,040	$4,532,600
1998	2,230,000	900,000	3,130,000	446,000	1,784,000	5,360,000
1999	300,000	700,000	1,000,000	60,000	240,000	1,300,000
2000		700,000	700,000			700,000
2001		300,000	300,000			300,000
2002		200,000	200,000			200,000
2003		200,000	200,000			200,000
2004		60,000	60,000			60,000
2005		60,000	60,000			60,000
2006		60,000	60,000			60,000
2007		30,000	30,000			30,000
Totals	4,646,300	3,510,000	8,156,300	929,260	3,717,040	12,802,600

The participation rate based on the need for agriculture waste storage facilities is 108 percent. The plan identified a need for 162 facilities. At this time requests have been received for 337.

A supplemental watershed agreement is being prepared between NRCS and sponsors to accommodate this increase in participation.

Question. How does participation in this project compare with similar projects in other watersheds?

Answer. Participation rates in similar projects include Opequon Creek Watershed West Virginia, with 70 percent of planned agriculture waste facilities.

Question. Please provide a full list of all flood control projects in West Virginia that are currently under construction, the cost associated with that construction, and a timetable for the completion of each project.

Answer. The following is a list of flood control projects under construction in West Virginia, including the federal construction cost and the time table for completion:

1. Cranberry Creek Channel Improvement Project, Raleigh County
   —Federal Cost: $16,355,289
   —Completion Date: May 1998
2. Little Whitestick Channel Improvement Project, Raleigh County
   —Federal Cost: 5.0 million
   —Construction bids received on March 3, 1998
   —Completion Date: August 2000
3. Lost River Dam No. 27, Hardy County
   —Cost $4,446,435
   —Completion Date: August 1998
4. Upper Mud Recreation Facilities, Lincoln County
   —Cost $1,219,142
   —Completion Date: June 1998.

Question. Please provide a full list of flood control projects in West Virginia for which feasibility studies have been completed.

Answer. A list of all Public Law 566 and Public Law 534 projects in West Virginia that are currently being installed will be provided.

Public Law 566 projects currently being installed

Brush Creek
Elk Twomile Creek
Headwaters of Indian Creek
Howard Creek
Little Whitestick-Cranberry Creeks
Mill Creek
Opequon
Piney Creek-Soak Creek
Teter Creek
Upper Buffalo Creek
Upper Mud River
Wheeling Creek

Public Law 534 projects currently being installed

Potomac:
- Cacapon River
- Potomac headwaters
- Lost River
- Lunice Creek
- New Creek-Whites Run

North and South Mill Creek
North River
Patterson Creek
South Branch Upstream of U.Tract
South Fork River

EQIP IN WEST VIRGINIA

Question. Please provide a status report of the Environmental Quality Incentives Program in West Virginia.

Answer. In fiscal year 1997, West Virginia received $2.0 million to carry out the EQIP program. Over 990 applications were received for the program, requesting about $6.7 million in financial assistance. Just over $1.8 million financial assistance was obligated in 362 EQIP contracts with eligible producers. These contracts will treat natural resource concerns and environmental problems on over 24,000 acres. The average contract was for $5,000 and will treat 68 acres. The program was primarily delivered in four priority areas: Mid Ohio River Basin; Central West Virginia Hills; Potomac Headwaters; and the Little Kanawha River Basin.

In fiscal year 1998, $1.8 million has been allocated to West Virginia. Of this amount, nearly $1.4 million will be used for financial assistance to eligible West Virginia producers. The program will be focused in the same priority areas as in fiscal year 1997.

ALDERSON, WEST VIRGINIA PLANT MATERIALS CENTER

Question. Please provide a status report on construction of the Plant Materials Center in Alderson, West Virginia.

Answer. Construction activities are underway in Alderson, WV. Development of the building site was completed in September, 1997. Plans and construction drawings for the seed barn are complete, and the construction contract was been awarded to an 8A construction firm. Anticipated date of issuance of the Notice to Proceed with construction is April 1, 1998, but the notice could be issued earlier if weather conditions permit.

SUBCOMMITTEE RECESS

Senator COCHRAN. This concludes today's hearing. We will have another hearing on Tuesday, March 3, at 10 a.m., in this room, SD–138 of the Dirksen Senate Office Building, to hear from Department of Agriculture witnesses regarding the budget request for the Rural Economic and Community Development Programs.

Until then, the subcommittee stands in recess.

[Whereupon, at 11:10 a.m., Thursday, February 26, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 3.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, MARCH 3, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Bumpers, and Harkin.

DEPARTMENT OF AGRICULTURE

STATEMENT OF JILL LONG THOMPSON, UNDER SECRETARY, RURAL DEVELOPMENT

ACCOMPANIED BY DENNIS KAPLAN, BUDGET OFFICE

RURAL UTILITIES SERVICE

STATEMENT OF WALLY BEYER, ADMINISTRATOR

RURAL HOUSING SERVICE

STATEMENT OF JAN E. SHADBURN, ADMINISTRATOR

RURAL BUSINESS-COOPERATIVE SERVICE

STATEMENT OF DAYTON J. WATKINS, ADMINISTRATOR

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION CORPORATION

STATEMENT OF ROBERT ARMSTRONG, EXECUTIVE DIRECTOR

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. We are pleased to continue our review of the President's budget request for the next fiscal year. This morning, we are specifically reviewing that portion of the budget which funds the Department of Agriculture's rural development programs.

We are pleased to have with us the Under Secretary for Rural Development, Jill Long Thompson, and other witnesses who have responsibilities in related areas. I will invite the Secretary to make whatever comments she would like to make and introduce the panel. First of all, I am going to call on my good friend the distin-

guished Senator from Iowa, Mr. Harkin, for any opening statement he might have.

Senator Harkin.

STATEMENT OF SENATOR HARKIN

Senator HARKIN. Mr. Chairman, thank you very much.

I want to welcome this distinguished panel here again this morning because what you all deal with really is just absolutely critical to the quality of life in all of rural America, kind of small towns that dot my State of Iowa and, indeed, the State of Mississippi too. What you do really is the lifeblood of how people live and whether they have good jobs, and places to live, and electricity, and telecommunications, clean water, wastewater facilities. These are all the things you deal in.

Coming from a small town myself where only just a few years ago they tested all of the wells in my town including the well that I drank from all my life, and none of the wells tested fit to drink, which a lot of my political opponents always pointed out that is probably what was wrong with me, drinking that water all my life.

We finally got good water through the help of your agency. This predated your time being there. I am just saying that it meant a lot to people there to have that and now we have wastewater facilities there also. The rural business cooperatives that we have seen spring up have just been a dramatic engine for economic growth in our country.

I just want to take my few minutes, Mr. Chairman, and just again return to a topic that you are very familiar with I know, and I know Senator Bumpers always hits me a little bit about this because I always bring it up all the time, that is: the need to increase our support for getting new nonfood, nonfeed agricultural products into the market. I think this is one of the best ways to increase not only farm income, but rural income, to create jobs and foster economic growth in rural America.

To that end, Mr. Chairman, it has been a bipartisan effort. I am speaking specifically here of AARCC. I first started working on it with Ed Madigan when he was in the House. I greatly appreciate, Mr. Chairman, especially the support that you have given as chairman of this subcommittee to AARCC and also that Senator Bumpers has also provided over the years.

I just want to emphasize once again the importance of the Alternative Agricultural Research and Commercialization Corporation and the success it has had with its limited funding. It leverages. It has leveraged private capital. From $3 to $4 of private money has been invested for every $1 of Federal money. That is pretty darned good leveraging. That means that AARCC has spurred some $120 million of private investment in new agricultural products.

Again, these are always open for interpretations and whether it is good or not, but I think it can be safely said that AARCC has created over 5,000 new jobs, it has generated a new demand for over 250,000 acres' worth of farm commodities. Again, AARCC is set up so it gets repaid as those new markets grow. It is supporting a wide range of new products from relatively low technology to high technology, but all based on farm materials. Of course, I brought

my crop with me here. Mr. Chairman, this is a tabletop. It is really nice with my name on it. [Laughter.]

It really looks like granite. They are making those now. That was one of the investments made by AARCC.

You are just in time to hear my thing on AARCC. How lucky can you be? [Laughter.]

Your timing is perfect.

Senator BUMPERS. Can you start over again?

Senator HARKIN. I just wanted you to see. You can have one of these tables too. If you are a nice guy, you can have one of these tables too. Find out how much they cost.

These are some of the new products. I know in looking at your testimony, Secretary Thompson, we are now importing wall panels made of wheat straw from England. Can you imagine that? We are importing wall panels made of straw from England. We are the wheat producers in the world, not England, so I am thinking this ought to be an American product. If they can do it there and we can ship it all the way here and it can be competitive, it makes no sense to me why we cannot be spurring this here, a lot of things: industrial oils and greases, cleaning products, packaging materials.

Senator Daschle told me last week about using millet. Now, you know these little plastic peanuts that you get in boxes, you know, that packages things up and stuff? It takes I do not know how many thousands of years for that to decompose and all of that kind of stuff. They now have a millet that they use.

Senator COCHRAN. Biodegradable?

Senator HARKIN. Biodegradable totally. The good thing about it is you can ship a small box of this. You can put it through a microwave or something like a corn popper, and it pops it up so you do not have to have big boxes to ship this stuff in.

Senator COCHRAN. Then you can eat it?

Senator HARKIN. Then you can eat it. Put it on your cereal after you are through emptying the box out. These are the good things that we can work with, biomaterials, all of that. Anyway, we are moving forward. It is a snail's pace because of the shortage of funds. I have argued for years that AARCC should not be funded at the $10 million level. It could effectively use at least twice that much next year and more thereafter.

Really, again I know I sound like a broken record on this, but just the history of it has been great and we are moving ahead in it. I think that there is just a lot of promise out there, especially with the leveraging of the private money that we get. I just want to thank Secretary Thompson, I want to thank Mr. Armstrong and all of the people at AARCC who have worked so diligently. I think you are doing a great job, and I just hope that we can provide the resources.

I know we are under a bind with the budget and the money that we have. Mr. Chairman, I am very respectful of that, and I know you have a heck of a time trying to balance all of those things. I just hope that we can come up with some more funding for AARCC to spur more of these kinds of product developments.

Thank you very much, Mr. Chairman, for letting me do my annual thing here on AARCC.

Senator COCHRAN. Thank you. Well, you have done it very well this time. We appreciate the props.

We are also delighted Senator Bumpers is here, the distinguished ranking member of the subcommittee.

Senator, I have already introduced Ms. Thompson and welcomed her to the hearing, but we would be delighted to hear any comments or opening statement that you might have.

STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Mr. Chairman, I will insert my opening statement into the record.

I do want to acknowledge that Secretary Thompson came down to Arkansas last year to College Station for an announcement. College Station is an ultrapoor section. It is an unincorporated village outside Little Rock that was devastated by a tornado—400 poor black citizens. Secretary Thompson's appearance there on behalf of the Department of Agriculture and the U.S. Government was a real shot in the arm to those people.

I want to personally thank her again, and also Mr. Shadburn and Mr. Beyer and Mr. Romano, who is here this morning, thank all of them for the attention they gave us. This is a particularly appropriate time to thank them for that because that tornado was, I believe, a year ago the day before yesterday or Saturday, I forget which. I just wanted to publicly acknowledge your compassion and your attention to an area not just there, but Arkadelphia which is going to be a brand new city.

Incidentally, Harry Thomason, you know, who is Linda Bloodworth Thomason's husband and producer of some note, "Coach" and a host of other shows, has taken it on himself to try to restore—he wants to restore Arkadelphia, which I think was his home, to make it just like it was around the turn of the century, particularly the courthouse and a few other buildings there.

I have seen tornadoes devastate towns in my State. When I was Governor, I used to go out. At first I would not go because I thought it sort of looked like I was trying to take a political advantage of other people's misery. I found out they not only want you there, but it is a great comfort for somebody in authority, an authoritative position, to show up when tornadoes occur.

I can name communities in my State that were just leveled which are now brandnew cities. I mean, except for the tragedy of the deaths it was almost a good thing because they are just beautiful cities. Arkadelphia will not be any exception. College Station is going forward thanks to you with things they never dreamed would ever come their way.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator.

Ms. Thompson, we appreciate your being here again. Please introduce the panel of witnesses who are with you and proceed as you like.

STATEMENT OF JILL LONG THOMPSON

Ms. THOMPSON. Thank you. Thank you all for your very kind words. I am very appreciative. I must tell you that for me this is a labor of love, and working with you over the past 2½ years and

reaching out and working with communities across the country has been just 100 percent pleasure for me. Again, so I thank you very much.

With me today are Dayton Watkins, who is the Administrator of the Rural Business Cooperative Service; Dennis Kaplan, who is with the Office of Budget and Program Analysis; Jan Shadburn, with the Rural Housing Service; Wally Beyer with the Rural Utility Service; and Bob Armstrong with the Alternative Agricultural Research and Commercialization Corporation. It is quite a mouthful.

If it pleases the chairman, I will simply summarize my remarks and submit the statement for the record.

Senator COCHRAN. We appreciate your giving us the statement in advance and it will be printed in the record in full. You may summarize it as you like.

Ms. THOMPSON. Well, Mr. Chairman, I am very pleased to be here today and to present to the subcommittee the "President's Budget Request for Rural Development" for fiscal year 1999. This particular request reflects the budget's strong commitment to the needs of rural areas even when balancing the Federal Budget has been his highest priority.

I think the President's commitment to balancing the budget, as well as the commitment of both the House and the Senate, to deficit reduction and balancing the budget have resulted in unprecedented economic growth. I think it really presents a very important lesson to us as a nation. The lower deficit has generated the lowest interest rates in decades, and that has lowered the cost of capital, which has generated new investment in plant and equipment and it has created millions of new jobs.

In addition, the level of home ownership in this country has reached an alltime high of 66 percent, and perhaps the best news is that the misery index, the combination of unemployment and inflation, is at its lowest level in 30 years.

Almost all of the new jobs that have been created are in the private sector. Government has been a very important partner in this expansion, but its role has been to create an environment of investor confidence and this is the way that our economy works best. This is also the role we think appropriate in rural areas to help create the environment that generates the confidence and private investment.

I wish that I could report today that the full benefits of the economic expansion have reached rural areas, and we are beginning to see some improvement in the net creation of new jobs and some increases in salaries, but not as much as I would like to see. After a full decade of decreasing real income, rural wages are beginning to increase because of the tight labor markets.

However, income levels in rural areas continue to lag behind those in urban areas and rural areas continue to experience very high poverty rates. The rural median household income is only about 77 percent of that in urban areas and additionally the median household income for African-American and female headed households is only about 50 percent of the overall rural median income.

One disturbing fact is that employment still does not always lift a family out of poverty in rural areas. A typical rural wage is below

the poverty line and is not sufficient to support a family of four. Poverty in rural areas is 2 percentage points higher than it is in urban areas, 15.6 percent compared with 13.4 percent, respectively. Poverty in the rural South is just under 20 percent.

Probably, the most devastating effect of rural economies is that 3.2 million rural children live in poverty and 48 percent of the African-American children in rural areas live in poverty. It is very difficult for these children to attain the educational levels the will be necessary to compete for jobs in this information technology-dominated economy.

These are the reasons that the President is committed to continuing Federal investment in rural areas. Yet, he is cognizant, as we are at USDA, that the Federal Government alone cannot solve these problems. An additional benefit of the economic expansion is that interest rate-sensitive programs administered by the rural development area are 40 percent less costly than they were in fiscal year 1993. We are in the enviable position of being able to deliver these programs to rural America at less cost.

The budget request for the programs administered by rural development agencies totals $10.4 billion, requiring $2.2 billion in budget authority. These are increases of about $540 million and $110 million, respectively, over the levels enacted for fiscal year 1998. I will briefly, if you would like, go through the three agency areas and highlight the requests in those three agency areas.

RURAL UTILITY PROGRAMS

If you would prefer that I be briefer, just indicate so and I will be glad to cut it even shorter. In the Rural Utilities Service, the programs that are administered by rural development contribute significantly to the economic viability of rural communities. Perhaps, none are more important than the programs that provide the basic infrastructure investment because economic growth and vitality cannot occur without the systems that provide water and sewer, electric, and telecommunications service.

The telecommunications and electric industries throughout this country are in the vortex of change and a monopolistic supply is giving way to open competition. While the generally held perception that competition will drive down cost may be true for the two industries from a macroeconomic perspective, we have to be vigilant that rural areas are treated fairly in the process.

The Telecommunications Deregulation Act continued the universal service concept and that ensures that rural areas will continue to have access to the telecommunications network at a reasonable cost. The administration is in the process of addressing similar issues for electric service. A lack of consumer density in rural systems combined with the fact that construction costs in rural areas is virtually the same as in urban areas means the cost per rural consumer is much higher.

The budget authority requested for the Electric and Telecommunication Loan Program is $40.3 million, which will support lending levels totaling $1.7 billion. When we factor in the private capital that accompanies this investment, the total investment in electric and telecommunications grows to $5.1 billion.

Due to the growing demand for electric loans, we are also proposing a new Treasury rate direct loan program of $400 million, which would require budget authority of only $840,000. The reason that we are proposing this program rather than increasing the request for the Federal financing bank is that the FFB financing has traditionally been used only for generation and transmission loans and distribution borrowers have expressed some reluctance to use the FFB authority because of the additional time needed to process the loans.

The budget authority requested for telecommunications loans, including the rural telephone bank, totals $10.3 million. As you all are very well aware, there are still many rural areas that cannot access the full benefits of modern telecommunications because the basic switching equipment has not been modernized.

Also, as you are very familiar, in prior years we have proposed immediate privatization of the rural telephone bank, but because of concerns of the bank's ability to suddenly begin operating effectively as a private lending institution in a deregulated environment without a transition period, the administration is now proposing that the bank operate as a performance-based corporation. As such, it would be required to set specific targets and strategic goals to be achieved in not less than 10 years.

For the distance learning and telemedicine loans and grants, the budget requests a lending level of $150 million and a grant level of $15 million. The request for grants is an increase of $2.5 million. The loan request is the same as enacted for 1998.

For water and waste, we are requesting $1.3 billion in loans and grants for this program, which is a slight increase over the amount made available in 1998. This level of funding would provide new water service to about 500,000 rural residents, improved water service to an additional 400,000 rural residents, provide new or improved waste disposal service to about 410,000 rural residents, and in the process support about 30,000 jobs primarily in the construction trades.

RURAL HOUSING PROGRAMS

In the Rural Housing Service, we believe very strongly that no single factor contributes more to community stability than does home ownership, and even though home ownership is at an alltime high there are still some very serious needs that are not being met in housing.

The budget request for the Rural Housing and Community Facilities Program is $5.5 billion, requiring $895 million in budget authority and 65 percent of that is for rental assistance. This represents an increase in the program level of $300 million over the 1998 level and an increase of $27 million in budget authority. The request for the home ownership program, which is the flagship program, is $4 billion of which $1 billion is for direct loans, the same amount enacted for 1998. The average income for families borrowing under this program is $17,000, which is barely above the poverty level.

For the Guaranteed Ownership Program, we are requesting $3 billion. Together these two programs would finance over 60,000 new and improved homes. In addition, we are again proposing leg-

islation that would permit use of the Guaranteed Loan Program for refinancing direct loans and that is because if these loans could be made available to borrowers who do not have enough equity in their homes to refinance in the private market but are paying interest rates in excess of the existing market rates, then they would be allowed to refinance their homes with this program. We are currently prohibited from refinancing direct loans.

For multifamily housing and rental assistance, we are requesting $250 million of which $100 million is for direct loans, requiring $48 million in budget authority, which is a decrease from the level enacted for 1998. This level of funding will provide 1,100 new units and will provide for the rehabilitation of just under 5,000 units. The average income of tenants in this program is $7,300 a year. We are also requesting $150 million for the Guaranteed Multifamily Housing Program, which has operated as a pilot program for the past 2 years. This program serves tenants with higher incomes up to 115 percent of an area median income.

For rental assistance, the budget requests $583 million. That is a $42 million increase over 1998. Of this amount, $544 million is needed for expiring contracts and the remainder will be used for rehabilitation and construction and servicing, as well as for farm labor housing.

We are again requesting $26 million for the Mutual and Self-Help Program, which as you know provides technical assistance required for families engaging in the construction of their own homes. For the community facilities programs, we are requesting a total of $418 million, $200 million for direct loans, $210 million for guaranteed loans, and $8 million for grants. As you know, these programs finance a wide variety of facilities throughout rural America.

RURAL BUSINESS-COOPERATIVE PROGRAMS

In the Rural Business-Cooperative Service, we believe that the key to improving economic conditions in rural America is the creation of business opportunities and jobs and the role of the Federal Government is to assist in creating the environment that generates the private investment.

Our budget request for the Rural Business-Cooperative Service Program totals $1.2 billion, which requires $77.6 million in budget authority for the flagship program, guaranteed business and industry loans we are requesting $1 billion and $50 million for direct B&I loans.

Direct lending will be targeted to those traditionally underserved areas of the country for the rural economic development loan and grant programs. We are requesting $15 million in loans and $11 million in grants, $35 million for intermediary relending, and $40.3 million for the rural business enterprise grants.

For assistance to cooperatives, as Senator Harkin so eloquently stated, we are seeing quite an interest in developing cooperatives in a variety of areas across the country. We are requesting $1.7 million in rural cooperative grants and $2 million for Federal, State research on cooperatives.

Research on cooperatives has not kept pace with the growth in cooperatively owned businesses, and particularly with respect to

nontraditional cooperative activity such as processing and retail and export cooperatives. In addition, we are also requesting $2 million for the appropriate technology transfer for rural areas programs.

For the Alternative Agricultural Research and Commercialization Corporation, we are requesting a total of $10 million, $8.5 million for investments and $1.5 million for administrative costs. This level of funding is expected to help bring six new products to market and would create about 1,000 new jobs in rural America.

SALARIES AND EXPENSES

Finally, the request for salaries and expenses for rural development is $527 million and that is an increase of $18 million over 1998. There are several reasons for the increase. First, because of all of the organizational changes that have occurred within rural development over the past few years, we have lost a disproportionate share of employees at the lower level of employment. Even though we have used every means available to keep them, that just has not happened. That has caused our average salary costs to increase significantly. While our costs are less than they would have been without those changes, they are still more than they are going to be in this fiscal year 1998.

If sufficient funding is not available for salaries and expenses, then it will be necessary to execute a reduction in force to remain within our available funding levels. That action would only exacerbate the problem, because a RIF will in turn eliminate additional lower paying positions and that drives the average salary cost even higher. The vast majority of these staff are in our field offices and are primarily responsible for delivering the programs that we are discussing today. I feel that we really need them to continue doing the work that they are.

Another reason for requesting an increase is that in order to retain our employment level through 1998 we have deferred investment and information technology and training, and that is something that we cannot afford to continue to do. Investments in information technology and training are means through which we can realize additional efficiencies, but there are some initial investment and startup costs to accomplish that.

With that, Mr. Chairman, I will conclude my formal remarks and we will be glad to answer any questions that you or the committee have.

PREPARED STATEMENTS

Senator COCHRAN. Thank you, Ms. Thompson. Your complete statement will be made part of the record along with the statements of the other witnesses.

[The statements follow:]

PREPARED STATEMENT OF JILL LONG THOMPSON

Mr. Chairman, I am very pleased to be here today to present to the subcommittee the President's Budget request for Rural Development for fiscal year 1999. This request reflects the President's strong commitment to the needs of rural areas even when balancing the Federal Budget has been his highest priority. I think the President's commitment to balancing the budget and the resulting unprecedented economic growth presents us with a very important lesson. The lower deficit has gen-

erated the lowest interest rates in decades, thereby lowering the cost of capital which has generated new investment in plant and equipment and created millions of new jobs. In addition, the level of home ownership in this country has reached an all time high of 66 percent. Perhaps the best news is that the "misery index", the combination of unemployment and inflation, is at its lowest level in 30 years.

Almost all of the new jobs that have been created are in the private sector. Government has been a very important partner in this expansion, but its role has been to create an environment of investor confidence, and this is the way our economy works best. This is also the role we think appropriate in rural areas, to help create the environment that generates confidence and private investment.

I wish I could report to you that the full benefits of this economic expansion have reached rural areas. We are beginning to see some improvement in the net creation of new jobs and some increase in rural salaries, but not as much as I would like to see. After a full decade of decreasing real income, rural wages are beginning to increase because of tight labor markets. However, income levels in rural areas continue to lag behind those in urban areas, and rural areas continue to experience very high poverty rates. Rural median household income is only about 77 percent of that in urban areas. Additionally, median household income for African American and female headed households is only about 50 percent of the overall rural median income. One disturbing fact is that employment still does not always lift a family out of poverty in rural areas. A typical rural wage is below the poverty line and is not sufficient to support a family of four. Poverty in rural areas is 2 percentage points higher than it is in urban areas, 15.6 percent and 13.4 percent respectively. Poverty in the rural south is just under 20 percent. The unemployment rate is 16 percent higher in rural areas than in urban areas. And as I stated last year, the most devastating effect of rural economies is that 3.2 million rural children live in poverty and 48 percent of the African-American children in rural areas live in poverty. It is very difficult for these children to attain the educational levels that will be necessary to compete for jobs in this information technology dominated economy.

These are the reasons that the President is committed to continuing Federal investment in rural areas. Yet, he is cognizant that the Federal government alone cannot solve these problems. I recently had an opportunity to review a report prepared by a USDA Task Force on rural poverty. Its authors concluded that a healthy rate of economic growth is essential to the alleviation of rural poverty, but it is not {by itself} a sufficient condition to bring the adjustments needed. The report was written in 1961.

I think the authors also had the answer to much of the problem of rural poverty when they stated "the problems of rural economic stagnation are so deep-seated and the effects are so widespread on all community facilities, resources and attitudes, that the only development program that will work is one that attacks many problems simultaneously, and in depth". The President recognized this approach when he created the Empowerment Zone/Enterprise Community (EZ/EC) legislation, the concept of which is to address the structural economic problems comprehensively and in depth.

As noted in the President's Budget, the Kentucky Highlands, one of the three rural empowerment zones, has used $11 million of its EZ funds to expand the amount of investment capital. From the amounts obligated to date, they have leveraged an additional $38 million in private capital for 11 new manufacturing enterprises creating 575 new jobs, and they have commitments to create an additional 1,600 jobs. According to one of the EZ/EC Board Members, the current unemployment rate for the three county area is below 6 percent for the first time in memory. The President's budget provides for a second round of EZ designations, five for rural areas and 15 for urban areas. This comprehensive and in depth approach was also part of the Administration's thinking in the Rural Community Advancement Program (RCAP) which we have discussed previously with the subcommittee. The budget again requests the authority to transfer funds among the program areas within RCAP to provide us the flexibility to address problems as they need to be addressed. The budget also provides for the 3 percent set-aside of the RCAP funding for federally recognized Indian tribes as authorized by the 1996 Farm Bill.

RURAL DEVELOPMENT BUDGET REQUEST

An additional benefit of the economic expansion is that the interest rate sensitive programs administered by Rural Development are 40 percent less costly than they were in fiscal year 1993. We are in the enviable position of being able to deliver these programs to rural America, at less cost. The budget request for the programs administered by the Rural Development agencies totals $10.4 billion requiring $2.2 billion in budget authority. These are increases of about $450 million and $110 mil-

lion respectively over the levels enacted for fiscal year 1998. This includes the program level and budget authority, $2.8 billion and $715 million, requested for the programs under RCAP.

RURAL UTILITIES SERVICE

Mr. Chairman, each of the programs administered by Rural Development contributes significantly to the economic viability of rural communities, but perhaps none are more important than the programs that provide basic infrastructure investment. Economic growth and vitality cannot occur without the systems that provide water and sewer, electric, and telecommunications services. The presence of these systems does not guarantee economic growth. But one thing is an absolute certainty: growth and stability will not occur without them. These programs are responsible for much of the economic growth that has occurred in rural areas during the past fifty years, but as you well know, many rural areas still have not prospered and many of the infrastructure systems that we have built are now old and they need to be replaced. These programs are still very much needed in rural America, but the measurement of need has shifted from prior years when success was the number of farms or households connected to electricity and telephone systems for the first time to the amount of economic activity generated by these investments.

ELECTRIC AND TELECOMMUNICATIONS

The telecommunications and electric industries throughout this country are in the vortex of change. Monopolistic supply is giving way to open competition and while the generally held perception that competition will drive down cost may be true for the two industries from a macro-economic perspective, we must be vigilant that rural areas are treated fairly in the process.

The Telecommunications Deregulation Act continued the "universal service" concept which ensures that rural areas will continue to have access to the telecommunications network at reasonable cost. The Administration is in the process of addressing similar issues for electric service. The lack of consumer density in rural systems, combined with the fact that construction cost in rural areas is virtually the same as in urban areas, means the cost per rural consumer is much higher. On average, revenue per mile for urban utility systems is 8 times that of rural areas. This, of course, translates to higher rates in rural areas and puts rural systems at a competitive disadvantage with neighboring systems. We are working with electric borrowers to ensure they are in the best possible competitive position and to ensure that our loan security is protected when the electric industry is deregulated.

BUDGET REQUEST

The budget authority requested for the electric and telecommunication loan programs is $40.3 million. This will support lending levels totaling $1.7 billion and factoring in the private capital that accompanies this investment, the total investment in electric and telecommunications grows to $5.1 billion. This level of investment will provide new or improved service to at least 1.8 million residents of rural areas and in the process support over 34,000 jobs primarily in the construction trades.

Due to the growing demand for electric loans, we are also proposing a new Treasury rate direct loan program of $400 million which requires budget authority of only $840,000. We are proposing a new direct loan program rather than increasing the request for the Federal Financing Bank (FFB). The reason for this request is, since FFB financing has traditionally been used only for generation and transmission loans, distribution borrowers have expressed some reluctance to use the FFB authority because of the additional time needed to process the loans. This new authority requires authorizing legislation which will be submitted to Congress in the very near future. The total budget authority requested for electric loans is just under $30 million.

The budget authority requested for telecommunications loans, including the Rural Telephone Bank, totals $10.3 million. There are still many rural areas that cannot access the full benefits of modern telecommunications because the basic switching equipment has not been modernized. Most of the exchanges in this category for the past few years are being sold and the new owners are installing newer equipment. We do not provide financing for the purchase of these systems, but we are financing the new equipment, and require that the equipment that we finance will provide the capability to provide subscribers full access to modern telecommunications.

As you know, in prior years the Administration has proposed immediate privatization of the Rural Telephone Bank. Because of concerns of the Bank's ability to suddenly begin operating effectively as a private lending institution in a deregulated environment, without a transition period, the Administration is now proposing the

Bank operate as a performance based corporation. As a performance based organization, the Board and managers would be required to set specific strategic and financial goals, one of which would be to achieve privatization in not less than ten years, and more quickly if possible. The Bank would have the authority to hire its own personnel, and funding for salaries and expenses and the subsidy cost of loans would be requested from balances in the liquidating account. Legislation is necessary to effect this proposal.

DISTANCE LEARNING/TELEMEDICINE LOANS AND GRANTS

For Distance Learning/Telemedicine loans and grants the budget requests a lending level of $150 million and a grant level of $15 million. The request for grants is an increase of $2.5 million. The loan request is the same as enacted for 1998. The demand for this program continues to grow, not only because of the education and medical benefits that it provides rural areas, but also because more and more people are beginning to realize its potential as an economic development tool. As firms are assessing areas for opportunities to locate facilities in rural areas, among the first questions asked are about the quality of education and health care. This program provides the opportunity to rural areas to reap immediate benefits in education and medical care, but the presence of these capabilities also provides the longer term benefits of attracting new growth.

WATER AND WASTE DISPOSAL LOANS AND GRANTS

Mr. Chairman, the value and benefits of this program are best demonstrated by comments made in 1995 by the manager of a water system in the southwestern part of the country—"Thanks to the Department of Agriculture, we have running water in our faucets. We hauled water in barrels and water tanks until you gave us a loan and grant * * * for the first time since the town was founded the citizens were able to get a drink of water from a faucet. Without your help, it never would have happened." This statement was made following completion of a Water 2000 project awarded in 1995.

The 1980 Census reported 2.1 million rural Americans did not have any drinking water flowing into their homes. The 1990 Census reported that this number had been reduced to just over 1 million and since the Water 2000 Initiative was implemented in fiscal year 1995, Rural Development has invested $1.3 billion in loans and grants that have afforded just under 300,000 people the opportunity to have safe, clean water in their homes for the first time.

Water 2000, as ambitious, challenging and rewarding as it is, is a small part of the water and waste disposal program in rural America. The Drinking Water Infrastructure Needs Survey conducted periodically by the Environmental Protection Agency estimates the total investment needed in small systems (serving less than 3,300 people) to bring them into compliance with the Nation's Drinking Water standards is $37 billion. A similar investment is needed for water disposal systems. At present the applications for loan and grant assistance through this program total over $3 billion.

The budget requests $1.3 billion in loans and grants for this program, a slight increase over the amount made available for fiscal year 1998. This level of funding would provide new water service to about 500,000 rural residents, improved water service to an additional 400,000 rural residents, provide new or improved waste disposal service to about 410,000 rural residents and in the process support about 30,000 jobs primarily in the construction trades.

RURAL HOUSING SERVICE

No single factor contributes more to community stability than does home ownership. Since the early 1970's USDA's rural housing programs have played a key role in improving the availability and quality of housing in rural America. These programs reach families and individuals who cannot otherwise afford decent, safe, and sanitary housing. The Rural Housing Service (RHS) has financed over 2 million single family homes since the inception of its home ownership program. RHS has been particularly successful in reaching those residents that the private market and other government programs cannot reach—low and very low income families living in isolated rural areas.

SINGLE FAMILY HOUSING

The budget request for the rural housing and community facilities programs is $5.5 billion requiring $895 million in budget authority, 65 percent of which is for rental assistance payments. This represents an increase in the program level of

$300 million over the 1998 level and an increase of $27 million in budget authority. The request for the home ownership program, the flagship program, is $4.0 billion of which $1.0 billion is for direct loans, the same amount enacted for 1998. The average income for families borrowing under this program is $17,000, barely above the poverty level. For the guaranteed ownership program we are requesting $3.0 billion. These two programs will finance over 60,000 new and improved homes. Each home constructed provides 1.75 years of employment, over $50,000 in wages and over $20,000 in taxes for the local economy.

In addition, we are again proposing legislation that would permit use of the guaranteed loan program for refinancing direct loans. These loans would be made available to borrowers who do not have enough equity in their homes to refinance in the private market and are paying us interest in excess of the existing market rates. We are currently prohibited from refinancing direct loans.

MULTI-FAMILY HOUSING/RENTAL ASSISTANCE

For the multi-family housing programs, we are requesting $250 million, of which $100 million is for direct loans, requiring $48 million in budget authority. This is a decrease from the level enacted for 1998. This level of funding will provide over 1,100 new units and will provide for the rehabilitation of just under 5,000 units. The average income of tenants in this program is $7,300.

We are also requesting $150 million for the guaranteed multi-family housing program which has operated as a pilot program for the past two years. This program serves tenants with much higher incomes, up to 115 percent of area median income, than in the direct program and is therefore much less costly. The budget would provide for the construction of about 4,100 units.

For rental assistance, the budget requests $583 million, a $42 million increase over the 1998 level. Of this amount $544 million is needed for expiring contracts and the remainder will be used for rehabilitation, new construction, and servicing, as well as for farm labor housing consistent with the recommendations of the Civil Rights Action Team. Rental assistance payments are made to the developers of the projects as the difference between the 30 percent of income required by the tenants and the market rental cost of the unit.

MUTUAL AND SELF HOUSING GRANTS

We are again requesting $26 million for the mutual and self-help program which provides the technical assistance required for families engaging in the construction of their own homes. As you are well aware, Mr. Chairman, this is one of the most rewarding programs that we administer. It provides not only a decent, safe housing unit, but it also provides a measure of self confidence and self assurance for the family and it is the only way the participants will ever have the opportunity to own a home. One measurement of success for this program is that the delinquency rate is significantly below that of the direct loan program. The participants are incredibly and justifiably proud of their accomplishment.

COMMUNITY FACILITIES

For the community facilities programs we are requesting a total of $418 million, $200 million for direct loans, $210 million for guaranteed loans, and $8 million for grants. These programs finance a wide variety of facilities throughout rural America, but the priorities are health and safety projects. During the past two years RHS has also placed an emphasis on funding child care centers. The decrease in real income for rural families during the 1980's; the fact that close to 50 percent of rural workers have income that is near or below the poverty level; and the fact that women are filling many of the new jobs created in rural areas dictate that child care facilities be available in rural areas. This is critical for families to make the transition from welfare to work. RHS, working with a national non-profit organization, began the rural child care initiative in 1996 and since then we have increased the number of child care projects funded from 6 in 1992 to 44 in 1997 and we expect to fund even more in 1999.

RURAL BUSINESS-COOPERATIVE SERVICE

The key to improving economic conditions in rural areas is the creation of business opportunities and jobs and the role of the Federal government is to assist in creating the environment that generates private investment. Economic growth tends to occur with concentrations of population and investment capital, or is associated with the abundance of extractable natural resources. For too many years, this country has been attempting to apply what is known about economic growth in urban

areas to rural areas. This is not practical. And it is equally true that there is no single "solution" that can be employed in each situation. Rural areas hold two key advantages in economic development, the abundance of natural resources, including agricultural production, and a labor pool that has a tremendous work ethic.

We can be more effective if investment is channeled into businesses associated with what is readily available in rural areas. The concentration of agricultural production and processing causes the migration of investment capital out of rural areas and the population tends to follow in hopes of economic improvement. In addition, the out-migration of capital and people diminishes prospects for attracting external capital.

The question is, "how do we maximize the advantages that rural areas have to offer". One solution is to ensure that a larger portion of the income generated from agricultural production remains in rural areas. One way this can be done is through the establishment of more businesses engaged in processing and marketing of agricultural commodities. The processing of food and non-food as well as feed and non-feed uses of agricultural commodities in rural areas helps retain income and capital needed for other investments in rural areas.

With the $1.0 billion requested for the Business and Industry loan guarantee program, I intend to set aside $200 million exclusively for the use of cooperative businesses. These funds will be available only for cooperatives for a time certain, and if not used for this purpose will be available for other loans. We will also continue to work closely with AARC and other organizations to ensure that no investment opportunity is missed and we will continue to work with cooperative associations to develop other investment opportunities, both for the Rural Business-Cooperative Service and for AARC.

BUDGET REQUEST

Mr. Chairman, the budget request for the Rural Business-Cooperative Service programs totals $1.2 billion, requiring $77.6 million in budget authority. For the flagship program, guaranteed Business and Industry loans, we are requesting $1.0 billion, and $50 million for direct B&I loans. Direct lending will be targeted to those traditionally under-served areas of the country. For the Rural Economic Development loan and grant programs (cushion of credit) we are requesting $15.0 million in loans and $11 million in grants; $35.0 million for Intermediary Relending loans and $40.3 million for Rural Business Enterprise Grants.

For assistance to cooperatives, we are requesting $1.7 million in Rural Cooperative grants and $2.0 million for Federal/State Research on Cooperatives. Research on cooperatives has not kept pace with the growth in cooperatively owned businesses, particularly with respect to non-traditional cooperative activity such as processing and retail and export cooperatives. In addition, we are also requesting $2.0 million for the Appropriate Technology Transfer for Rural Areas program. The volume of requests handled by this office has grown significantly in recent years and the level of financial support has remained constant. We need to increase funding for this activity in order to respond quickly to customers.

AARCC

For the Alternative Agricultural Research and Commercialization Corporation we are requesting a total of $10.0 million, $8.5 million for investments and $1.5 for administrative costs. This level of funding is expected to help bring 6 new products to market and will create about 1,000 new jobs in rural America based on agricultural commodities. Mr. Chairman, this helps retain more income in rural America and I would like to do more of this. This program can take what has been a waste product like wheat straw or peanut hulls, which actually have a negative value, and develop new products and creating positive economic values for farmers and producing jobs for other rural residents. Other countries invest much more in this type of activity than we do and we are losing business opportunities. For example, a firm in England is exporting non-load bearing wall panels made from wheat straw to this country, of all places. The largest wheat producing country in the world is importing products made from wheat straw.

SALARIES AND EXPENSES

The request for Salaries and Expenses for Rural Development, $527 million, an increase of $18 million over 1998. There are several reasons for this increase. First, because of all of the organizational changes that have occurred within Rural Development over the past few years, we have lost a disproportional share of the lower level employees, even though we have used every means available to keep them, such as buyouts and early retirements of our more senior employees. This has

caused our average salary costs to increase significantly. While this is a situation I would not have preferred, it is something that has to be dealt with because the alternative is no better. If sufficient funding is not available for salaries and expenses then it will be necessary to execute a reduction-in-force (RIF) to remain within available funding. This action will only exacerbate the problem because a RIF will, in-turn, eliminate additional lower level employees driving the average salary cost even higher. The vast majority of these staff are in our field offices and are primarily responsible for delivering the programs we are discussing today. We need to keep them employed.

Rural Development is blessed with very dedicated and hard working staff that have maintained a positive attitude toward public service through our reorganization, restructuring and streamlining efforts. They know the value of the programs we deliver because most of them live and work in the communities in which we provide assistance.

Another reason for requesting an increase is that in order to retain our employment level through fiscal year 1998, we have deferred investment in information technology and training, something we cannot again afford to do. Investments in information technology and training are means through which we can realize additional efficiencies. In fact, the Secretary's plan for achieving efficiencies through convergence of the administrative services of the three county based mission areas is dependent on investments in the common computing environment and re-engineering of our business practices. Achieving additional savings through administrative efficiencies will provide the flexibility for all three mission areas to continue to support the staffs responsible for delivering the programs. We will also better utilize support staffs by directing their efforts to more critical needs rather than maintaining antiquated, staff intensive systems. Of the $18 million increase for salaries and expenses, $8.5 million is for investments in information technology; most of this is for maintenance of our existing systems, proceeding with service center implementation, and accomplishing the changes in systems necessitated by the Century date change.

Providing support to the very dedicated employees of Rural Development is a priority equal to funding any of the programs we have discussed. Without the employees we will not be able to continue to deliver the programs as effectively as we have in prior years and many needs in rural areas will not be met. I ask for your very serious consideration of this request.

This concludes my comments. Thank you for the opportunity to appear before the subcommittee. The Administrators and I will be most happy to answer any questions you and members of the subcommittee may have.

PREPARED STATEMENT OF WALLY BEYER

Mr. Chairman, members of the subcommittee, thank you for the opportunity to appear here today to discuss the President's budget and program proposals for fiscal year 1999. I want to begin by thanking you and the members of the subcommittee for our productive working relationship over the years. A relationship that, I am proud to say, has helped rural America contribute to the nation's continuing prosperity.

Rural America continues to be a vital part of our nation and its economy. As we look to the future, we see an environment of challenge and opportunity. The global marketplace is redefining rural America. Rural America's customers and competitors are no longer just down the road, but around the world as well. National and global changes are constant and rapid.

Safe, affordable, modern utility infrastructure is a key component of economic competitiveness. The telecommunications and electric industries are at the vortex of change. Rural America is at a critical juncture, and the challenge is to secure its role, as well as its future, in a rapidly changing national and global economy. USDA/RUS is helping communities meet this challenge.

To secure this role, rural America must reinvest in infrastructure, provide quality education, and continue to address quality of life issues. Rural youth must be provided with educational opportunities that will enable them to compete with the best and brightest from around the world. The aging rural population must have affordable access to quality health care, and rural businesses need state-of-the-art communications technologies to foster new economic growth, create new jobs and enhance the quality of life.

Through a successful local/public partnership with the federal government, RUS programs help provide needed capital and critical credit support to leverage private capital for infrastructure financing. RUS programs focus scarce resources into areas

burdened by poverty, low population density, and high out-migration. These factors, contributing to a lack of economies of scale, make it significantly more expensive to construct infrastructure in rural areas.

As rural America is changing to meet these challenges, USDA/RUS is changing as well. We are reinventing program delivery, streamlining our organizational structure, and leveraging private investment. We embrace these changes as new opportunities. Our goal is to help provide rural America with the tools and resources necessary to realize the full extent of its potential. This requires creative thinking, commitment, and value-added program delivery. From the point of initial contact, to project reality, the USDA/RUS role has never been more important.

THE FEDERAL PARTNERSHIP WITH RURAL AMERICA

The nearly $42 billion RUS loan portfolio includes investments in approximately 7,000 small community and rural water and wastewater systems, and 2,000 telecommunications and electric systems, servicing approximately 84 percent of America's 3,096 counties. This 60-year old local/federal partnership is a classic American success story. It is a partnership providing critical infrastructure to 80 percent of the nation's landmass while enhancing the lives of 25 percent of the nation's population. That infrastructure spurs economic growth, creates jobs, and improves the quality of life in rural America. The vitality of rural communities truly depends on access to modern, reliable, and affordable utilities.

TELECOMMUNICATIONS

This year's telecommunications budget proposes $4.895 million in budget authority to support $50 million in direct telecommunications loans and $810 thousand in budget authority to support $300 million in Treasury-rate loans, as well as $4.638 million in budget authority to support $175 million in Rural Telephone Bank (RTB) loans. Implementation of the Telecommunications Act of 1996 poses many challenges for rural consumers. RUS continues to work with our borrowers to assure that rural citizens share in the benefits of the digital revolution. I am very proud of the role RUS plays in assuring that citizens outside America's great urban centers have affordable and quality service. Our borrowers are providing modern, reliable telecommunications service that enables rural Americans to benefit from the rapidly improving technologies of the information age. Continued capital investments and operational and technical support are critical to maintaining that level of quality in areas served by RUS borrowers.

The budget also reflects our commitment to move the RTB toward privatization within the next 10 years. The RTB is proposed to become a performance based organization, under which the RTB can demonstrate its financial and managerial independence, as an intermediate step towards full privatization. This move toward independence is consistent with funds for subsidy budget authority and administrative expenses being transferred from the unobligated RTB liquidating account balances in fiscal year 1999.

DISTANCE LEARNING AND TELEMEDICINE

In the Distance Learning and Telemedicine (DLT) Program, the budget request of just over $15.2 million in budget authority will support $150 million DLT Loans and $15 million in DLT grants.

The Distance Learning Telemedicine Program provides financial assistance for rural education and health care providers utilizing state-of-the-art telecommunications technologies. The DLT loans and grants provide for needed infrastructure and end-user equipment for rural areas. This program is a powerful complement to the new schools, libraries and rural health care discounts recently authorized by the FCC, which primarily focus on the recurring monthly telecommunications costs to those entities.

When Vice President Gore announced the 1997 DLT awards, he stated "This country cannot afford a digital divide between those who have access to the benefits of the Information Superhighway, and those who do not." A range of financing options that includes loans, grants, and combinations of the two makes this program a flexible tool and resource for any rural community that wants to use telecommunications to bring the advantages of technology in the 21st Century to rural America's students and citizens.

The DLT Program is making a real difference in people's lives. RUS made a grant to the Fiber Optic Consortium United Schools (FOCUS) project. This initiative united eight school districts in Northeast Montana to share teachers and other course resources in foreign languages, vocational agriculture, science and mathe-

matics, and for staff training. These same facilities are used by the community for fire, emergency medical, and environmental training.

Since 1993, the DLT program has funded 192 projects totaling $52 million in 41 states and one U.S. territory. These projects serve 850 schools and learning centers and 600 hospitals and rural health clinics. The DLT program provides seed money to leverage almost two times its investment from other private and public sources.

Simply put, rural Americans must be connected to America's Information Superhighway. USDA/RUS is the catalyst for the rural connection.

ELECTRIC PROGRAM

The Electric Program budget proposes $30 million in budget authority to support a program level of over a billion dollars. The RUS Electric Program continues to serve as one of the most effective local/public partnerships of the federal government. Today's program ensures that all areas of our nation have access to reliable, reasonably affordable, electric energy.

Fiscal year 1997 budget authority for RUS loans and loan guarantees enabled 136 rural electric utilities in 33 states and the Marshall Islands to upgrade their electric systems to provide more reliable and efficient electric service to their customers.

Over the last several years, changes have been made in the electric lending program to reduce the overall federal cost of the program. This year's proposal contains $1 billion of funding for the electric program, an increase from $925 million in fiscal year 1998. In an effort to reduce the cost of the electric program and provide yet another financing tool to meet increasing demand, the Administration proposes a new Treasury Rate Loan Program to complement its existing loan programs. This $400 million loan program can be generated with only $840,000 of budget authority.

Each RUS electric loan dollar leverages three dollars from private sources. RUS provides only 1/3 of the $3 billion annual capital needs of the RUS borrowers. The following chart illustrates leveraging of the Federal dollars:

INVESTMENT IN ELECTRIC PLANT—YEARS 1991 THROUGH 1996

[Dollars in millions]

Year	Gross additions to plant	RUS	Funds advanced FFB	Private and general capital expended
1996	$3,212	$682	$93	$2,437
1995	3,269	809	211	2,249
1994	3,344	618	242	2,484
1993	2,833	388	169	2,276
1992	3,104	401	208	2,495
1991	2,833	592	98	2,241

We believe that RUS has a continuing role to play in assuring that electric systems serving rural communities have access to the capital needed to maintain reliable, high quality, affordable electric service to support economic development and meet new environmental requirements.

In the coming years, rural distribution and power supply systems will require assistance in upgrading and replacing an aging electric infrastructure to support growing electricity demand, new technologies, and a more competitive industry structure. For example, RUS financing will enable rural electric systems to replace aging, inefficient and undersized electric transformers and conductors to enhance the reliability of distribution and transmission systems to meet load growth while cutting line losses, improving energy efficiency, and reducing carbon and other air pollution emissions.

RUS is also working very closely with borrowers facing financial stresses from past nuclear and large base-load generating plant investments and from increasing pressures from wholesale and retail competition. In each instance, RUS is diligent in ensuring that work-out agreements maximize the recovery to the Federal taxpayers. Today, RUS is actively working with 6 financially stressed borrowers as compared with some 15 borrowers 3 years ago.

WATER AND WASTE DISPOSAL PROGRAMS

This budget seeks $503 million in budget authority for Water and Waste grants and $126 million in budget authority to support $839 million in loans.

The RUS Water and Waste Disposal (WWD) program improves the quality of life of thousands of rural Americans each year by bringing safe drinking water and environmentally sound wastewater facilities to those rural communities in the greatest need. The program is delivered by a field network of Rural Development employees who provide "hands-on" technical and financial assistance. The funding for this program is contained in the Rural Community Advancement Program (RCAP), and could be enhanced as a result of the flexibility of funding offered by RCAP authorizations. This funding is also part of the Environmental Fund for America.

WATER 2000 PRESIDENTIAL INITIATIVE

The demand for this program is high. As of January 1998, $3.7 billion of unfunded loan and grant applications were on hand. Based on the Administration's belief and policy that low income, high unemployment and high poverty areas—especially those with water-related public health problems—represent the greatest need, we increasingly target drinking water and waste disposal investments to those areas.

In a state-by-state safe drinking water assessment performed in 1995, RUS found that at least 2.5 million rural Americans had very critical needs for safe, dependable drinking water, including one million rural residents who had no water piped into their homes. Approximately 5.6 million more were found to have serious needs under Safe Drinking Water Act standards. The costs of meeting all of these needs was estimated at $10 billion. Water 2000 is an initiative to clearly assess rural drinking water needs and target loan and grant investments to address them.

Under Water 2000 targeting guidelines, over three fiscal years, RUS has committed almost $1.3 billion in loans and grants to over 1,000 of the high priority safe drinking water projects throughout the nation. Water 2000 projects serve communities with the most limited financial resources and highest poverty rates. They are financed with significant grant assistance and our lowest interest rate loans to ensure safe drinking water at affordable cost. We estimate that the Water 2000 projects funded through September 1997 will serve an estimated 1,900,000 rural Americans and leverage approximately $437 million in additional investments from other federal, state, and local sources. For the first time ever, 280,000 Americans will receive water from properly maintained and tested public sources.

A good example of Water 2000 in action is a project funded with Water and Waste Disposal loans and grants for the Pueblo of Acoma, in New Mexico, in fiscal year 1997. The RUS investment is allowing the Pueblo, which has an annual median household income of less than $17,000 (slightly above the national poverty standard), to expand and improve its drinking water treatment and distribution system to overcome serious water quality, quantity, and dependability problems. To overcome the constraints of the relatively low income of the population and limited resources of the community, New Mexico Rural Development field personnel worked closely with Pueblo officials to develop a fundable application. In April 1997, Rural Development announced a grant/loan package of $1.5 million, to be combined with funds from the State of New Mexico, to allow the Pueblo to develop Phase One of a drinking water system that will supply 177 homes, two schools and a Head Start center, and a 25 bed Indian Health Service hospital that serves three pueblos.

In summary, we are very proud of our record of bringing drinking water and wastewater facilities to thousands of rural Americans—serving those who truly need our services the most.

THE NEW TELECOMMUNICATIONS AND ELECTRIC COMPETITIVE ENVIRONMENTS

To ensure that newly formulated policies address the role of rural utility systems in a deregulated marketplace, RUS has assumed a proactive role in discussions with FCC, FERC and our partners within the executive branch to protect and enhance RUS loan security, and improve the lives of rural residents. As this nation grapples with telecommunications and electric market reforms, the RUS will remain in the forefront of these discussions and will lead the policy debate as it impacts on rural Americans. In an ever-changing legislative and regulatory environment, ensuring the security of a $42 billion loan portfolio while providing modern, high quality, reliable, and affordable infrastructure in rural America will present a formidable challenge into the 21st century.

The February 2nd issue of U.S. News and World Report article outlines, in human terms, the impacts of a deregulated environment in rural areas. It points out that in Arizona alone, 5,000 rural Americans remain involuntarily phoneless. The spokesperson for one of America's large for-profit telecommunications companies was quoted as asking "Why should we be spending money in expensive rural areas if we need to upgrade our network in the cities to compete with competitors?" No

other statement better illustrates the need for the RUS program to provide financial support to high-cost rural areas.

Financial support mechanisms will be critical to supporting high costs, rural areas in a market driven, for-profit environment. The stage is now set for serious reflection on the rural challenges of electric infrastructure deregulation in state legislatures and Congress as well.

Although the pace of restructuring in the electric industry may have slowed, many states are moving ahead. At last count, 10 states have passed legislation providing for retail electric competition and 6 state public service commissions have issued comprehensive restructuring orders to promote competitive retail electric markets. Other states are continuing to study the issue and may act on legislative recommendations in 1998 or 1999. Many unanswered questions remain concerning how to transform America's $200 billion plus electric industry from a traditional, monopolistic, industry to a more competitive, market-based, consumer-driven environment. One of those questions is, what happens to electric rates in high cost rural areas?

In a recent letter to Energy Secretary Peña, Secretary Glickman expressed concern that in a restructured marketplace, electric rates in high cost to serve rural areas will likely increase.

"In examining the potential effects of restructuring on rural areas, it is important to consider the common practice of 'cost-averaging' across customer classes within utility systems. This practice has been supported historically by public utility systems. It most often occurs when utilities use revenues from industrial and large commercial consumers to offset other fixed costs within the system. This is done to maintain reasonably affordable cost of service to residential customers and to balance the high cost of service in rural areas."

In a competitive environment, larger industrial and commercial power purchasers in high cost areas will be lured away from incumbent utilities. New competitors will engage in "cherry-picking". The Secretary went on to state that "Although distribution companies may be able to institute "wire charges" to cover delivery cost of another company's power, these charges may not be sufficient to maintain reasonably affordable rates for smaller customers."

CONCLUSION

USDA/RUS continues to be an integral part of rural America's future. Rural America's ability to capitalize on new opportunities depends, to a large extent, on the success of RUS in meeting its goals of creating modern community facilities and infrastructure. RUS is enabling rural communities to utilize state-of-the-art telecommunications technologies to improve education and health care. By continuously reinventing our programs to address the changing needs of rural residents, RUS will achieve its ambitious goals, and continue to play a significant role in advancing rural America's quality of life and enhancing its competitiveness in the global marketplace.

Thank you Mr. Chairman for the opportunity to appear before your committee.

PREPARED STATEMENT OF JAN E. SHADBURN

Mr. Chairman and members of the Committee, thank you for this opportunity to testify today on the President's fiscal year 1999 budget proposal and discuss some of the accomplishments and goals of the Rural Housing Service.

The Rural Housing Service continues to provide opportunities to rural families which help them improve their standard of living, move out of poverty and build for the future. We enable rural communities to enhance the quality of life of their residents and to strengthen their economic competitiveness and sustainability. We accomplish this by providing rural people and communities access to credit—which, as you know, is often limited in rural areas. We also subsidize loans and rents and provide technical assistance and support to complete their community development efforts.

Our community facilities direct and guaranteed loan and grant programs provide funding for essential facilities such as health care centers, fire stations, municipal buildings and day care centers. These facilities allow rural communities to improve the quality of life for their citizens and remain competitive in attracting jobs and businesses.

In the rural United States, 5.6 million households live below the poverty line. Almost one quarter of rural households pay more than 30 percent of their income for housing with more than four of every 10 rural poverty level households paying more than 50 percent of their income for housing. Minorities in rural America are dis-

proportionately likely to be low-income or in poverty and have housing problems. One third of African-American households, and almost one third of Hispanic households, pay more than 30 percent of their income for housing. Rural African-American households are far more likely to live in seriously inadequate housing than are rural white households or urban African-American households. Native Americans continue to be the most poorly housed population in America.

Our programs are largely targeted to lift these populations out of poverty and provide stability for the family, the community and rural America. Some communities have been rebuilt from disaster or economic downturn, others have reversed the outward migration of their people and jobs and have built a sustainable economy and tax base. We have invested in two of our most vital assets—our people and our small communities—and enabled them to have a part of the American Dream. To assure our programs meet the needs of rural America, RHS has developed five strategies to further the implementation of the Rural Development Strategic Plan.

The five strategies are as follows:

—Support self sufficiency;

—Expand access to our programs to all eligible rural Americans;

—Continue reinvention;

—Expand partnerships and leveraging opportunities; and

—Protect the government's interest.

SUPPORT SELF SUFFICIENCY

The RHS home ownership programs offer rural people and their families the most basic piece of the American Dream—the chance to own their homes. The President's fiscal year 1999 Budget requests a program level of $1 billion for the Section 502 Direct program and $3 billion for the Section 502 Guarantee program. This $4 billion dollar program level will provide approximately 65,000 homes for individuals and families in fiscal year 1999 and ensure that the home ownership opportunities that are accessible in suburban and urban America are equally available to rural America.

RHS has also proposed legislation to permit the use of Federal guarantees to help graduate current direct loan borrowers to private credit. Many of our borrowers do not have sufficient equity to graduate and qualify for conventional credit. Further, they are statutorily prohibited from graduating to our guaranteed program. The President's fiscal year 1999 Budget requests an authorization of $100 million for graduating direct loan borrowers into the guaranteed program.

The Mutual Self-Help Grant program enables low and very-low income rural families to become homeowners through the efforts of their "sweat equity" contribution while simultaneously building and stabilizing their communities. The sweat equity contributed by these families not only builds communities, but also reduces the cost of the mortgage and enables the Agency to reach a lower-income customer. The majority of the mortgages are provided by the Agency's Direct 502 loan which allows the interest rate to be subsidized down to as low as 1 percent based on income.

These Self Help borrowers have exceptional track records—both lower delinquency rates and better graduation. Over half have paid off their loans in full or graduated to private credit. Approximately 27,000 self-help loans have been made since the program's inception in 1971, providing housing for approximately 1,000 families per year. In fiscal year 1995, RHS received over a 100 percent increase in the grant program. In fiscal year 1998, the program expanded to 46 states with an estimated 121 grantees serving approximately 1,600 new homeowners. The fiscal year 1999 request of $26 million would enable RHS to serve over 100 grantees.

Time and time again we hear stories of how participating in the self-help program has truly turned borrowers lives around—enabling them to achieve the equity from home ownership that can finance children's education, launch entrepreneurial careers and move families towards financial independence.

For example, Rudy and Angie Lopez lived from one paycheck to another; he was a cook, she was a waitress. Owning a home seemed out of reach until they qualified for the Mutual Self-Help Housing program. After completing their home, Rudy and Angie Lopez decided to open their own business. Now they operate Rudy and Angie's Mexican Restaurant in Grover Beach, California.

In support of Secretary Glickman's Civil Rights Action Team Report, the Administration is requesting a significant increase for Farm Labor Housing over the available level in fiscal year 1998. For fiscal year 1999, the $20 million increase in budget authority would provide for $32 million for farm labor housing loans and $13 million for grants. These additional funds will address some of the worst housing in the country by providing increased safe and affordable rental housing for our farm-

workers. The horrendous housing conditions that some of these families endure impact their health and their quality of life.

In Molalla, Oregon, Soledad Morales lives with her farmworker husband, his elderly mother, and her four children; she cares for other farmworker's children in her apartment. Before they moved into RHS' farmworker housing, they lived together with many families. "Meal preparation and access to the bathroom were the worst part; with so many in one kitchen and one bathroom, sometimes I'd have to get up at 2:00 a.m. to bathe or make my husband's lunch, and sometimes I'd have to wait until 11:00 at night. It was chaotic and impossible to keep clean, since there wasn't agreement about cleanliness."

"Our health is better here; I think we live better. The children live better because they have the freedom to play outside in the lawns, playground and court. There's also counseling, classes, more access to programs, more communication. Also, here, those of us who give and receive childcare can participate in co-payment and reimbursement programs that we couldn't access before, due to the condition or distance of our homes from services."

This is just one example of the thousands of hardworking, low-income American families whose housing and quality of life will benefit from the increased funding requested for farm labor housing loans and grants in fiscal year 1999.

The President's fiscal year 1999 request for Community Facilities program levels provides an increase of approximately $50 million over the available levels in fiscal year 1998. We have significantly increased the utilization of the guaranteed program. In reviewing applications for assistance, we first consider if the project can be funded by a guaranteed loan. If this is not feasible, we look at a blended approach prior to considering the direct loan and/or the grant program. As a result of this approach, we have significantly expanded the number of guaranteed loans made to rural communities by approximately 100 percent between fiscal year 1995 and fiscal year 1997.

Access to high quality, affordable child care is a major priority for many young working rural families. The benefits of this kind of care are numerous: children are nurtured in a safe environment, parents have the opportunity to enter the work force to earn sufficient income to obtain an acceptable standard of living, and employers maintain a work force whose productivity is not impaired by unstable child care arrangements. Recognizing the importance of providing excellent child care to America's low-income rural families, the Rural Housing Service has consistently invested in child care facilities through the Community Facilities program.

In fiscal year 1997, 19 States obligated $8.8 million in direct and guaranteed Community Facility loans and grants for 32 new child care centers. Five of these centers are funded through a new partnership that includes RHS, the Federal Housing Finance Board, Head Start, the Freddie Mac Foundation and the Rural Local Initiatives Support Corporation (Rural LISC). These partnerships and others go beyond funding to provide technical assistance and build capacity.

RHS programs also enable many rural elderly residents to remain self sufficient by continuing to live independently. The Section 504 repair loan and grant program, the Section 515 multi-family housing program and the Section 521 rental assistance program all enable elderly residents to live independently. For others who can no longer be independent, RHS helps provide a decent quality of life in their own rural communities. The Community Facilities Programs finance assisted-living, adult and child day care, emergency services, nursing homes and health care facilities to help improve the quality of life.

These programs are helping people like Ms. Caroline Young, a 70 year old tenant currently living in LaPaula Villa Apartments, a 515 complex located in Friars Point, Mississippi, a poor Delta town. Ms. Young rented a home on the outskirts of Friars Point, prior to moving to the complex four years ago. The living conditions were deplorable, with cracks in the walls and floor. Ms. Young indicated she could see the ground through the cracks. The house was very old and extremely cold in the winter months. Even though the home had gas heat, she had to wear layers of clothes to keep warm. Now that she lives in the 515 project, she feels her health has improved significantly. Ms. Young said, "it's like living in a mansion compared to my previous living conditions."

If it were not for the Section 515 multi-family housing and rental assistance programs, Ms. Young would likely not have been able to live independently in a decent safe environment. Ms. Young sought other housing options before finding a vacancy at a local 515 project, including an assisted living facility and a group home, both of which would have resulted in a greater cost to the government.

For fiscal year 1999, the President's Budget requests $583 million for rental assistance. This level is needed to renew $544 million of expiring contracts, enabling 37,516 elderly individuals and families to continue to live in decent and affordable

housing. In addition to renewals, based on the fiscal year 1999 loan and grant request for Farm Labor Housing, $8.4 million of rental assistance will be used specifically to ensure affordability for all new Farm Labor tenants. For Section 515, $5.9 million has been requested to preserve affordability in projects eligible for prepayment and prevent displacement of tenants.

EXPANDING ACCESS TO OUR PROGRAMS TO ALL ELIGIBLE RURAL AMERICANS

Under Secretary Glickman's leadership, the Rural Housing Service is continuing its outreach to underserved communities and populations. Native Americans are among the poorest housed groups in America and mortgage financing has not been widely available on Tribal lands. In 1995, USDA and HUD jointly conducted a series of home ownership conferences to enhance opportunities for lending on Native American lands. One result of these conferences is a comprehensive guide for Rural Development staff called "Lending on Native American Lands." In addition, RHS is working closely with Fannie Mae and several Tribal councils to better serve Native Americans' housing needs.

RHS has also improved the quality of life on tribal lands by expanding the use of the Community Facilities programs by Native American communities. The Agency has placed increased emphasis to provide funding opportunities to tribal colleges through the Community Facilities loan and grant programs. In fiscal year 1997, the Agency provided a total of $9,950,000 in financing through the direct, guaranteed and grant program to Native Americans. This funding provided day care, administrative, medical and food preparation facilities.

RHS has been promoting outreach activities to historically underserved customers. For example, RHS has participated in the "Home Ownership Opportunities for Women" (HOW) partnership, one of 58 national partners in the President's Home Ownership Initiative. HOW is committed to increasing national home ownership rates for women.

On July 11, 1997, Secretary Glickman and HUD Secretary Cuomo signed a Memorandum of Understanding outlining the responsibilities between the two Departments on how to manage Fair Housing complaints. This MOU provides a more efficient and streamlined process for handling discrimination claims. In addition, RHS has worked hard to ensure that all of our borrowers and staff follow the Fair Housing Laws. We are continuing to incorporate a Fair Housing training component at all national housing training meetings.

REINVENTION AND PARTNERSHIPS

We are continuing our reinvention and partnership efforts we initiated over three years ago. Our reinvention efforts in the single family 502 direct loan program were a great success and have set the standard for future efforts. We reduced the size of the 502 regulation by almost 90 percent and made it easy to read. We are currently streamlining and simplifying our other housing programs. As we move to a balanced budget with the President's fiscal year 1999 Budget request, we all recognize the need for automation and modern technology to increase our efficiency, improve our customer service and cut costs. The USDA field structure has been reduced in the number of offices and employees. We have to work harder and smarter to continue to reach our customers. The ongoing reinvention of the housing programs include the following:

—Continuation of our Congressionally mandated servicing for escrow and taxes of the single family housing portfolio. The DLOS initiative, which automated our loan origination and servicing functions, established the Centralized Servicing Center (CSC) in St. Louis. In September of 1997, the Agency completed the last phase in the transfer of approximately 700,000 single family loans for 550,000 plus borrowers from the states to one centralized facility in St. Louis. This was a massive undertaking and one of the largest portfolio transfers, private or public, in history.

—We are proceeding with the reinvention of the guaranteed single family housing and the mutual self help regulations. We will create new handbooks for both programs that will act as a guide for our employees and customers.

—Reinvention of the multi-family regulations will ease the burden on our borrowers and our staff. This streamlining effort, which will include the Section 515 Multi Family Housing and the Section 514/516 Farm Labor Housing programs, will be completed by the end of 1998.

EXPANDING OUR PARTNERSHIPS AND LEVERAGING OPPORTUNITIES

I would like to share with you our continued efforts to build partnerships and leveraging opportunities which expand our limited resources, drive dollars into rural

communities, and build private, nonprofit and other public sector participation in local rural development efforts, increasing their likelihood of success.

The goal of the President's National Partnership for Home Ownership is to provide home ownership to an additional eight million Americans by the year 2000. In support of the President's Initiative, we have formed many successful partnerships. Let me tell you about one.

The Rural Home Loan Partnership, formed in June of 1996 by RHS, the Rural Local Initiatives Support Corporation (Rural LISC) and the Federal Home Loan Bank System, enables more families below 80 percent of area median income to achieve home ownership. RHS provides a fixed-rate, subsidized 502 mortgage to cover a portion of the cost of a house, while a local bank provides financing for the remaining portion. Private non-profit community development corporations (CDC's) identify and counsel eligible borrowers and aid in the development of affordable housing opportunities. This partnership is just one example of our leveraging success. In fiscal year 1997, with all partners, we leveraged 46.24 percent or $125,699,475 of the Section 502 low-income allocation with $58,149,512 from lenders.

RHS' loan guarantee programs have brought increased numbers of financial institutions into partnership with the Agency. Over 2,000 lenders now participate in the Section 502 guarantee loan program which serves low and moderate-income residents.

In the 515 multifamily housing program, we increasingly employ partnerships with state housing finance agencies, CDBG and HOME funds, the private sector and local community organizations. This has allowed RHS to reach larger numbers of low-income tenants with limited budget authority.

In the new Section 538 Guarantee Multi Family housing program, we have completed two years under a demonstration mode and are in the third year of operation. For fiscal year 1996 and fiscal year 1997, the Agency provided $41 million in guarantees for 25 projects, which when leveraged with other funding, financed total development costs of $71.5 million. For fiscal year 1998, the Agency proposes to issue final regulations and a Notice of Funding Availability in the late Spring.

In the Community Facilities programs for fiscal year 1997, RHS has leveraged over 50 percent of its Direct funds and 26.5 percent of the guarantee funds, with state, local and private partners. RHS developed a new partnership with the Department of Health and Human Services Head Start, the Freddie Mac Foundation and Rural LISC (Local Initiatives Support Corporation) to expand the number of child care centers in rural America and demonstrate a variety of financing models.

PROTECTING THE GOVERNMENT'S INTEREST

I would like to offer my appreciation for the reforms to the Section 515 program that were passed by this Committee in the fiscal year 1997 Appropriation Act. The Department worked diligently to expedite the implementation of these reforms, and they were published as an interim rule on May 7, 1997 and as a final rule on December 23, 1997. In developing these rules, RHS worked extensively with stakeholders representing for-profit and non-profit developers as well as housing advocacy groups, state housing finance agencies and other interested parties.

As a result of this Congress' and the Administration's efforts to provide the necessary tools to provide the proper oversight and management, the 515 portfolio is healthier and safer today. The tenants' and government's interest are protected.

In March of 1998, a joint effort between the Office of Inspector General (OIG) and the Rural Housing Service will begin. This will include joint participation between National and field staff from both RHS and OIG to identify and review projects, owners and management companies in 12 states that potentially are at risk for financial abuse. This will allow RHS and OIG to assess the recent legislative changes including the equity skimming provision and their effect on curbing fraud, waste and abuse in the 515 program.

We have become concerned, as I know this Committee has, with the increasing need for budget authority for our rental assistance program, which has grown from $404 million in 1993 to $541 million last year, and is projected to reach $650 million by 2000. We are exploring ways to address this issue while preserving the safety net for rural families. We will work with the Congress on this effort in the coming months.

Since 1994, the Agency has placed a high priority on rehabilitation of Section 515 Multi Family projects. Currently, the 515 Multi Family portfolio consists of over 18,000 projects with over 458,000 units. With this large and aging portfolio, the Administration is committed to preserve the integrity of these structures and protect both the tenants' and government's interest.

Now I would like to highlight the following points from the fiscal year 1999 Budget proposal.

For section 502 direct single family housing loans in fiscal year 1999, we are requesting a loan level of $1 billion. This is the same level provided in the fiscal year 1998 Appropriation Act. For the Section 502 guaranteed loans, we are requesting a loan level of $3 billion.

In the section 515 multi-family housing loans, a loan level of $100 million is requested for fiscal year 1999. The loan level request for housing repair loans (Section 504) is $25 million. For domestic farm labor housing loans, we are requesting $32 million program level, a $17 million increase over fiscal year 1998 to meet the needed housing for farm workers consistent with the recommendations in Secretary Glickman's Civil Rights Action Team Report. We are requesting $5 million for two loan programs for housing site development. This significant increase over current levels will allow the Agency to effectively serve applicants on a national level.

The loan level request for the Multifamily Housing guarantee program (section 538) is $150 million. This will allow RHS to have a fully operational program that will provide approximately 2,000 units to low and moderate-income tenants in rural areas.

The budget authority appropriation requested for the housing and community facilities loan programs is $231 million, approximately $13 million less than in the 1998 appropriation.

An increase of $42 million to $583 million is requested for rural rental assistance in 1999.

For the Self Help Technical Assistance Grants we are requesting $26 million, the same level as appropriated in fiscal year 1998.

The housing grant programs are being requested for fiscal year 1999 under the Rural Housing Assistance Grants Program. Within this program, our requests include $13 million for farm labor grants, $25 million for housing repair grants, and $9 million for housing preservation grants. The supervisory and technical assistance grant program and the compensation for construction defects grant program will continue to operate in fiscal year 1999 with small amounts of carry-over funds which will be available.

The community facility program request is included in the proposed Rural Community Advancement Program. Within that overall program, we project that $200 million will be available for direct community facility loans and that another $210 million will be available in the guaranteed loan program. Approximately $8 million is proposed for community facility grants. The appropriation requested within RCAP to support the community facility programs is $36 million for fiscal year 1999. This is $10 million more than is available for fiscal year 1998.

For administrative expenses, the Budget requests $429 million. This is a $15 million increase from fiscal year 1998. RHS's ability to successfully implement the Centralizing Servicing Center and deliver the programs in the field and protect the portfolio requires this increase in administrative expenses.

This is the conclusion of my statement. I appreciate the opportunity to appear before this Committee today and as always, I will respond to any questions that you may have at this time. For release only by the Senate Committee on Appropriations

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PREPARED STATEMENT OF DAYTON J. WATKINS

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you today to report on our progress in rural development and to present the Administration's fiscal year 1999 Budget for the Rural Business-Cooperative Service (RBS).

DEMOGRAPHIC DATA ON RURAL DEVELOPMENT

As I am sure the Subcommittee will agree, we in RBS firmly believe that, there cannot be a strong America without an equally strong and participating rural America. The USDA Economic Research Service (ERS) in a 1995 report identified a reshift of population from urban areas back to rural communities. This underscores an increased need for our programs. The proportion of real poverty is worse in rural areas than in the cities according to ERS data. In some areas of the rural south and on some Indian reservations, poverty and its associated ills of poor health, poor nutrition and poor educational opportunities is staggering.

The RBS is a component of the Rural Development Mission area and as such strives to make significant contributions to the enhancement of life for rural Americans. In partnership with the other agencies of the Rural Development Mission area, we share in the belief that a strong rural America requires a continuing in-

vestment from all levels of government and the private sector in people, education, technology, health care, infrastructure and social and community affairs. Certainly, there can be no sustainable development without employment. According to the ERS report, the unemployment rate in rural areas is 16 percent higher than in urban areas. There is energy and resources for business development in rural areas which can be harnessed to address this issue. Our efforts have been focused on leveraging this energy and investment potential to maximize employment in rural communities. The rural business programs proposed in this Budget will create and save about 83,000 jobs.

These investments will enable rural Americans to continue advancing in the economic mainstream of this great nation and help citizens build sustainable rural communities. The RBS contribution to this effort continues to be our ability to make our financial and technical resources available to rural America.

PARTNERSHIPS FOR RURAL DEVELOPMENT

These resources facilitate the building of partnerships within rural communities when leveraged with public, private, and non-profit resources and stimulate economic growth and development. New jobs, paying higher wages, are created or saved. This further enhances the ability of rural citizens to be able to meet the individual needs of their families for the basic necessities of life.

This is accomplished by assisting rural residents in acquiring adequate income to pay for the educational expenses of their children, meet their housing needs, and building their pride and self esteem. This means helping new entrepreneurs implement their dream of owning and operating their own businesses by providing for the credit and financing needs of rural business owners who are unable to find credit from traditional sources. Further, it means helping agricultural producers analyze alternative business forms, like cooperatives, which offer greater economic opportunities than currently found in the marketplace. Each of these efforts touches rural America in a meaningful way. Our responsibility is to provide efficient and cost effective access to our programs so that rural Americans can maximize the resultant benefit.

A paramount objective is to use this opportunity to be creative in developing new concepts and approaches to serving our customers. To ensure that rural Americans continue to have access to our programs and services, we are continuing to develop and advance new and exciting initiatives. These initiatives will focus more resources on individuals, businesses and communities that have not been traditional participants in our programs. By continuing this effort, we can and will be instrumental in increasing the contributions made to the overall growth of rural America by putting underutilized resources to better use. This is consistent with the overall strategic goals and objectives of the Rural Development Mission Area.

To meet our goals, objectives, and the growing demand for our services and resources, our strategy is to continue along the direction begun last year to increase strategic alliances through creative partnerships with other Federal departments and/or agencies of the United States Department of Agriculture, corporate America, educational institutions, non-profit organizations and others. Through strategic alliances, we can serve more people and communities because more organizations will be available as resources to rural residents.

ROLE OF AGRICULTURAL COOPERATIVES

We endeavor to enhance the quality of life for rural Americans by encouraging the use of cooperatively owned businesses as a self-help tool in the marketplace. Our programs of research, technical assistance, education/information, finance and assistance in starting new cooperatives are designed to establish viable business entities that help individual farm operators and other rural residents retain access to markets and sources of supplies and services in a sector that is rapidly becoming vertically integrated and industrialized. Cooperatives are a means for rural people, both farm and non-farm, who typically have weak market power compared to buyers and suppliers, to be treated more fairly in the marketplace.

The existence of these rural cooperative businesses is an important component to most rural communities providing jobs, opportunity for purchase of more reasonably priced supplies and services, and a market outlet and improved returns for farm products. A noticeable trend in recent years has been the attempt to add value to raw commodities by primary and further processing in the communities near the source of production. The Cooperative Services Program continues to augment these efforts by helping to determine feasibility, assistance in the development of new cooperatively owned businesses, and maintaining statistical data on aggregate trends and commodity sector developments.

Since 1926, USDA has worked as a partner to farmer cooperatives, helping interested groups of agricultural producers form new cooperatives and working with existing cooperatives to improve their efficiency and expand the scope of services to members. This work is carried out by our National Office staff who specialize in research, technical assistance, statistics and educational/informational activities and the State Rural Development Offices that are identifying Cooperative Development Specialists on their staffs to assist in starting and servicing the needs of new cooperatives. We are further aided by partnerships with universities, State departments of agriculture, and non-profit associations through various programs aimed at strengthening rural people's ability to use mutual self-help efforts to earn a decent living and to enhance their quality of life.

OUTREACH THROUGH INNOVATIVE PROGRAMS

The National Commission on Small Farms recently released its report A Time To Act which points to the role of cooperatives in assisting small farm operators to survive and prosper in a rapidly changing production agriculture. The Department is formulating a response to the recommendations in this report that will address effective marketing methods and other needs of small farmers throughout the nation. We will be an integral part of this overall effort since group action, so prominently recommended in the report, is also the focus of our programs. As part of this effort, we want to determine how under served rural Americans can utilize the cooperative form of business to help overcome market access barriers.

During the past year, we implemented a Cooperative Value-Added Program funded from the Fund for Rural America. Eligible applicants were institutions of higher learning or nonprofit associations that would provide technical assistance to specific value-added projects. We were surprised, and a bit overwhelmed, to receive 104 applications requesting a total of $19.4 million. After review, 18 projects were funded up to $75,000 each for a total of $1.1 million. We think this experience is good evidence of the expanded interest in the value-added strategy.

Another major initiative of this Mission Area is to expand the types of cooperatives serving rural America. Legislation has been developed and introduced at the Secretary's request under which we would assist rural residents interested in forming cooperatives for rural non-farm business. Based on our proven track record of success, we believe we can maximize their chances for business success. Successful nonagricultural cooperatives can assist rural residents to obtain increased access to technology, housing, rural utilities, health care and other shared services. These services will strengthen the infrastructure of many rural communities that are faltering by providing stable businesses, more reasonable prices for goods and services, and increased earnings for products sold.

RE-INVENTION OF PROGRAMS

Last year, in my testimony to the Subcommittee, I discussed the sweeping revisions we were making to the regulations for our Business and Industry Guaranteed Loan Program. The new regulations are shorter, clearer, and more logically organized. They're certainly more concise, taking up about one-half the pages of the previous regulations. The new regulations shift some responsibility for loan documentation and analysis from the Government to the lenders. We've made the program more responsive to the needs of the lenders and businesses, and created an environment for easier and faster application processing.

This year, I'm pleased to be able to update the Subcommittee on recently published revisions to the Intermediary Relending Program regulations. These regulations were published in final on February 6, 1998. The new regulations expand the current $2 million cap on loans to intermediaries to a $15 million cap to any one intermediary in annual increments of $1 million. The regulation is more user-friendly and authorizes the Rural Development State Offices to process applications at the State level, rather than submitting applications to the National Office for processing. This change will speed up the applications process and allow State Offices to work closer with borrowers to provide immediate feedback concerning their applications. There will continue to be a nation-wide competition for funding the applications.

A revised priority scoring system will help us target more funding to the neediest communities such as those in low-income or in under served areas, those with declining population, or communities faced with economic restructuring or natural disasters. In addition, the eligible purposes for loans to businesses have been expanded.

Mr. Chairman, since the streamlined Business and Industry Guaranteed Loan Program regulations were published last December, demand for the program has in-

creased 300 percent. This increased demand for the program will mean that the quality of the applications and the opportunity of providing funding to the communities most in need will be enhanced.

Now, I'd like to address our specific programs and their accomplishments in a little more detail.

BUSINESS PROGRAMS

To meet our goals and objectives and the growing demand for our services and resources, we have increased partnerships and strategic alliances with other Federal agencies. One example is the implementation of a Memorandum of Understanding between Rural Development and the U.S. Department of the Treasury to carry out the Community Adjustment and Investment Program under the North American Free Trade Agreement (NAFTA). We estimate that this partnership will provide for an additional $75 million in business and industry guaranteed loans in fiscal year 1998.

For all business programs, the emphasis this year is to provide program funding in our targeted areas of greatest need. This objective is supported in the Performance Goals identified in the Rural Development Strategic Plan, the Administrator's Priority Goals, and the priority selection criteria of the various regulations that are used to score and select projects. To demonstrate our earnestness, Rural Development State Directors' annual performance will be evaluated, in part, based upon how well they accomplish the program objectives of providing financial assistance to targeted areas and areas of greatest need.

The following are examples of how the Business and Industry Guaranteed Loan Program, the Rural Business Enterprise Grant Program, the Intermediary Relending Program, and the Rural Economic Development Loan and Grant Program provide economic opportunities in America:

B&I Guaranteed Loan Program and Rural Economic Development Loan Program: Freshwater Farms, Inc., Mid Delta Employment Zone, Mississippi

Freshwater Farms, Inc., was originally incorporated in November 1982 under the name "Humphreys County Catfish Processing" by Mr. Robert Edwards. In September 1986, a group of nine local catfish farmers and businessmen joined with Mr. Edwards to provide new capital, new management, and increased catfish supplies. Stock in the company was issued equally to all ten stockholders, a new ten-member Board of Directors was elected, and the name was changed to Freshwater Farms, Inc. Under this leadership, the company has grown in annual sales from $4 million to $18 million, in employment from 75 to 170, and the number of stockholders has increased to 19.

The Rural economic Development Loan Program provided a $400,000 loan to Twin County Electric Power Associate to finance the processing equipment for Freshwater Farms.

Rapid growth, requiring continuous repair and renovation, placed a considerable strain on the company facilities and resulted in inefficiencies and added expenses. Yet, even with these disadvantages, the company has proven itself to be a low-cost processor in the industry, delivering a quality product to markets in over 20 States. By relying almost exclusively on stockholders to supply catfish, the plant has been able to operate at near maximum capacity and has been profitable during varying market conditions.

In order to supply additional processing capacity for the stockholders, who have expanded their operations, the Board of Directors unanimously agreed to build a completely new facility which would accommodate future sales of $30 million, improve efficiencies, and increase employment from 170 to 235. An increase of 65 new jobs and the economic activity associated with these jobs have a very positive impact upon the unemployment rate, sales tax revenues, property tax revenues, and welfare rolls. The facility is located in the Mid Delta Employment Zone, one of only three Federally designated Rural Empowerment Zones in the United States. The new facility is a source of pride for the owners, employees, and the community as a whole. Had the new facility not been built, production would have been reduced in order to meet ever increasing environmental regulations, and employment would have been reduced by nearly 40 jobs.

Rural Business Enterprise Grant: Town of Medway, Maine

A $30,000 rural business enterprise grant was awarded to the Town of Medway to develop an industrial site. The project was a cooperative effort between the town, the State of Maine, private business, and RBS. In addition to the $250,000 provided by the funding partners, Great Northern Paper, Inc., donated the land for the roadway.

The project enabled Medway to bring in much-needed employment. Earthgro, Inc., a manufacturer and processor of bark, wood chips, and other forest byproducts, initially provided 16 new jobs when the company started a new operation in the industrial park in 1997. The business now provides 25 jobs and is Medway's largest employer. Since this is a new operation, it did not just relocate the company's existing jobs.

Medway is an economically depressed area which has depended on the paper mills located in adjacent towns to provide jobs. Since 1990, the mills have eliminated more than 2,500 jobs, significantly affecting Medway's economy. The area unemployment rate exceed the State rate by approximately 50 percent. This project provided immediate jobs to the area, and it is expected that additional businesses will locate to the park in the future, thus further mitigating economic distress in the area.

Intermediary Relending Program: Northeast Delta and Macon Ridge Enterprise Communities, Louisiana

Magnolia Home Health Services of Tallulah, Louisiana, is a family owned home health care business situated in rural Madison Parish, within the Northeast Delta Enterprise Community. The family saw the need to provide home health care services to this impoverished Delta Region and developed a plan to implement the service. After several unsuccessful attempts to obtain funding through traditional lenders, the business presented a plan to Northeast Delta Enterprise Community. The Northeast Delta Enterprise Community was not yet set up to provide business loans, and Macon Ridge Economic Development Region, Inc., stepped in and provided a loan of $112,500.

Magnolia Home Health Services has not only provided rural Madison Parish with quality home health care, but has grown well beyond the projected 10 employees to a staff of more than 20. In addition to Madison Parish, it now serves a total rural population of 12,463 including areas of Tensas Parish and Richland Parish, which are within Macon Ridge Enterprise Community.

The business has been so successful that it paid the original loan of $112,500 down to $38,000 in just over a year, $50,000 ahead of schedule. The business is still growing and has certainly boosted the economy and health care service in Madison and surrounding parishes.

Rural Economic Development Loan Program: Winnebago Cooperative Telephone Cooperative, Lake Mills, Iowa

A $350,000 zero-interest loan was made to the Winnebago Cooperative Telephone Cooperative for the purpose of assisting the Larson Manufacturing Company of Lake Mills with its plant expansion.

Larson Manufacturing Company produces aluminum wood core storm doors, aluminum windows, and energy saving products. The Company's overall plant expansion included the purchase of land, site preparation, building of roads, sewer and water extensions, construction of a 70,000 square foot building, parking lots, and the purchase of new manufacturing equipment. An additional $2.43 million was leveraged from other funding sources for a total project cost of $2.78 million. It was estimated that the project would increase production capacity by 25 percent and warehouse capacity by 50 percent.

It was projected that 50 new jobs would be created within two years of completion of the project. Plant representatives have indicated that, in less than one year, the employment projection had already been surpassed. The jobs created in this small rural community of 2,143 population consist of sales managers, sales persons, truck drivers, general production workers, warehouse workers, production coordinators, forklift operators, and office support staff. The new jobs have led to an increase in the long-term productivity and per capita personal income in the rural areas of north central Iowa and south central Minnesota.

Rural Economic Development Loan and Grant Program: Chariton Valley Rural Electric Cooperative, Albia, Iowa

A $300,000 grant was made to the Chariton Valley Rural Electric Cooperative of Albia, Iowa, to establish a revolving loan fund program. The electric cooperative provided $60,000 of its own funds and made loans totaling $360,000 to the Albia Industrial Development Corporation to renovate a vacant industrial building in Albia and to purchase 24 acres of land to expand an industrial park. These loans were leveraged with $662,000 of financing from private sources.

After renovation of the 102,000 square foot industrial building, one-half of the space was sold to a metal fabricating business which employs 33 people. The business holds the option to purchase the remaining building space. In the interim, a plastics company proposes to lease the remaining space for a period of three years.

At the end of the lease term, the plastics company intends to build a 100,000 square foot building in the new industrial park.

COOPERATIVE SERVICES

The Cooperative Services Program devotes its efforts to promoting the understanding and use of the cooperative form of business as a viable option for rural residents. As government support programs are changed and encouragement is given to a more market driven policy, farm operators, ranchers and other rural residents are realizing that they need more effective forms of group action in the marketplace to represent their economic interests.

Cooperative Services conducts studies, alone or in conjunction with other Federal or state institutions, to provide farmers with information on economic, financial, organizational, legal and social aspects of cooperative activity. Technical advice assists farmer cooperatives in the development and operation of viable organizations to better serve the Nation's family farmers. Educational assistance provides farmers and other rural residents with a proper understanding, use and application of the cooperative tool.

The Nation's agricultural sector is currently experiencing rapid structural change often referred to as the "industrialization of agriculture." United States businesses involved in agriculture are finding it increasingly necessary to have a coordinated and controlled supply of a narrowly defined raw product. As previously mentioned, the report "A Time To Act" by the National Commission on Small Farms has recommended an expanded use of cooperatives as a means for smaller farm operators to access markets.

A major initiative by RBS has been to encourage the staffing of Cooperative Development Specialists in each State Office. These individuals, either solely or collaterally, provide a more localized source of expertise in guiding the development of new cooperative businesses and helping to determine their feasibility. We are confident they will become a more important source of assistance to emerging businesses as they gain more expertise.

Development of a sound knowledge base acquired through research is essential to offering sound technical and cooperative development assistance. This program utilizes researchers at the 1862 and 1890 universities as well as state departments of agriculture on important agricultural cooperative marketing projects. As an example, Purdue University completed research on cooperative coordination in the hog-pork sub-sector that may help maintain the status of independent hog producers.

There has been a lapse in supporting research on cooperatives in recent years, and the 1997 budget includes $2 million for the Federal/State research on cooperatives program. This money will be used in partnerships with State Departments of Agriculture and State universities and colleges to fill the void and make up for lost ground. Among the new areas for research are the role that cooperatives can fulfill as Federal farm price supports are ratcheted down and perhaps eventually terminated, the emergence of collaboration between farm operators in farm production cooperatives, evaluation of types of strategic alliances developed between cooperatives and with investor owned firms, identification of key successes and problems of "new generation" cooperatives, and operational adjustments being made by cooperatives to global competitors.

We met recently with representatives from the 1994 Native American institutions and encouraged them to develop, with our help, teaching modules on cooperatives that fit into their expanding curriculums. We also encouraged development of a Cooperative Center of Excellence at one or more of their institutions.

As an example of technical assistance, we worked with Shoreham Apple Growers of Vermont, an apple packing and warehouse operation serving the majority of apple growers in the state, to develop a plan to revitalize its organization. A business plan and financial projections were developed with the help of Cooperative Services staff to enable them to obtain bank financing required to keep in operation. The cooperative was also assisted in adopting operational and record keeping changes required for its long term survival.

The emerging alpaca industry is characterized by its geographical dispersion and its lack of organization at the producer level. This past year, Cooperative Services staff worked closely with producers throughout the western states to establish the framework for a producers' association that will facilitate development of industry strategies and orderly marketing. From a disorganized group of producers at the beginning of the year, the alpaca association has emerged with a strategic plan, experienced officers, and a sense of direction that will carry them forward as an effective marketing cooperative.

Small vegetable growers in Arkansas have been assisted in growing tomatoes to supply Burger King. The growers are attempting to structure a cooperative that will continue to provide them market access to the growing produce market. Similar efforts are being made in eastern Kentucky to assist small producers accustomed to growing tobacco to engage in vegetable production as a parallel crop and to market it through a local cooperative packing facility.

RURAL COOPERATIVE DEVELOPMENT GRANTS

Another source of assistance to developing cooperatives is the funding of new and existing cooperative centers through the Rural Cooperative Development Grant Program. This partnership with institutions of higher learning and nonprofit associations permitted us to fund 11 centers for a total of $1.7 million in 1997.

The program is used to facilitate the creation or retention of jobs in rural areas and enhance producers' incomes through the development of new rural cooperatives, value-added processing, and other rural businesses. Grants are competitive and awarded based on specific selection criteria.

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS (ATTRA)

We have also been providing extensive support for the Appropriate Technology Transfer for Rural Areas program which provides producers and agribusiness advisors information on use of the best sustainable production practices. Encouragement of such practices lessens dependence on agricultural chemicals and is more environmentally friendly.

The ATTRA program handled over 18,000 requests this past year and continues to be a major source of information on sustainable agriculture throughout the country through its 800 telephone number and the use of the Internet. We're asking for $2 million, an increase of $700,000, for the ATTRA program to accommodate expanding requests for information.

NATIONAL SHEEP INDUSTRY IMPROVEMENT CENTER

The National Sheep Industry Improvement Center was established this past year. The Center has held three public hearings, developed a strategic plan, and hired an Executive Director. This program will become operational under the Board's direction this year and will assist development of infrastructure in the sheep and goat industries through a $20 million revolving fund provided in the Federal Agriculture Improvement Act of 1996.

FISCAL YEAR 1999 BUDGET REQUEST

The fiscal year 1999 Budget requests a program level of $1.2 billion for the Rural Business-Cooperative Service including amounts under the Rural Community Advancement Program. The Federal loan guarantee as used in the Business and Industry Program is an extremely cost effective mechanism to meet capital needs of rural businesses. Under Federal Credit Reform, business and industry guaranteed loan program borrowers or the cooperating financial institutions pay an up-front fee which is pooled as a reserve to be used in future years to cover losses in the program. This reserve remains in the Treasury and draws interest until it is needed. In this way, the participants in the program "self insure" the program against losses and minimize the cost of the program to tax payers. The result of this self insurance feature is that the loan subsidy rate, that is, the proportion of the program cost that must be provided from tax money is currently less than a penny on the dollar.

As part of the Rural Community Advancement Program (RCAP), the Budget requests program levels of $1 billion for business and industry guaranteed loans, $50 million for business and industry direct loans, and $40.3 million for rural business enterprise grants.

The Intermediary Relending Program of the Rural Development Loan Fund is requested at the $35 million level.

The Rural Economic Development Program budget proposal includes a $15 million loan level and $11 million for grants.

The total program request for Cooperative Services is $5.7 million. This includes $1.7 million for cooperative development grants and $2 million for appropriate technology transfer. Federal/State cooperative marketing research agreements are proposed at $2 million.

For administrative expenses, the budget includes $29.9 million for the Rural Business-Cooperative Service. Although this amount is slightly greater than the current level, the increase is less than the rate of inflation and will call for a reduction in employment in 1999 and belt tightening in other administrative activities.

EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES

The Rural Business-Cooperative Service continues a strong fiscal year 1999 Program in Empowerment Zones and Enterprise Communities. The Budget estimate includes a program level of $31 million to be reserved for these designated areas. We are also proposing legislation to provide for additional rural Empowerment Zones as authorized in the Taxpayer Relief Act of 1997.

CONCLUSION

Mr. Chairman, this concludes my formal statement on the fiscal year 1999 Budget. I would be happy to respond to any questions the Subcommittee may have regarding the business and cooperative development programs of the Rural Development Mission Area.

PREPARED STATEMENT OF JEFFREY W. GAIN

Mr. Chairman and members of the Subcommittee, I am pleased to testify today on the President's fiscal year 1999 budget proposal of the Alternative Agricultural Research and Commercialization Corporation (AARCC). It is a pleasure to provide you with an update on the Corporation's investment successes and the impact the AARC Corporation is having on the economy of rural communities.

I am not a federal employee and am not here to support the growth of another Federal bureaucracy. I do, however, own and operate a diversified farming operation near Hardin, Illinois, producing grain, orchard crops, and livestock. I also serve as Chair of the Corporation's Board of Directors. I am here today on behalf of the mostly private sector members of the AARCC Board of Directors to testify to the unique opportunity the AARC Corporation offers to add value to agricultural raw materials and create economic opportunities in rural communities.

The committee has copies of the latest Source Book which lists many of the AARCC-supported companies and the products now being produced and sold. The committee also has a copy of our first annual report as a corporation. You will notice such industrial products as absorbents, building materials, lubricants, cleaners, and others. Many of these products are made from what was considered agricultural waste.

As an aside, I would be remiss if I did not point out that because of their very nature, these products may be environmentally friendly. In many instances, they replace finite or polluting raw materials such as petroleum. Certainly, using renewable, sustainable raw materials from agriculture can be viewed as having a positive impact on the environment.

I would like to offer the committee a short background on how we got to where we are today. Congress created the AARCC Center in the 1990 Farm Bill and reauthorized it in the 1996 Farm Bill as a wholly-owned corporation of the U.S. Department of Agriculture (USDA). AARCC's creation followed a 1987 report of the New Farm and Forest Products Task Force. I served on that task force which met for 2½ years. The task force recommended developing and commercializing a wide array of new farm and forest products utilizing the excess productive capacity of American agriculture as a way to revitalize ailing segments of rural America.

When we downsize agricultural production through set-aside or other non-production incentives, we also downsize rural communities and the infrastructure which supports agricultural production. Rural America must harness the productive capacity of idled acres by producing crops for value-added industrial use, or by growing new unsubsidized industrial crops. The U.S. "farm plant" is running under capacity. The National Agricultural Statistics Service reports that in 1996, only 336 million out of a possible 430 million acres of cropland were cultivated in the United States. Approximately 94 million acres of cropland, or 22 percent of our total productive capacity, lay idle. Companies in the U.S. must create and sell bio-based, value-added industrial products from agricultural and forestry materials and animal by-products if we hope to restore productivity and economic vitality to Rural America and expand world markets for U.S. agricultural products.

It is true that many of the things we make today from petroleum can, in fact, be made using biodegradable materials. This is not a new idea. USDA's four regional research laboratories were built in 1938–41 to find new uses for farm products. A national Presidential Commission on Increased Industrial Uses of Farm Products studied new uses in 1956–57. I have already mentioned the work of the 1985–87 USDA Task Force. Predating all these activities was the formation of the "Chemurgic Council" in 1935 under the leadership of Wheeler McMillen with financial support from Henry Ford. Other notables on the council included Thomas Edi-

son, Irenee du Pont, MIT President Karl Compton, Nobel Prize winning physicist Robert Milliken, General Motors Vice President Charles Kettering, and Sears, Roebuck & Company Board Chairman Robert E. Wood. George Washington Carver was also a leader in the work of finding new uses for agricultural materials. Henry Ford even built a car body from vegetable plastic and plant fibers. He felt we could "grow our cars." Today we are beginning to see a move in Europe to a car which can be totally recycled. Increased use of vegetable fibers is part of that effort. Here in the U.S. a number of car manufacturers are also moving toward a "green" automobile.

The AARC Corporation, a unique venture capital entity, is attempting to restart the bio-based economy by investing in small businesses that are using agricultural materials to produce environmentally-friendly industrial products. The decision as to which companies and industrial sectors should receive AARC Corporation investments is made by a largely private sector board. Eight of the 11 members of the AARCC Board are from the private sector representing processing, financial, producer, and scientific interests.

It is important to recognize the AARC Corporation intends to make a profit for the Federal government from these investments and reinvest those repayments in other companies. But AARCC has a larger mandate. Unlike private sector venture capital firms, the AARC Corporation's investment strategy considers much more than profit, also referred to as return on investment (ROI). In pursuing AARCC's investment strategy, no one variable—ROI, jobs creation, or agricultural material used has priority. Investment decisions are made after weighing these three factors in order to maintain a balance in our portfolio. To date the AARC Corporation has invested $33 million in Federal funds, leveraging an initial $105 million in initial private investments creating more than 5,000 new jobs in rural communities. AARCC continues to be an engine for rural development by investing in technologies that create real jobs and increase the use of agricultural materials or agricultural wastes.

AARCC's first investments were made in 1993. We know that not all the companies in which the AARC Corporation invests will be successful. However, many will. The venture capital industry norm for portfolio performance is that companies do not begin to break even until 75 months after the initial investment, somewhere between the sixth and seventh year. Even so, some 15 companies have already repaid the AARC Corporation over $200,000 in royalties. The business plan anticipates a continued and steady increase in repayments over the next 5 years.

We are constantly working with those companies in which we have invested to help them secure additional outside financing. Because the AARCC partnership places the USDA "stamp of approval" on these companies, it gives private investors a better "comfort level" and many partners have been able to attract significant follow-on financing from private sources. The AARC Corporation has secured an additional $3 dollars in private follow-on financing for each $1 dollar it has invested.

Many AARCC companies have succeeded in penetrating difficult to access retail distribution channels for consumer products. Those marketing efforts are continuing. Perhaps the biggest near-term market for AARCC-supported companies, however, is government. To help jump-start these companies, as part of the 1996 Farm Bill, Congress included language which gives Federal procurement preference to products produced by AARCC partners. The preference language is part of the new Agricultural Acquisition Regulations (AGAR), which govern USDA purchases, recently published in the Federal Register. This year, similar information will be included in the Federal Acquisition Regulations (FAR), which govern all Federal purchases. As part of on-going marketing efforts to the Federal government this past fall, AARCC and 30 of its partners participated in the National Marketplace for the Environment here in Washington attended by Federal procurement officials, private buyers, and environmental organizations.

With the necessary resources, the AARC Corporation can continue and even expand its role in creating value-added products and jobs that benefit rural America. With the AARC Corporation investment serving as a catalyst, private sector funds, which otherwise would not be available, will be committed to these companies. The AARC Corporation respectfully requests $10 million in 1999 to continue its mission. An appropriation at this level would enable the AARC Corporation to fund approximately 20 new investments. In addition, these funds would make it possible for AARCC to provide follow-on financing to some of its existing portfolio companies which have begun to transition from the start-up stage of their development to intermediate stage in which they are beginning to penetrate markets and make sales. At the requested funding level of $10 million, AARCC can attract some $30 million in private capital investment in its portfolio companies, thereby creating hundreds of new jobs in rural communities.

In conclusion, AARCC's venture capital approach is quite different from that of traditional government loan or grant programs. Indeed, AARCC may be seen as a model for public/private cooperative developments and several other Federal departments are investigating the possibility of establishing AARCC-like programs. The AARCC model of eventual self-sufficiency, coupled with the program's role as an engine for economic development, makes it an attractive option for a new way of doing the government's business.

BIOGRAPHICAL SKETCHES

JEFFREY W. GAIN

Jeff Gain was appointed to the Board of Directors of USDA's Alternative Agricultural Research and Commercialization (AARC) Corporation in 1995 and serves as Chairman of the Board. The AARC Corporation makes equity investments in small, mostly rural-based companies to commercialize industrial uses for agricultural materials. Mr. Gain currently manages his farm in Calhoun County, Illinois, and is also engaged in agricultural policy, marketing, and management consulting.

Mr. Gain served for 10 years as the Chief Executive Officer the National Corn Growers Association, retiring October 1, 1994. Prior to that, he was Executive Director of the American Soybean Association from 1977 to 1984. He is one of the original founders of the New Uses Council, formed in 1990 to serve as an advocate for commercializing new industrial uses for agricultural raw materials and to help coordinate public and private sector activities in that regard. He was Chairman of the New Uses Council from 1991 to 1993.

Mr. Gain was one of the founders of the St. Louis Agri-Business Club and served as its first president. He was named the Agri-Business Leader of the Year by the Club in 1985. He also served as a member of USDA's New Farm and Forest Products Task Force, which resulted in the new industrial uses initiatives for U.S. agriculture. The Task Force recommendations in 1987 led to the creation of the AARC Corporation in the 1990 Farm Bill.

For his work in promoting the development of industrial products from agricultural materials, he received the Outstanding Leadership Award from the American Crop Protection Association. Most recently, he was presented the prestigious Wheeler McMillan Award from the New Uses Council. Mr. Gain has traveled extensively on various agricultural marketing missions to Europe, South America, and Asia, including the People's Republic of China.

Jeff is a native of Rushville, Illinois, and has a B.S. degree in management from the University of Illinois. After graduation as a Lieutenant, he served as a Public Information Officer and as an admiral's aide in the U.S. Coast Guard. He then served as Executive Secretary of several Illinois county chapters of the American Farm Bureau Federation and was director of Commodity Programs for the Illinois Agricultural Association for 10 years. He has two daughters, Ann and Gretchen, and a 6-year old son, Jeffrey.

ROBERT E. ARMSTRONG

Dr. Armstrong joined the Alternative Agricultural Research and Commercialization (AARC) Corporation in early 1993. Since that time, he has assumed a variety of increasing responsibilities, culminating in being named Executive Director in 1997.

The AARC Corporation is a wholly-owned corporation of the U.S. Department of Agriculture (USDA). Operating under the guidance of a largely private-sector Board of Directors, the Corporation functions as a venture capital firm that invests in companies commercializing non-food/non-feed products derived from agricultural raw materials. The AARC Corporation currently has $35 million invested in companies throughout the U.S. As Executive Director, Dr. Armstrong is responsible for the daily operations of the Corporation, as well as the on-going growth and management of the Corporation's portfolio.

He was graduated summa cum laude/Phi Beta Kappa with a B.A. degree in psychology from Wabash College in Crawfordsville, Indiana. He holds an M.A. in experimental psychology from Oxford University, Oxford, England. In addition, he holds an M.S. in biology and a Ph.D. in agronomy (plant breeding and genetics), both from Purdue University in W. Lafayette, Indiana.

His early professional work centered on Third World issues, and he has worked in a number of developing countries. His work includes projects related to famine

relief and food availability in Sahelian Africa, agricultural development in the Persian Gulf and deforestation in Southeast Asia.

Dr. Armstrong is a Vietnam veteran and continues to serve in the U.S. Army Reserve. He has two sons and two daughters and is married to the former Leslie Carlson, a career USDA employee.

DELTA REGION ECONOMIC DEVELOPMENT PROGRAM

Senator COCHRAN. Ms. Thompson, we appreciate your comments and the written statement that you submitted. There is a proposal the administration has made to create a Lower Mississippi Delta regional economic development program and to have it administered, in effect, by the Appalachian Regional Commission or in some way be managed by the Appalachian Regional Commission staff.

The President's budget request includes $426 million for the Appalachian Regional Commission and a $26 million program is proposed for the Lower Mississippi Delta Region. Senator Bumpers has taken an active role in earlier years, and I cosponsored his initiative to establish a study commission to see if there were ways that we could deal with problems of poverty, education, economic development, transportation, and the like in this region. A lot of information was compiled and work was done and the Commission went out of business after it made its recommendations.

I like the idea of targeting funds to this region because it is one that has characteristics that are similar throughout the area. I am curious to know what your reaction would be if the Congress decided to approve the idea, but place the responsibility for administering the program in the Department of Agriculture, and specifically under your jurisdiction. What would your reaction be to that?

Ms. THOMPSON. Well, I think that it could be extremely valuable to that region of our country. The reason I do is that this particular approach would be a broader regional approach to partnering with communities. The more we learn about the role that the Federal Government can play, the more I personally and we as a department appreciate that we work best as a partner and the communities have the greatest potential for sustainable growth when each community works harmoniously within the community, but also partners and joins with other communities in a larger regional area, that long-term sustainable growth and economic and social development are going to occur probably only if there is a regional approach to economic development and rural development.

NATIONAL CENTERS FOR EXCELLENCE

Senator COCHRAN. Earlier this year, I think in January, you announced that you were establishing some national centers for excellence to provide technical expertise to rural America. One of those centers is to be located, as I understand it, at Mississippi Valley State University in Itta Bena. The center is to receive $100,000 and a Peace Corps fellow to assist as liaison between the community and the university. What other funds would be available to support this center's activity, and what is the status of it now?

Ms. THOMPSON. Well, this, as you stated, is a new initiative. The funds, additional funds, that would be available would be funds through our traditional programs that are administered in rural development. I think this is an excellent approach to economic de-

velopment because community colleges have always served a variety of purposes in the communities.

In addition to providing education opportunities, they very typically are doing outreach and working with community leaders, both local government leaders as well as business leaders, and so I believe that there is considerable potential for this partnering to occur between us and the community colleges and the community colleges and their communities that they are serving. As they put together plans and initiatives for their own communities, then that will allow them to come back to us, or us to go to them, to discuss and explore how the programs that are administered through rural development at USDA could also benefit those communities.

RURAL UTILITIES SERVICE

Senator COCHRAN. The Rural Utilities Service is one of those agencies that ends up being under some pressure from time to time because of the growing awareness of deregulation, the idea that we are going to have a new national energy policy in utility service. What is being done to prepare for these changes, and are these changes having any effect on the ability to provide utility services in rural America under the traditional government programs that are administered by the agency?

Mr. Beyer, would you be able to respond to that?

Ms. THOMPSON. I would ask Mr. Beyer to elaborate on that.

Mr. BEYER. Thank you, Mr. Chairman and Senator Bumpers. I would be happy to respond to that. Thank you for the question. The electric and telecommunications industries, as you know, are in a revolution. It is a milestone in the history of providing infrastructure services, moving from the old traditional monopoly structure to an open-access, market-based price, customer choice.

The telecommunication industry has now moved over to the Federal regulatory and the Public Service Commission activities in rulemaking to comply with the legislation, which is another difficult, very difficult process from the standpoint of providing support into high-cost-to-serve areas. I think, you know, we are going to be all right, but there are a couple of critical things that we are working with, with the FCC and with the Public Service Commission where we have an opportunity.

Basic to our loan security issue is certified areas, which is now multiple. States can issue as many certified areas as they wish. The second principal thing for our loan security traditionally has been the universal service pool mechanism that exists in the telecom industry. About 65 cents out of every revenue dollar, on the average, of the RUS borrowers comes from that pool, which includes toll separation.

There is another part that addresses the high-cost-to-serve areas and high-cost-to-maintain-and-operate areas. That pool is now about $20 billion that is generated from within the infrastructure, and is a huge issue at FCC in the rulemaking.

We are working with the FCC and making as much input as we can to stand up for the rural systems, obviously. You know, it is going to continue to evolve and we are hopeful that in the end—Congress will provide a public policy that says we need to support the high-cost-to-serve areas so that we don't end up with infra-

structure have-nots and haves in this country. I am marching forward with that 50-year-old, 60-year-old policy that has been enacted since the Rural Electrification Act.

Senator COCHRAN. One provision of the budget request suggests the Administrator of RUS will have the ability to move subsidy budget authority among the electric loan programs under your jurisdiction. Is this something that is going to require additional legislation to provide that authority, or do you suggest or does the budget suggest that you now have that authority? What is the reason for that?

It seems to me it might bypass the appropriations process where we appropriate specific amounts and identify subsidy levels and the like in our bill. Now we are going to have the provisions of the bill ignored and instead we are going to see the administrator moving subsidy authority among the programs without any further action by Congress?

Mr. BEYER. Well, Mr. Chairman, we view that as a tool in managing the dollars invested in infrastructure. If there is a need for additional hardship loans, we would like some authority to utilize budget authority to increase hardship loans from funds that are not being utilized. It would simply be another tool for us to better manage the portfolio.

Senator COCHRAN. I assume the answer is that you think you have that authority now? No new legislation is required?

Mr. BEYER. No; my understanding is we do not have that authority now.

Senator COCHRAN. This proposes that that authority be given?

Mr. BEYER. Appropriation legislation is required, Mr. Chairman.

WATER 2000 INITIATIVE

Senator COCHRAN. I see. The President's Water 2000 Initiative has a goal of providing clean running water by the year 2000 to all rural households. Is that something that is possible under the budget that is proposed by the President? I suppose that should be asked of the Secretary?

Ms. THOMPSON. Under the budget that is being proposed, we will not be able to reach every household by the year 2000, but we have made tremendous progress over the last several years in this initiative. The numbers in the beginning of 1993, before the Water 2000 Initiative, were about 400,000 households with about 1 million rural residents without any running water. Through the Water 2000 Initiative we are now down to about 300,000 households and about 800,000 residents without running water.

The challenge gets greater the closer we get to reaching the goal because we are now reaching the hardest to reach clients, and so it is a real challenge.

Because I have an optimistic nature, I think it is important to keep working toward that goal that was established in the Water 2000 Initiative. I think it is also important to realize that it is a very, very difficult goal to achieve given our commitment to also balancing the budget.

I, as well as our Administrator and others in the Rural Utilities Service—John Romano was recognized earlier—we will continue to have a very, very strong commitment to reaching as many homes

as we can by the year 2000. You know, there is always 2001 and we can just keep moving forward at that point as well.

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman.

HOME OWNERSHIP LOANS

Mr. Shadburn, let me ask you, Secretary Thompson alluded to the President's commitment to add 8 million homeowners by the year 2000. Is that correct?

Mr. SHADBURN. Yes, sir.

Senator BUMPERS. How many of those are not going to be in rural areas, but how many of those are you going to be responsible for under the Agriculture Department housing programs? Do you have any idea?

Mr. SHADBURN. In terms of——

Senator BUMPERS. Have you been assigned any kind of a quota on this?

Mr. SHADBURN. We have not been assigned a quota, but obviously we are working with our rural partners throughout the Nation to look and see how we can take $4 billion in the housing programs to maximize the total number of units we can place toward reaching that 8 million goal that the President has set.

Senator BUMPERS. Well, it is a very laudable goal, but it is a pretty long stretch, I think, to get there. I applaud the President for doing it.

DELTA REGIONAL COMMISSION

Secretary Thompson's statement, I was especially impressed with the statistics you gave about poverty still being fairly pervasive in the rural areas, and especially in the South. Let me just add my own comments to what the chairman has already mentioned, and that is, the Appalachian Regional Commission [ARC]. I will tell you now, I am not for putting this $26 million in the ARC. I would like to see the Delta Commission stand on its own. They have unique problems. I just do not want it to get lost in the Appalachian Regional Commission.

I have a lot of time invested in that in my life, and the President has too. The only person I would yield to in my commitment to the delta is the President, because when he was Governor he did everything but stand on his head down there to try to help those people.

DELTA TEACHERS ACADEMY

In any event, one other question I wanted to ask you on the delta and you mentioned education and the role it plays in rural areas. Are you familiar with the Delta Teachers Academy?

Ms. THOMPSON. I am not, per se.

Senator BUMPERS. You are not. Is anybody here?

Senator COCHRAN. I am. [Laughter.]

Ms. THOMPSON. Is there a role that we can play through community facilities or distance learning with the Delta Teachers Academy? I may have someone here.

Senator BUMPERS. I will submit a question to you in writing on that, because that is something that Senator Cochran and I are

both committed to. It is a $3.5 million program. It is for the delta. I want it continued, and I would like to see it expanded. I would like to get the Department's view on how well they are performing.

Ms. THOMPSON. Well, we will be very happy to respond.

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS

Senator BUMPERS. Yes; for many years, Senator Cochran's former colleague in the House, Jamie Whitten, and I fought vigorously, long, and hard over a program which was originally housed in Memphis. I do not think—Jamie is not with us anymore and I am reluctant to say that I think Jamie turned against it when it moved from Memphis to the University of Arkansas. Of course, that is what peaked my interest.

In any event, we had a long, rather volatile battle about that. I was always convinced that in the coming days as we looked for different methods of farming using less herbicides, less pesticides that the so-called appropriate technology transfer program at the university had great potential.

I think Jamie was right to some extent. Back when I was fighting it—I guess that has been 10 years ago—he had some arguments on his side. They were not as busy as they would have you believe, but now all of a sudden—not just all of a sudden, but the demands on their services have been increasing almost exponentially. Really, this is not a question. It is just a statement that applauds you for asking—who has that program?

Mr. WATKINS. [Raising hand.]

Senator BUMPERS. Mr. Watkins, I want to applaud you for the request for the increase in that program, because they are really—the demands on them are increasing dramatically as you probably know. I am sure that is the reason—is that the reason you have asked for the increase?

Mr. WATKINS. Yes, sir; actually, Senator Bumpers, the demands on the program, as you have already indicated, are growing exponentially. Information requests are coming from farmers, from small farmers, from extension agents throughout the entire country. One of the things that you suggested in a previous hearing, I believe, was that we consider bringing technology, the use of Internet and computers to that program. That is something that we would like to see going forward as well. That is part of the reason for the request for an increase.

Senator BUMPERS. Sometime, Mr. Watkins, if you get a chance, I wish you would go down to Fayetteville and look at the brewery.

Mr. WATKINS. I certainly will.

WATER AND WASTE PROGRAMS

Senator BUMPERS. Mr. Beyer, I will probably submit some questions to you in writing, but I wanted to ask you, first of all, it is my understanding that private companies are making efforts to buy some of these rural water programs. Is that true?

Mr. BEYER. Senator Bumpers, Mr. Chairman——

Senator BUMPERS. Systems, I mean, some of the systems.

Mr. BEYER. In some cases where a community starts growing out into a rural area, then, you know, you have a little bit of a con-

frontation between the community and the rural areas. There is some of that.

Senator BUMPERS. Is that presenting any kind of a problem for you?

Mr. BEYER. Well, we have looked at this this particular year, and, you know, we do not think the problem is wide enough for Federal legislation. We would not recommend that at this point in time. It is all down to the local community issues. Where communities work together, where the rural people work together with their urban neighbors, they work this out and they sell it. Where they do not work together, it is a very, very difficult process and they fight.

You know, unless it really spreads all over, it would not be our recommendation that there be Federal legislation. That would just create another big problem.

Senator BUMPERS. I do not have any planned. I just wanted to know what kind of a problem it was, if any, for you.

Mr. BEYER. It crops up here and there. I can give you some numbers, if we go back and look at it. We would be happy to do that.

ELECTRICAL RESTRUCTURING

Senator BUMPERS. OK. Mr. Beyer, you and I have discussed electrical restructuring in my office, but I think two or three questions for the record might be helpful. It is no secret that the co-ops in the municipalities are the biggest opponents, I think, generally of electrical restructuring.

Now I would assume since the President has said that he feels electrical restructuring will go a long way toward helping with the global warming problem, that the Agriculture Department, the Rural Utilities Service, you are not adamantly opposed to this bill, even though most of your members in the co-op, electrical co-ops, out there are. What is the official position of the Agriculture Department? I assume it is the same as the President's, is it not?

Mr. BEYER. Yes, sir.

Ms. THOMPSON. It is precisely the same as the President's. [Laughter.]

Mr. BEYER. To the letter. The dilemma is that as we move along in this country toward molding a new infrastructure it is a very complicated process as you all know.

Senator BUMPERS. Well, let us get down to the heart of it. There are two or three things. No. 1, they have enjoyed a great deal of independence——

Mr. BEYER. Right.

Senator BUMPERS. A lot of Government assistance, never had a better friend than Senator Cochran and me. I do not enjoy being on the opposite side of them for the first time really in my public career. I must say that I really have some reluctance to say this publicly, but I think their fears are largely unfounded.

Now, California has allowed municipalities and, I think, co-ops to opt in or opt out of their program. There are some people who think we ought to do that here. I have always felt this thing will only really work well if you don't make any exceptions. I am not going to make an exception for TVA and I would not make an exception for the PMA's, municipalities, co-ops, or anybody else be-

cause I think everybody ought to have a chance to enjoy the benefits of competition, picking and choosing whom they want to provide them with electricity.

I must say because of the political and other alliances I have had with the co-ops I just want to ask this question. Their principal concern, at least I think it is their principal concern, is, as I have always said, the guy that lives down at the end of the lane. Now INRON, for example, may come and pick off some of your industrial customers and the Arkansas Electric Co-Op through one of their regional co-ops supplies one of the biggest steelmills in the United States.

The point is they have got a contract which the steelmill must honor, but at some point that is going to be up for renewal and the co-op may get it and they may not. That is competition. When you are in the steel or aluminum business, you cannot stay in business unless you compete and unless you have a competitive electric rate.

The fear is that the big customers are going to be picked off, the little guy at the end of the lane is going to be left—this is the traditional case—and his rate is going to go up. Now I want to give you the opposite of that and then ask you to comment.

No. 1, there are a few States that allow competing distribution lines to be built, but I do not think very many. In my State, you cannot just walk in and build a competing distribution line. Let us assume for a moment that that is not a problem, that people cannot come in and build a distribution line.

Let us assume further that the steelmill, that you lose the steelmill and not just because of my bill, because as I said in my illustration the REA is having to compete for that business anyway, but at the end of that contract, say, they lose it. That takes a big chunk out of their revenue. They have generating capacity that they have gone in debt for to supply the steelmill. When the steelmill leaves, let us assume that they now have a 50-percent excess in generating capacity that they cannot use.

Is everybody with me so far?

[No response.]

Senator BUMPERS. The question then becomes, What are you going to do with the rest of your customers? How are you going to pay for it? Now, No. 1, under my bill as you know, and it is the only bill in the House or Senate either one that provides for stranded costs. I feel very strongly about that, because that just takes away a lot of arguments against the bill, but I also think it is right to do that.

In my State under the bill, the co-op has the right to collect stranded cost. You know who sets the amount of stranded cost they are entitled to recover? They do.

Let us assume that they wind up with a generating plant that they owe $2 billion and they lose $1 billion of generating customers, customers who would use that generating capacity, so they are stuck. They say, "How do we get our $1 billion back?" You get it through stranded costs. They set it themselves.

That means that the steelmill or any other customer—now that steel would apply because that is a private contract—but most every customer in the co-op system if they leave the system and the co-op has stranded cost there will be a wire charge against the

people who have left to make sure that people's rates do not go up until that stranded cost is collected.

Do you follow me on what I am saying, Mr. Beyer?

Mr. BEYER. Yes, sir; yes, I do.

Senator BUMPERS. Now, you still have the distribution line to the guy at the end of the lane. My question is, How is the co-op hurt? They are going to recover their cost of the lost generating capacity, and nobody else is going to be able to build a distribution line to somebody else that they are going to lose customers with. Why is that not a fair deal?

Mr. BEYER. Well, Mr. Chairman and Senator Bumpers, my sense is that most people agree there needs to be some mechanism to recover that cost on generation and transmission facilities, high-cost stuff. When you get down to the distribution system where the folks are, where the meters are, the wire system, if you please, if you take a big load like a steelmill, for example, out of that system there is a huge revenue loss. You are suggesting that they will pick that up with a wire charge.

The wire charge is going to be a big issue because I can tell you that the average cost to operate a distribution system in our loan portfolio—excluding power costs now, this is everything—is 2.9 cents a kilowatt hour. It ranges from, you know, probably 1.5 to 6 cents. Now, if that steelmill is on a 6-cent line, there is going to be some negotiations.

The Public Service Commission will probably get involved, and probably some lawsuits, because those entrepreneurs, those power marketers, that want that steelmill to make some profit are not going to be interested in what happens to that system. They are not going to want to pay a 6-cent wire charge. Therein, I think, lies the dilemma.

I just want to go on and say that—and I am sure this is the administration's position—I really feel that competition in the electric industry would in the long run now, I am talking about, would be useful.

I also feel very strongly that the high-cost-to-serve areas will continue to need some support. It simply costs more money to build a capital investment to build, per consumer to build, lines in high-cost-to-serve areas in rural America and it costs more to operate. We have some figures on that. It simply costs more. Not unlike the telecom, this universal service is to me one of the critical elements of deregulation in our portfolio along with the stranded investment as well.

To me it is not such a huge issue. I mean, it is not a multibillion-dollar issue. With a little tweaking and a continuation of Federal policy that has been there for 60 years, this thing could work. This thing could really work. There is going to be a lot of—you know, EEI is not going to want it. There is going to be all kinds of opposition to it. You know more about that than I do, really. In the end, if Congress sets up some financial support mechanism that does not have to be huge in my judgment, it will work. I think that will work.

Senator BUMPERS. Mr. Beyer, I want you to know that I want to be accommodating.

Mr. Chairman, I will finish after this. I have taken too long, but obviously this is a big issue with me and I can talk about it for a long time. Let me just suggest that, if you will, along the lines we are talking about—because nobody is any more concerned—I have got more people at the end of the lane than just about anybody in the country, and I do not want those people to be penalized as a result of this legislation. If this legislation does not work for everybody, then it is no good.

I believe strongly it will, but there is one other thing I might just say by way of digression, and that is: I try every time I speak to groups to disabuse them of the notion that they are going to have a 20-percent utility cut almost immediately. The truth of the matter is the benefits of competition are down the road. It is going to take a little while to flesh this whole thing out. Stranded costs are going to have to be taken care of. In the long run, I think it is the right thing for us to do.

I am concerned as much about the REA as I am anything else. I wish I could dampen their opposition to this bill. I understand they have done their own thing for a long time, and I can understand that. If you would, just assume that I have asked you this question to be responded to in writing and include in your answer some of those figures you have said that you have. Because as I say, it seems to me that as long as the co-ops own the distribution lines and they get their stranded costs, there really should not be much left to recover in order to service the guy at the end of the lane. That is sort of the point I am trying to make.

Mr. Chairman, thank you very much.

RURAL HOUSING PROGRAMS

Senator COCHRAN. Thank you very much, Senator.

In the budget request for housing, there are proposals to increase funding for some of the housing programs and there is also a proposal for some legislative changes, one of which would require tenants to pay a monthly minimum rent to cover costs of the Rural Housing Service finance programs. Specifically, though, there are requests to decrease funds for a number of these housing programs: Section 515 multifamily housing programs, the Direct Housing Repair Loan Program, the Rural Housing Preservation Grant Program.

MULTIFAMILY HOUSING

In a meeting I recently had with the Inspector General for the Department of Agriculture, he told me that there were serious problems of fraud and waste and abuse in some of these programs. He specifically mentioned the 515 program. Is the Department cooperating with the Inspector General to try to get to the bottom of some of these problems, and is that why you are requesting decreased funding for some of these programs?

Ms. THOMPSON. Well, in a moment I would like to defer to Jan to talk about some of the specifics of our housing programs. We are more than cooperating with the Office of Inspector General. We are working as a partner with the Office of the Inspector General in particular to address the issue of equity skimming among 515 multifamily housing borrowers, and feel very strongly that this is an

important program that for the most part is working well to serve some of the lowest income individuals and families in rural America.

There are a few borrowers who are simply not adhering to the rules and are taking advantage of the program, and more significantly taking advantage of the people who live in the facilities and are to be the ultimate beneficiary of the programs.

With regard to some of the lower requests, some of the decisions are made simply because we have to make some tough fiscal decisions that if we are serious about balancing the budget, and we are serious as I know you are, we just have to make some tough choices. That explains part of it. Jan Shadburn can answer some of the more specific questions regarding the specific programs that you have referenced.

Senator COCHRAN. Thank you.

Mr. SHADBURN. Yes; Mr. Chairman, we have initiated several administrative changes over the last couple of years to strengthen the 515 program. We have also initiated the reforms that the Appropriations Committee enacted, and we have those in place.

We feel very comfortable with the steps that have been taken to strengthen the program over the last couple of years, as well as initiating this OIG/USDA partnership to look at incidents of fraud, waste, and abuse. We have been working with the 12 States on the reforms that we have enacted with the OIG, and looking at creating a model that identifies the potential for fraud, waste, and abuse. Obviously no one is more interested in the future integrity of the 515 program than the Under Secretary and myself. We want to make sure that we do prevent fraud, waste, and abuse, as well as making sure that we continue to provide safe, sanitary, and affordable living conditions for our tenants.

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION

Senator COCHRAN. The AARC program, as I understand it, is under a legislative mandate to phase out its loan programs into a totally private ownership situation. Could you tell us, Mr. Armstrong, what the timetable is for this phasing out or sunsetting of the program and whether or not you are prepared to meet those dates? Help us understand what the funding needs are going to be in view of the legislative timetable.

Mr. ARMSTRONG. Thank you, Mr. Chairman. Before I answer your question, I want to take a second and introduce Mr. Jeff Gain, the chairman of our board. As you know, AARCC is run by a largely private sector board of directors, and Mr. Gain serves as our chairman. He is my boss and I thought it would be nice to introduce him.

In answer to your question, Senator, in the 1996 farm bill the mandate was that by the year 2001 we would present a plan to privatize. The actual privatization date was not set, but the plan is to be submitted by 2001. We are ahead of that date in terms of our preparation of the plan.

At the moment, we are working through a number of scenarios that we would identify as likely endpoints for AARCC when we do privatize. Would we become a small business investment corporation? Would we put it up for sale in private markets? Would we be-

come a government-sponsored enterprise? Those decisions are being worked through by the board after they identify what they think makes the best economic sense, then we will take it to the secretary and then bring it to the Congress.

Now, in preparation for all of this, you know, AARCC has done a business plan where we have projected out our repayment schedule over the next 5 or 6 years. In fiscal year 1998, we project $300,000 in repayments. We are right on target for that. In fiscal year 1999, we are projecting we will recover about $1.7 million. If some of the notes—and which I feel certain they will—the repayment agreements that we have in place are paid off on time, we will be right on target for that.

Now to get to the question of the appropriations to meet this repayment schedule, in determining the business plan we laid out appropriations through 2001. In fiscal year 1997, we actually fell short. The number that we placed in our business plan was $10 million. We received $7 million, but we still have been able through our investment strategy to recover the $300,000 in fiscal year 1998 that we were projecting would be derived from that fiscal year 1997 investment.

My point is that the $10 million that is being requested in this year's appropriation, although it is $2 million less than what we had in our business plan, and the business plan was put together 3 years ago, it is less than what was in the business plan. We feel we can still track with the repayment schedule, and that is really the key to making sure that we are financially sound to privatize.

Senator COCHRAN. What would be the projected outyear appropriations? Do you have those in your timetable? Will the $10 million level be funded for the balance until you get to 2001?

Mr. ARMSTRONG. No, sir; not for the balance. Actually, we increased it in the business plan. Now that is strictly AARCC's Board of Directors' business plan, not anything to do with the administration's budget. In the business plan, we had projected $15 million for the next 3 years and then dropped it back down to $12 million for the final 2 years of the business plan.

Senator COCHRAN. OK. Will the schedule for repayments continue to go up over that period of time in your view or in the business plan? What is contemplated with respect to repayments?

Mr. ARMSTRONG. In the business plan repayments, Mr. Chairman, as I said $300,000 is anticipated for fiscal year 1998 and we are at—oh, already here at the first of March we are at $248,500, I think, is the actual figure. I am very confident by the end of the fiscal year we will have $300,000; next fiscal year is projected $1.7 million; in 2000 we are projecting $3.801 million; $7.9 million; and in 2002 $12.2 million.

As we have structured these investments, you know, some of them are based on a royalty repayment, some of them are predicated on a company undergoing an IPO or an acquisition. We have identified a core within the AARCC's portfolio that we feel is going to carry the bulk of this repayment. That is very typical of how the private sector venture capital fund works. You know, there is a certain core that really carries the rest of the investments forward.

In total, we are looking at, just through the year 2002 we are looking at, almost $26 million anticipated in repayments. I do not

anticipate a problem in meeting that sum, particularly given the strength of three or four of those core companies that we have identified to focus on.

Senator COCHRAN. My impression of the program has been that it has worked pretty well. I know that you have had an opportunity to be, you know, more closely involved in assessing the quality of the performance. What is your impression overall of this program? Is it one that we should continue, or are we just throwing money away by supporting AARCC?

Mr. ARMSTRONG. Gosh, Senator Harkin is not here.

Senator COCHRAN. I know, he has left. [Laughter.]

Mr. ARMSTRONG. Well, obviously, Senator, we do not feel that this is good money after bad. The real crux of the question, I think, is why isn't the public sector doing this? If this is such a great idea, why isn't the private sector doing this? I think the answer to that is the private sector is doing it, but we have had to show the way; in a sense, jump off the bridge.

The idea of investing in agriculture to many in the private sector is simply an agricultural loans for major agriculture projects like irrigation or for farming equipment or for seed money to buy next year's seed or whatever. We are about value added. We are about investing in companies that use these raw materials from agriculture to process and manufacture things that then are not nonfood and nonfeed.

Our long-term vision, our 100-year vision is really transforming the economy to one based on biology they derive from agriculture, as opposed to the one we have at present based on geology, which uses petroleum. The advantages are numerous. The environmental advantages, the life cycle cost analysis of our products versus something made out of petroleum, you cannot compete with our products because there is hardly any disposal issue. The private sector is just now beginning to realize that this biologically based economy makes some long-term sense.

As I say, we have been the first to jump off the bridge in a sense in these investments, but as Senator Harkin pointed out we, we attract $3, $3.50, $4, private sector dollars, for every $1 of public money that we put in. More and more we are getting attention from the private sector. We are developing a network based on environmental investment funds, based on socially responsible investing funds.

We are beginning to understand what AARCC does and we are using them as coinvestors. I think the momentum that the public sector has started, the momentum needs to continue. I think the 2001, 2002, 2003 timeframe is appropriate, and then AARCC as an investment portfolio sunsets out of the Federal Government.

The mission, however, the mission of this bio-based economy of job creation in rural America, and that is really what it is an engine of, if you use biologically-based materials because of literally the physical chemistry in the molecules, you have to process and manufacture close to the source. You cannot drag it out of the ground like we can with petroleum and bring it one-half way around the world and still make any money. As we use these biological molecules, then the jobs are going to have to go to where they are, and that is rural America.

Ms. THOMPSON. Mr. Chairman, could I also answer that?

Senator COCHRAN. Sure, Secretary Thompson.

Ms. THOMPSON. The private sector does not traditionally invest in, whether it is venture capitalists or rural lenders, they simply do not invest in the kinds of development traditionally that we are investing in. There is tremendous potential for the small firms that we are partnering with, but there is even greater potential for the agricultural community and rural communities in general because of the technological development that comes as a result of these investments. I can say without any reservation, without any question that this is something that ought to be invested in, and that many rural communities will benefit down the road in the long run as a result of a very small investment.

BUSINESS AND INDUSTRY PROGRAMS

Senator COCHRAN. Mr. Watkins, I know that you and I have talked in the past about how can we do a more aggressive job and more active job of identifying needs for loans and technical assistance to develop business opportunities and job opportunities in rural communities and small towns. For a while, I was a little aggravated because it seemed like the administration was interested in having meetings, not in making loans. There were meetings being held all over the Mississippi Delta and my State and other States. You were traveling around and identifying folks to come talk about how we could help the people who need help in these areas.

I think we have finally gotten around to seeing some money loaned and some businesses started and expanded. I wondered if you could give us a report on how you see the progress that has been made? Has it been good? Tell me what you are doing with the money that you are supposed to be awarding to these borrowers in rural communities.

Mr. WATKINS. Thank you very much, Mr. Chairman. You are exactly correct. The business activity in rural America has mushroomed beyond actually our own estimates. At the end of fiscal year 1997 in our flagship, the Business and Industry Loan Guarantee Program, we had more than $950 million in applications and preapplications pending. We only had a fund of about $815 million that we could finance business deals. We project a very similar activity in fiscal years 1998 and 1999.

You know, we certainly cannot take credit. We can take credit for having gone around the country, as you said, and held all of those meetings, but a part of that was required in order for us, one, to get the lenders back to the table to participate in the program; and then, second, to alert businessowners and entrepreneurs in rural America that this opportunity existed for them to gain access to this kind of financing. It has worked. You know, we are creating and saving and maintaining a lot of jobs in rural America.

As the Under Secretary mentioned in her testimony, you know, the poverty line and the wage rates and wage levels in rural America are certainly behind urban America. We are still financing traditional businesses that are located or that have always been located in rural communities. We are beginning, though, to focus on

value added companies that are agriculture related, but that are adding value to their agricultural product.

We are also interested in trying to attract high-technology companies, companies that are, in fact, affiliated with AARCC that are invested in by AARCC. We see those in the future as having some tremendous value and benefit to increasing the standard of living to Americans in rural America. The picture is very bright. You know, it is certainly not any brighter than the picture for the U.S. economy.

MISSISSIPPI DELTA

Senator COCHRAN. Do you have any statistics from the last fiscal year about how many loans were made or how many jobs were created so we will know what the money went for and what was the result of the loans that were made, Madam Secretary?

Ms. THOMPSON. Yes; we do. We have funded projects totaling just under $160 million in the Mississippi Delta, of which about $75 million has been for water and waste disposal projects and about $80 million for business loans and grants. In fiscal year 1997, specifically we funded $65 million in various types of projects.

In my testimony I made mention, in the written testimony I made mention, of the lowest unemployment rate in the Kentucky Highlands Empowerment Zone counties in recent history. You, of course, are very familiar with the warehousing facility in the zone in Mississippi and the number of jobs that are going to be created there.

Senator COCHRAN. That would be good to have for the record, particularly as to what has happened this year too.

Ms. THOMPSON. I will be happy to do that.

Senator COCHRAN. Thank you very much. Secretary Glickman made a statement the other day which caught my attention. He said that the Department had awarded $1.1 million in rural business enterprise grants to 10 States to support business development in economically depressed areas. We only appropriated $40,000 for rural business enterprise grants, and we were wondering where the money came from to make up the $1.1 million in grants. Do you think he misspoke, or do we have our numbers confused in my notes?

Ms. THOMPSON. There was $41 million appropriated?

Senator COCHRAN. Well, my notes say $40,000. I am not sure that is right, but anyway that is what my notes say.

Ms. THOMPSON. I am sure what we did——

Senator COCHRAN. For rural business enterprise grants.

Ms. THOMPSON. I am sure what we did was within the law but——

Senator COCHRAN. Yes, sure, I am not suggesting—I am just curious whether it was reprogrammed or whether maybe these were not grants. Maybe they were grants plus some guaranteed loans or something and he just grouped it all under one. It sounded like the Government was giving away $1 billion in grants for business subsidies, and we did not remember appropriating any money, but just a little bit of money for it.

Ms. THOMPSON. I believe it was $41 million.

RESEARCH ON COOPERATIVES

Senator COCHRAN. OK. Thank you. There is also another item that I was going to ask about. There is an increase proposed in your budget request of $2 million in funding for research on cooperatives. I am curious to know what research is being done by the Department on cooperatives and what the increased amount of money will be used for? What will this extra funding accomplish; what you are going to find out when you do this research on cooperatives?

Ms. THOMPSON. We actually have not been doing much research over the last several years, but because of opportunities that are developing as a result of the 1996 farm bill and the phasing out of the commodity program, there has been a considerable increase in interest. We are very strong advocates of the cooperative approach to business development and growth, because it allows small producers in rural America to gain advantage in the food chain in the marketing of their products, either through value added or through a marketing cooperative.

There are also, we believe, some new kinds of opportunities in existence out there, and that is what the research will be used for, to determine in a very methodological way how, in a methodologically sound way how, we might better provide technical assistance and so forth to individuals and entities that are interested in pursuing the cooperative approach to business development and growth.

Senator COCHRAN. Will this money be used for additional staff at the Department of Agriculture here in Washington to do the research, or would you contract out the research activity and actually pay some outside group to do the research? How do you propose to spend the money?

Ms. THOMPSON. It will be, I believe, entirely through contracting. As you know, we are downsizing at the Department of Agriculture and don't expect that we will be adding new positions, and also believe that the kinds of research that need to be done can be done through contracting with universities that are involved in cooperative research already.

SUBMITTED QUESTIONS

Senator COCHRAN. We really do appreciate your assistance to our committee by being here this morning and providing the information that you have and by agreeing to respond to questions for the record. We have some additional questions that we will submit for the record so that we will fully understand the requests and what the needs are for these funds, and how the programs that we are funding are working, and whether changes need to be made in them.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

RURAL BUSINESS-COOPERATIVE SERVICE

Question. The budget includes $200 million for guaranteed loans that will be directed to cooperative-owned businesses. How much demand does the agency have for these loans?

Answer. Due to the fact that many cooperatives operate businesses that are incorporated we cannot give you an accurate indication of demand at this time from our automated management information system. We are, however, in the process of surveying our field offices to determine the demand. Results of that survey will be provided to your office.

Question. In fiscal year 1998 and in the fiscal year 1999 budget request, the Rural Cooperative Development program grants were allocated $1.7 million. The National Cooperative Business Association claims that there is a need for $5 million to fund grant requests. How many grant requests does the agency have on hand and how many grants will be funded with the $1.7 million appropriated?

Answer. In fiscal year 1997, the agency received 30 applications for the Rural Cooperative Development Grant program. Those applicants requested a total of $4.8 million. Eleven grants totaling $1.7 million were awarded. Unsuccessful applicants, and any other eligible applicants can apply for the fiscal year 1998 program which will be announced in the spring of 1998. The number of grants to be funded with the $1.7 million appropriation will not be determined until the applications are received and scored.

INTERMEDIARY RE-LENDING PROGRAM (IRP)

Question. The fiscal year 1999 budget request proposes an increase in the intermediary relending direct loan subsidy. The explanatory notes says this increase is due to two factors—the cashflow model has been changed and the new methodology for calculating the subsidy cost. What is meant by "the cashflow model has been changed?"

Answer. We found an error in the Cashflow model we had been using and corrected it. The cash flow model was adding the two year grace period to the term of the loan when calculating the amortization schedule.

Question. What is the backlog for the Intermediary Re-lending Program (IRP)?

Answer. As of March 10, 1998, there are 31 IRP projects pending for a total of $25,650,000. The balance of remaining IRP fiscal year 1998 funds available, including the amounts earmarked for the Pacific Northwest (PNW) and Empowerment Zones and Enterprise Communities (EZ/EC) initiatives, is $18,990,506. For fiscal year 1997, the number of loan requests unfunded at the end of the fiscal year, by State, was as follows:

INTERMEDIARY RELENDING PROGRAM LOAN REQUESTS NOT FUNDED IN FISCAL YEAR 1997

State	Number	Amount
Alabama	1	$1,000,000
Alaska	1	750,000
Arkansas	1	1,000,000
California	1	1,000,000
Hawaii	1	750,000
Idaho	4	3,150,000
Illinois	1	1,000,000
Kentucky	3	2,390,000
Louisiana	1	2,000,000
Michigan	1	600,000
Minnesota	2	1,500,000
Mississippi	1	2,000,000
Montana	2	200,000
North Carolina	3	5,500,000
New Hampshire	1	500,000
New York	2	1,200,000
Pennsylvania	1	1,000,000
South Carolina	1	1,000,000

INTERMEDIARY RELENDING PROGRAM LOAN REQUESTS NOT FUNDED IN FISCAL YEAR 1997—Continued

State	Number	Amount
Vermont	1	500,000
Total	29	27,040,000

Question. What major changes have been made to this program?

Answer. The new regulation was published in the Federal Register and became effective on February 6, 1998. The regulation for the Intermediary Relending Program (IRP) is renumbered and completely reorganized and rewritten for improved clarity. Major program changes include the following:

—Definitions are provided for "Agency IRP loan funds," "IRP revolving fund," and "revolved funds." Each section of the Regulation that imposes a requirement states whether that particular requirement applies only to Agency IRP loan funds or to everything in the IRP revolving fund (including revolved funds). This will result in the reinstatement of some requirements on loans made from revolved funds that had been determined to be unenforceable under the previous Regulation.

—A new purpose statement is provided.

—The program is made available in the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands.

—Eligibility requirements are revised to provide that applicants with any outstanding delinquent debt to the Federal Government are not eligible.

—State Offices are authorized to accept and process applications without the application having to go through the National Office. State Directors may delegate IRP responsibility to other offices under the State Director's jurisdiction provided the staff has had adequate training. The National Office will continue to allocate funds based on a quarterly national ranking of priority scores.

—Eligible loan purposes have been expanded to include refinancing (under certain conditions), management consultant fees, educational institutions, commercial fishing, revolving lines of credit (under certain conditions), and hotels, motels, and other tourist and recreational facilities except golf courses, race tracks, and gambling facilities.

—The definition of agriculture production is revised and exceptions to the prohibition against loans for agriculture production are eliminated.

—Security requirements are revised to provide that no assignments of promissory notes or collateral documents will be obtained at loan closing. The documents must, however, be assignable. The Intermediary will agree to provide additional security or documents later if requested to protect the Agency's interest.

—Guidelines are provided for rates and terms of loans to ultimate recipients. All rates and terms must be within limits established in the intermediary's work plan.

—Loan ceilings are revised to provide that, subject to certain conditions, intermediaries may receive initial loans of up to $2 million and subsequent loans of up to $1 million per year to a total of up to $15 million.

—The ceiling on the size of loans to ultimate recipients is raised to $250,000. However, no more than 25 percent of the intermediary's portfolio may be used for loans of over $150,000.

—A requirement is added for the intermediary to establish a reserve for bad debts.

—Loan disbursement procedures are revised to allow intermediaries to draw up to 25 percent of their loan at loan closing.

—The contents of a complete application and work plan are revised to eliminate some unnecessary items; provide more detail on what should be covered regarding relending plans; add certifications regarding debarment, Federal debt collection policies, and lobbying; provide goals, strategies, and anticipated outcomes; provide information on technical assistance available to ultimate recipients; and provide for streamlined applications for subsequent loans.

—The priority scoring system is revised by reducing the number of points for other funds, adjusting the threshold for points based on service area income compared to the poverty line, adding a category of points based on service area income compared to statewide income levels, adding a category of points for service to under represented groups, and providing additional guidance regarding justification for Administrative points.

—The frequency of required reports from intermediaries is adjusted to quarterly during the first year and until all Agency funds have been advanced, then semi-annually unless there are servicing problems.

Question. Please provide information on the performance of the IRP to date, by fiscal year.

Answer. The following chart provides the performance of the IRP to date by fiscal year.

INTERMEDIARY RELENDING PROGRAM—ALLOCATIONS/LOANS/OBLIGATIONS SINCE PROGRAM INCEPTION

Fiscal year	Allocation	Number of loans	Amount obligated	Average loan amount	Number of jobs created/saved over life of loan [2]
1988 [1]	$14,000,000	9	$13,990,000	$1,544,444	11,890
1989	14,000,000	13	13,625,980	1,048,152	11,580
1990	19,135,000	15	19,050,000	1,270,000	16,190
1991	32,500,000	28	32,499,540	1,160,698	27,625
1992	32,500,000	35	32,500,000	928,571	27,625
1993	32,500,000	42	32,500,000	773,809	27,625
1994	77,365,918	71	77,365,918	1,089,661	65,760
1995	85,153,646	81	85,153,646	1,051,279	72,380
1996	37,638,655	47	37,638,655	800,822	31,990
1997	37,155,765	53	37,155,765	701,052	31,580
Totals	381,948,984	394	381,479,504	968,222	324,245

[1] Fiscal year 1998 was the first year the new program was implemented as a result of the 1985 Farm Bill authority.

[2] Historically, other funds have been leveraged to assist borrowers at the rate of $3.75 for every dollar of IRP assistance. Over the 30-year life of an IRP loan, for each $4,000 of initial IRP program funding, a total of 3.4 jobs will be created/saved.

As of December 31, 1997, no loans are delinquent under the current IRP Program which was authorized by the 1985 Farm Bill. However, there are delinquent loans under the old Rural Development Loan Fund (RDLF) Program that were inherited from HHS, which makes the total delinquency rate below 1 percent.

RURAL ELECTRIC

The fiscal year 1999 budget proposal signals a shift in Rural Utilities Service (RUS) programs from the highly subsidized direct 5 percent and municipal rate electric loans to direct Treasury rate electric loans at an interest rate that is tied to the Government's cost of money. This proposal would result in an additional $400 million in available loans to consumers. This proposal would require legislation, I understand.

Question. Instead of requesting a new program, the Administration can propose to simply increase the request for direct Federal Financing Bank (FFB) loans. Why did the you not request an increase for direct FFB loans?

Answer. The proposed Treasury rate program would differ somewhat from the FFB program. First, the FFB program is a loan guarantee program; that is, RUS guarantees loans made by FFB. The Treasury rate program would be a direct loan program in which the borrower deals with only one federal agency. RUS would administer all phases of the program, as it does with the hardship and municipal rate programs. The Treasury rate program would, therefore, be a more customer friendly financing source for RUS borrowers.

The Treasury rate program would also be a less costly alternative to RUS borrowers. FFB interest rates reflect Treasury's cost of money plus one-eighth of one percent (0.125 percent). Under the proposed RUS Treasury rate program, this one-eighth of one percent would not be added thereby reducing the interest rates to RUS borrowers.

Question. Why can't you use these FFB funds, along with the transmission and generation loans? Why are distribution borrowers reluctant to use the FFB program?

Answer. The Treasury rate program is intended to supplement, not replace, the FFB program. FFB offers a complex range of financing options that many borrowers, especially smaller distribution borrowers, find confusing. In addition, FFB's former reluctance to allow borrowers to refinance high interest loans has disillusioned some borrowers. Although current law now provides for refinancing of FFB

loans, many borrowers believe that dealing with FFB represents an unnecessary complication. In contrast, the Treasury rate program would offer borrowers a simple, streamlined financial tool. By offering a wider range of financing options, the RUS program becomes more flexible and more responsive to the constantly evolving electric utility industry.

Question. Are any costs associated with this legislation in budget authority or outlays?

Answer. The cost associated with this legislation is $840,000 in budget authority to support a lending level of $400 million. The subsidy rate for this program would be very low, only 0.21 percent.

Question. Should the authorizing committee decide not to pass this proposed legislation, what would the fiscal year 1999 estimate be to meet the current demand for direct electric loans?

Answer. The estimates to meet the current demand for direct electric loans are $7.172 million in budget authority to support a lending level of $55 million for hardship rate loans, and $56.940 million in budget authority to support a lending level of $650 million for municipal rate loans.

Question. How many loans will be supported with a loan level of $400 million?

Answer. Approximately 80 Treasury rate loans would be supported by a loan level of $400 million.

A provision in the Balanced Budget Act of 1997 states that the surcharge on the Treasury's Federal Financing Bank (FFB) loans is to be deposited in the RUS account held by the Treasury and used to finance the cost of the guaranteed loans for electricity and telecommunications.

Question. Why is the Administration proposing to implement this in fiscal year 1999 when you had the authority to do it fiscal year 1997?

Answer. Legal issues arose concerning the appropriate implementation of the enacting legislation. The Administration is in the process of resolving these issues for implementation in fiscal year 1999.

Question. In a GAO report it was suggested that RUS should use a repayment rate of no less than 100 percent to control the vulnerability to losses on guaranteed loans. What percentage of guarantee does the RUS use for these loans? Why?

Answer. A report entitled "Rural Utilities Service: Opportunities to Operate Electricity and Telecommunications Programs More Effectively" issued by GAO in January 1998 notes, on pages 2 and 17–18, that RUS guarantees 100 percent of FFB loans, and that some rural development programs reduce their exposure risk by guaranteeing less than 100 percent of a loan. RUS' risk would not, however, be reduced by lowering the guarantee percentage. As the report goes on to note, on page 2, since FFB is a part of the Treasury Department, the "risk to the federal government as a whole would not be reduced if the FFB continues to be the sole source of loan funds."

Traditional lending practice may suggest that a loan should be guaranteed for less than 100 percent to help ensure that the lender is diligent in its loan processing and servicing because a portion of its own funds would be at risk. In the case of FFB loans, however, RUS performs virtually all processing and servicing functions, while FFB establishes the terms and conditions of the loan. Reducing the amount of the guarantee would, therefore, have no practical effect on FFB's vigilance.

The subsidy rates for fiscal year 1999 seem to be higher than for fiscal year 1998, yet interest rates decreased.

Question. Can you explain the reasons for this increase?

Answer. Most of the increase in subsidy rates for electric and telecommunications programs can be attributed to a change in the methodology used in calculating the subsidy rate. The change is the direct result of the Federal Credit Reform Act of 1990 being amended by the Balanced Budget Act of 1997. The 1997 Act requires that the Treasury discount rate utilized to calculate the subsidy be the same for all cash flows, regardless of whether the loan disbursement is made in the budget year or in subsequent years. In the past, the Treasury discount rate utilized in calculating the subsidy rate could be different, based upon Office of Management and Budget (OMB) Economic assumptions, for each loan disbursement year.

While interest rates have recently decreased, the interest rate used in this year's OMB Economic Assumptions is not lower than that used last year. The OMB Economic Assumptions used to calculate fiscal year 1999 subsidy rates were based upon a Treasury discount rate of 6.11 percent for 20-year plus loans regardless of when the loans were disbursed. The fiscal year 1998 subsidy rates were based upon a Treasury discount rates of 6.1 percent for first year disbursements, 5.76 percent for second year disbursements, 5.48 for third year disbursements, and 5.24 percent for fifth year and all later disbursements for 20-year plus loans.

Question. How does this new calculation affect the program level and loan subsidy for the electric and telecommunications programs?

Answer. This change in the calculation methodology has a greater affect on loan programs that have low disbursement rates in the first year and/or slower annual disbursement patterns. The electric and telecommunications programs experience both; therefore, the impact is more clearly evident and is less likely to be offset by other technical assumptions.

RURAL TELECOMMUNICATIONS

The Economic Research Service (ERS) is requesting an increase of $200,000 for an interagency research activity with USDA's Rural Utilities Service (RUS) and the Department of Energy (DOE) to expand Research, Education and Economic's (REE) capacity to assess the potential impacts of electric utility deregulation.

Question. Will this project be completed in fiscal year 1999, or do you anticipate funding requests in future fiscal years?

Answer. We expect that ERS will be asked to extend its research on issues associated with electric utility deregulation for one additional fiscal year beyond 1999.

Question. Will RUS and DOE fund any portion of the research project? If so, how much is being provided by each agency? If not, why?

Answer. DOE is not funding any portion of the research project beyond its commitment to provide a series of model runs, using its Policy Office Energy Modeling System (POEMS) computer model, to provide input into the analytic framework being developed by ERS. RUS is currently exploring options that may allow RUS to contribute financially to the project.

Question. What will be the role of each agency in this project?

Answer. DOE has committed to provide ERS with the output of several model runs of its POEMS model using ERS developed scenario assumptions. DOE has not yet provided the requested model runs because it is still calibrating its POEMS model. RUS has made operational and trade area data on rural electric cooperatives available to ERS.

The fiscal year 1999 budget request cuts the Rural Utilities Service (RUS) 5 percent hardship telecommunications loan program from $75 million to $50 million. In the President's budget request for fiscal year 1998, the program was cut from $75 million to $40 million. The other loan programs were left intact.

Question. How much total backlog in loan requests exists for this program?

Answer. As of March 1, 1998, hardship loans approved totaled $65.1 million, with an additional $61.5 million in applications on hand. With an authorized lending level in fiscal year 1998 of $75 million, we estimate that, based upon the number and amount of applications currently on hand and anticipated by the end of the fiscal year, the hardship program will have a backlog—or excess demand over available funding—of $79 million at the end of fiscal year 1998.

RURAL TELEPHONE

The fiscal year 1999 President's budget request also proposes that the Rural Telephone Bank (RTB) become a performance-based organization "to establish its financial and operational independence prior to its being privatized within ten years."

Question. The Administration has proposed in the last two fiscal years to privatize the RTB. Why has the Administration changed its position and now proposed to make the RTB a performance-based organization before it is privatized?

Answer. We became concerned with the Bank's ability to make an immediate transition to a private entity given deregulation of the telecommunications industry. We chose a more gradual approach with privatization to occur within ten years. During this period we expect full retirement of the government's investment of just under $600 million, if the limit on retirement of this debt is removed by the Congress.

Question. Does this require legislation?

Answer. Establishing the Bank as a Private Base Organization (PBO) would require legislation. RUS would craft legislation to fit the Bank's needs. Once established, the Bank could pursue privatization efforts while still under the U.S. Department of Agriculture (USDA) umbrella. As the proposed budget language stated, the Bank would hire its own Chief Executive Officer (CEO) and Chief Financial Officer and begin to take independent responsibility for its operations, acting more like a private corporation than a government agency. As a PBO, the Bank would "enjoy" a less restrictive operating environment than its current organizational structure provides. A primary reason for establishing a PBO is to foster the more efficient operation of a government agency performing a public purpose. One of the key qualifications to becoming a PBO is the ability to generate cash flow. The PBO status

is a way for the government to increase operating efficiency by allowing certain exemptions from government rules; yet at the same time, maintain control over the function the agency is performing. For most government agencies, becoming a PBO is a permanent status. However, for the Bank, it is a stepping stone to privatization. At the direction of the CEO, the Bank would focus its efforts on becoming a fully private entity within ten years while fulfilling its mission of providing financing for rural telecommunications infrastructure. PBO status will heighten the goal of privatization and provide a platform for the Bank to structure itself for complete privatization.

Question. Does this proposal result in budgetary savings? If yes, how much?

Answer. If the Bank were able to use its cash reserves in the liquidating account to pay administrative expenses and cover loan subsidies, those amounts would not require appropriations as they do now. Federal Credit Reform currently limits the use of those funds in the liquidating account to meet advances on loans obligated prior to fiscal year 1992 and to pay expenses associated with those loans, i.e., debt service to Treasury, dividends to shareholders, and retirement of government stock.

Question. Will the government's Class A stock still be repaid?

Answer. To transition the Bank from a government agency/PBO to a fully privatized entity within ten years, as the proposed budget states, all of the Class A stock of the Bank must be retired.

Funding for the RTB's loan subsidies and administrative expenses are proposed to be paid for by transferring funds from unobligated balances in the bank's liquidating account.

Question. Would this proposal not affect the bank's solvency and ability to privatize?

Answer. As of December 31, 1997, the liquidating fund balance totaled $493 million. Principal outstanding on loans in the liquidating account totals more than $1.2 billion while Treasury debt associated with those loans—excluding A stock—totals only $316 million. Last year, the budget authority required for a $175 million loan program was $3.7 million. The use of liquidating account funds for administrative expenses and loan subsidies would only decrease slightly, and temporarily, the amount of funds available for retirement of Class A stock and other purposes. The repayment of principal on loans in the liquidating account and associated interest on those loans in future years will enable the Bank to generate sufficient capital to privatize on its own.

Question. How were subsidy costs of loans and administration handled last year? Does this proposal save money?

Answer. The funds were appropriated in fiscal year 1998. The proposal is to use funds in the liquidating account in fiscal year 1999.

RURAL HOUSING SERVICE

The fiscal year 1999 budget request proposes an increase of $42 million for rural rental assistance, from $541 million to $583 million.

Question. What is the breakdown of funding for rural rental assistance for renewal of contracts, new construction, and for repair and rehabilitation?

Answer. The following chart provides a breakdown for the projected use of rental assistance in fiscal year 1999:

RENTAL ASSISTANCE CHART

Type of unit	Existing demand in units	Number requested in units	Total funds requested
Renewals	37,516	37,516	$551,898,000
New construction:			
515	1,667	1,003	12,868,000
Farm labor	658	658	8,442,000
Servicing	100,000	.....	.....
Rehab	326	292	4,289,000
Debt forgiveness	401	401	5,900,000
Total	140,568	39,870	583,397,000

Note.—This chart assumes that all renewals and Farm Labor new construction will be funded. Funding for Section 515 new construction and rehabilitation units will be limited. At this time, we estimate that the $17 million available will be split 75 percent towards new construction and 25 percent towards rehabilitation needs.

Question. How does the difference in the subsidy rate and the separate line items for single-family credit sales of acquired property and multi-family credit sales of acquired property affect these loans? Does this save money in fiscal year 1999 and other future fiscal years?

Answer. Our proposal to have separate line items for single family and multi-family is designed to make the credit sale programs easier to administer. Combining these two programs with different subsidy rates and providing a single cohort is not typically done. With more closely related program, this would be feasible. Operating this program though two accounts will better serve the Agency in addressing portfolio management.

Question. The fiscal year 1999 budget request proposes a decrease of $1.8 million in rural housing preservation grants which will support 2,500 units. At the fiscal year 1998 appropriated level, how many units are supported? Why does the Administration propose to cut these grants which are used for elderly housing?

Answer. For fiscal year 1998, the Housing Preservation Grant (RPG) Program was appropriated $10,820,000. The Agency estimates that 2,500 units will be repaired/rehabilitated.

The Administration believes the fiscal year 1999 request balances the high demand for all the housing programs while striving to maintain financial restraint necessary to balance the budget.

Question. The fiscal year 1999 budget request proposes legislation to allow Section 502 single-family housing direct loan borrowers to graduate to guarantee financing, and then ultimately to strictly conventional private financing. The projected subsidy rate for the program in fiscal year 1999 is negative, so no additional subsidy budget authority is required. However, would this program cost in out years? If so, what subsidy appropriations are projected to be required?

Answer. We do not anticipate future budget authority costs from this proposed legislation. Section 502 Direct borrowers who use the Guaranteed Rural Housing loan program as a vehicle for refinancing will generally be seasoned home owners with adequate loan repayment histories. We would expect defaults for these established borrowers to be minimal.

RURAL COMMUNITY ADVANCEMENT PROGRAM

The 1996 FAIR Act authorizes the Rural Community Advancement Program (RCAP) which has 5 funding streams that include a rural communities facilities account, rural utilities account, rural business—cooperative account and the federally recognized Indian tribe account.

Question. Do Federally recognized Indian tribes not already qualify for these programs under the RCAP? How would the 3 percent reserve account be administered?

Answer. Federally recognized Indian tribes do qualify for these programs. The reserve account would be administered by the National Office. Tribes would submit applications through the State Offices and, following review for eligibility, the applications would be submitted to Washington for decisions.

Question. How much funding has been received by Indian tribes during the past three fiscal years? What percentage of the total RCAP program dollars will the set-aside receive for each fiscal year?

Answer. Over the past three fiscal years Indian tribes have received $14,138,798 in Water and Waste loans, $13,753,307 in Water and Waste grants, $11,757,806 in Business and Industry guaranteed loans, $1,313,860 in Rural Business Enterprise grants, and $23,381,730 in Community Facilities loans, totaling $64,345,501, which is roughly equivalent to 3 percent of the RCAP budget authority over the same period.

Question. How much funding have the Mississippi Choctaw Indians received in the past two fiscal years?

Answer. During the past two fiscal years the Mississippi Choctaw Indians have not received any funding.

Question. Is there a demand and/or need from the Rural Development State Directors to transfer funds between the different funding streams, rural community facilities, rural utilities, and rural business and cooperative service? If so, between which accounts would they most want to transfer?

Answer. There is a need by the State Directors to transfer funds between the different funding streams to manage their program monies more efficiently and to address more appropriately the unique and changing needs in each state. It is not expected that transfers of funds would be used frequently, but the ability to do so would be very useful when it is needed in a state. The amounts of funds transferred, and the direction of the transfers, would vary from year to year depending on the needs in the states.

The Administration did not propose in the fiscal year 1999 budget request to earmark funding for Rural Alaskan Villages for water and waste grants. In fiscal year 1998, the Committee earmarked $15 million for direct water and waste loans for Alaska. The fiscal year 1999 budget also proposes a decrease of $7.2 million for water and waste grants.

Question. Should the Committee again earmark funding for direct water and waste loans for the Rural Alaskan Villages, would the funding for water and waste grants need to be increased rather than decreased as the fiscal year 1999 budget proposes to supplement loans? If so, how much?

Answer. In the event that the Committee earmarked funding for direct water and waste loans, funding for water and waste grants would not need to be increased.

Question. How much funding would Alaska receive if no funds are earmarked? Why did the Administration propose not to earmark this funding for Alaska?

Answer. If no funds were earmarked Alaska would receive a state allocation of about $1.8 million in direct water and waste loan funds and approximately $1 million in grants. The policy of the Administration is to eliminate all earmarks that do not have a specific statute requiring an earmark in the appropriation language or those that are not included in specific policy initiatives.

RURAL DEVELOPMENT—LOWER MISSISSIPPI DELTA DEVELOPMENT CENTER, INC.

The Department has urged the Lower Mississippi Delta Development Center (LMDDC) to become involved with the Enterprise Zone/Empowerment Community program and to become partners with these Federally approved communities of the Delta to work on a variety of regional efforts in order to attract non-government funds.

USDA has provided LMDDC with funds for three separate fiscal years and this has allowed the Center to stay open and to work on a variety of agricultural and rural development activities. This money has been given to the Center at the end of the fiscal year, once USDA has evaluated and allocated its funds. Because of limited funds, the Center wants assurance of this continued funding and is asking that report language be included in the fiscal year 1999 committee report to instruct USDA to include approximately $200,000 for the Center.

Question. How much money has USDA provided to the Center in past fiscal years? Was this grant money?

Answer. USDA has provided approximately $400,000 since 1994 to the Center for the purposes of updating the socio-economic characteristic data contained in the original report on the Lower Mississippi Delta, to develop a data base of development success stories throughout the Delta that could be utilized by other communities, and to retain staff of the Center to permit them to continue to work on behalf of the residents of the Delta area. The funds were not grant money, but rather salaries and expense monies and were provided to the Center through a cooperative agreement.

Question. How did the Center use this funding?

Answer. The bulk of the funding was used to update the socio-economic data that was contained in the original report on the Delta which primarily reflected the 1980 Census information.

Question. What sort of work is USDA currently doing with the Center? What does it plan to do in the future?

Answer. The most important role of the Federal government is to help create an environment that attracts private investment and creates jobs. This is what we are attempting to accomplish with the Empowerment Zones; providing tax incentives and infrastructure investment as well as directed job training, education and counseling and a variety of other services through a well orchestrated plan with specific objectives directed by local residents. We have also recently been working with the Lower Mississippi Delta Center and the EZ/EC designated areas to get them to work together to improve the region. A partnership agreement will be signed in March to effect this cooperation.

Question. How much funding will the Center need to help with these projects?

Answer. The Center has indicated that it may need as much as $200,000 over the next two years.

Question. Has the agency included funding for the Center in the fiscal year 1999 budget request? If not, why?

Answer. The budget constraints under which we are working do not provide the flexibility to fund activities such as the Center's operations and therefore no funds were requested.

SALARIES AND EXPENSES

Question. In what areas of Rural Development does the decrease of 150 staff years occur in the fiscal year 1999 budget request, and how will those reductions be accomplished?

Answer. The reductions occur throughout the Mission Area; 80 in the Rural Housing Service; 49 in the Rural Utilities Service; and 24 in the Rural Business-Cooperative Service. The reductions will primarily come from administrative areas rather than program areas. We anticipate that administrative convergence will provide the reductions.

Question. The President's request for Salaries and Expenses for fiscal year 1999 is significantly higher than the level enacted for fiscal year 1998 which was close to the fiscal year 1997 level. With streamlining and the conversion of loans to a new servicing system, one would assume the administrative expenses should be decreasing. Why is there such a significant increase in cost?

Answer. The request for Salaries and Expenses for Rural Development, $527 million, is considerably higher than the level requested and appropriated for fiscal year 1998. There are several reasons for this. First, because of all of the organizational changes that have occurred within Rural Development over the past few years, we have lost a disproportional share of the lower level employees, even though we have used every means available, to keep them. This has caused our average salary costs to increase significantly and while this is a situation I would not have preferred it is something that has to be dealt with because the alternative is no better. If sufficient funding is not available for salaries and expenses then it is necessary to execute a reduction-in-force (RIF) to remain within available funding. This action would only exacerbate the problem because a RIF will, in-turn, eliminate additional lower level employees driving the average salary cost even higher. The vast majority of these staff are in our field offices and are primarily responsible for delivering the programs. We need to keep them employed.

Another reason is the need for investment in Information Technology. In fiscal year 1998, we decided to defer investment in information systems and training in order to maintain our employment level. We cannot afford to make the same decision in fiscal year 1999. Information systems and training are means through which we can realize additional efficiencies in future years and we need to maintain our investments in these areas. Converging the administrative systems of the three county based organizations into one and completing the move into the service center which will house the three mission areas can be accomplished if we have a common computing environment. Further, in order to continue to function, we must maintain our legacy systems while we are building new systems to replace them and we need to complete the Year 2000 assessments and corrections where necessary.

The Department of Agriculture is in the midst of converging the administrative system of the three county-based organizations into one system.

Question. What is the status of the administrative convergence? How will this affect Rural Development?

Answer. The Secretary announced his decision on March 16, 1998 to proceed with administrative convergence, implementing the plan developed by the three Under Secretaries. A manager of the planning effort has been selected and the planning will commence shortly. The Secretary is still committed to having a new administrative structure in place on October 1, 1998.

Question. Are there any savings in the fiscal year 1999 budget related to administrative convergence?

Answer. There are no savings reflected in the fiscal year 1999 budget attributed to administrative convergence but, from the perspective of Rural Development, consolidation of the administrative functions at headquarters and in the field will provide the flexibility needed to ensure an effective program delivery system remains in place.

Question. Why does the fiscal year 1999 budget request propose a significant increase in the Rural Housing Services' salaries and expenses account amounting to $15.2 million?

Answer. The Rural Housing Service has by far the largest staff of the three agencies, so pay costs will necessarily be large. In addition, the account includes the management initiatives for the mission area. For instance, $8.5 million of the total covers information technology needs, including the $1.5 million mentioned later regarding Rural Utilities service information technology. The balance of the increase is salary related.

Question. The fiscal year 1999 budget request proposes an increase of $1.5 million for the Rural Utilities Services' information technology. This increase will be used for software development for the century date change, among other things. Will this

funding proposed in the fiscal year 1999 budget for the computer system century date change complete these efforts?

Answer. Yes. The funding proposed in the fiscal year 1999 budget will complete Rural Development's Year 2000 conversion efforts.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. Rural Development established one strategic plan which supports the three agencies in the mission area. The Rural Development Strategic Plan contains a mission statement which encompasses the role of the entire mission area and three Goals, one for each agency. It also contains four broad Management Initiatives which support the entire mission area. By having a Goal for each agency, alignment with the existing budget structure, which is agency-based, is achieved. The Annual Performance Plan for the mission area consists of a Purpose Statement for the mission area, an Annual Performance Plan for the Management Initiatives, and separate Annual Performance Plans for each agency. The separate Annual Performance Plans for each agency facilitate the reconciliation of the Plan with the budget request. The Goals in the agency Annual Performance Plans, which align with the Objectives in the strategic plan, are supported by one or more quantifiable performance measures to be achieved during the fiscal year.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Since the Goals and funding are by agency, and the performance measures are aligned to the Goals, there were no particular difficulties encountered. The primary challenge was determining how to aggregate the numerous programs included in the budget into reasonable Program Activities in the Annual Performance Plan. Many of the programs are used jointly when providing assistance, for example, grant programs are often combined with a loan to assist a community. Attempting to develop separate performance goals for both the grant and loan programs would be tedious and generally meaningless. We have instead aggregated performance goals along major program activities, i.e., single family housing, multi-family housing, water and waste, telecommunications, etc.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. As indicated above, we do not have performance measures for each account since they are often used together to finance a project. We have aggregated the accounts into various program activities which result in a more meaningful expression of the expected impact on the public.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Agency performance plans focus on the major programs that account for, by far, the bulk of the mission area's funding. Performance measures are not provided for all of the small programs and activities. Further, in some cases performance measures reflect achievements in similar programs and programs that are often used concurrently (i.e. certain loans and grants). We are continually refining the process as we learn from our experiences. Measures will change as we determine what best indicates the outcomes of programs and what is most useful for our management and monitoring purposes. For instance, in future submissions guaranteed and direct single family housing measures will probably be desegregated to describe more effectively our results in improving housing in rural areas.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. Rural Development does not propose any changes to the account structure for fiscal year 2000.

Question. How were performance measures chosen?

Answer. Performance measures in the five-year strategic plan were developed over time through a series of drafting sessions involving major stakeholders and were then refined through reviews by mission area and other Departmental officials. Performance measures in the annual plans are based on measures in the long range plan but are limited to data that are currently available or will likely be available in fiscal year 1999.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Existing data collection systems in place have been able to produce most of the information necessary to address performance measures which have been pro-

posed. The mission area is considering changes to the data collection systems to allow the use of performance measures for which data is not currently available, provided the data is needed for purposes other than just reporting performance under the Government Performance and Results Act.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Reliable data should be available for the performance measures included in the fiscal year 1999 Annual Performance Plan, for which the first performance report is due in March 2000.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. Performance goals reflecting the themes from Rural Development's Strategic Plan would be the most useful to use to track results. These themes include leveraging, partnering, and directing resources to the weakest communities, and are consistent with the Rural Community Advancement Program (RCAP). For most programs we have developed a handful of measures that, together, describe the results of the program activity. Identifying only one measure for a particular program could lead to focusing too narrowly on only one facet of that program or activity.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The development of outcome measures has been a significant challenge for the mission area. The limited size of our programs mean that there is not a National outcome which can be verified through existing data. The impact of our programs are on the individuals and communities who received assistance and on their immediate, surrounding community. Developing data to measure this impact is expensive for the agency and would have a significant reporting burden for the public. We have elected, instead, to use existing data, such as the number of loans made, to project the impact on the local community through the number of jobs produced using a recognized multiplier which currently exists. As we develop or enhance our systems in the future, we will be looking for opportunities to obtain better outcome data so long as the cost and impact are reasonable.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The mission area has conducted performance measurement training sessions for program managers and their staffs. They have developed an understanding of the difference between inputs, outputs, and outcomes.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. A sample performance measure for external customers is; "obtain feedback from Program Customers for: (applicable program). A sample performance measure for internal customers is; "Reduction in program and EEO complaints backlog."

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The measurable goals in the Annual Performance Plan were not used to develop the fiscal year 1999 budget. The long lead time in the development of the budget required that the fiscal year 1999 budget be developed ahead of the Annual Performance Plan.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. The impact of budget number changes by the committee could be determined for those measures which are budget sensitive. The impact of some changes could not be defined, for example, the impact on customer service if staffing levels were reduced.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. We are relying on existing data bases for most performance measures. We can, therefore, monitor performance during the year for most measures.

The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. Yes. Because several of our programs are often used together to assist a customer, having performance measures for each budget account would result in a great deal of duplication or tedious sorting out of data to a level that is meaningless to the user.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. For GPRA reporting purposes, combining of similar accounts would be helpful.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Combining like accounts (those with the same basic purpose and customer) would result in a reduction in the number of accounts which both the agency and the Congress must manage. It would be easier for a third party to understand the budget document.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. A modified account structure would not necessarily result in a strengthening of accountability.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Performance Plan discusses extensively the potential impacts of external factors on goal achievement. The ability of the mission area to achieve the goals of its strategic plan can be impacted by a variety of factors beyond its control including macroeconomic influences, legislative and other regulatory changes, and reductions in funding.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. No steps have been defined as the identified external factors are beyond the control of the mission area.

Question. What impact might external factors have on your resource estimates?

Answer. Changes in legislative, regulatory, or funding levels will impact our ability to assist our customers. Significant changes in the economy will affect the amount of funds we have available, after considering Treasury's discount rate. Likewise, changes in the economy may impact our delinquency and loss rates.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. We have identified no overlapping functions or program duplication for the specific customers we have been mandated to assist.

Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

Question. To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. To the extent that performance measures are based upon existing data bases, they are basically mature. Outcome-based measures which are not tied to an established data base will be much less reliable.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The concept of impact or outcome-based data is very new and very little experience exists for relating the cost of such data to its usefulness.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The current mission area strategic plan has been several years in development, clearly defines our priorities, and is adequate to meet our needs. While we have no plans for substantive changes, we are committed to reviewing it this year to ensure the recommendations from the Departmental civil rights activities are adequately included. At the time of that review there may be other areas in need of enhancement.

QUESTION SUBMITTED BY SENATOR MCCONNELL

RURAL COMMUNITY DEVELOPMENT VENTURE CAPITAL

The Rural Community Development Venture Capital Demonstration which is authorized in section 761 of the Federal Agriculture Improvement and Reform Act of 1996. Under this demonstration, the Secretary may designate ten organizations per year to establish and operate rural venture capital pools. Using federal guarantee authority, these rural venture capital programs will seek to encourage private sector investors in rural business enterprises. This is a very important demonstration. Economic Research Service reports indicate that there is a lack of investment or equity capital for rural businesses. Most rural businesses have neither the size nor the proximity to private sector investment company to attract much private sector equity investment.

In August, 1996 USDA published in the Federal Register a notice of intent to publish regulations on the demonstration. Nothing has been published since that time.

I have written, along with Senator Leahy, to the Secretary urging the Department to get regulations so that the Subcommittee may consider an appropriation for the program.

Question. Please provide the Subcommittee with a status report on the regulations and a date certain for publication.

Answer. This program is authorized as part of the Rural Community Advancement Program Rural Development Trust Fund in the 1996 Farm Bill. The Agency is considering options available for promulgating regulations to implement this program. As part of that process, an advanced notice of proposed rule making was published in the Federal Register on April 9, 1997, requesting suggestions for implementing this authority. Five comments were received and are being considered in the drafting of the regulation. The fiscal year 1998 Appropriations Bill does not appropriate funding for this program, and the President's fiscal year 1999 Budget does not request funding for this program. However, we are in the process of developing a proposed rule. We anticipate publication of the proposed rule by early calendar year 1999.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

LOAN SUBSIDY RATES

A couple of years ago, rising interest rates cut the program level of many rural development loan programs nearly in half. Last year Congress enacted legislation that helped avoid that problem by locking in the loan subsidy amount over a period of years. In addition, you state that lower interest rates will reduce the costs of these programs. Still, we see the subsidy rates increase for fiscal year 1999. For example, $67 million in BA for the water and wastewater loan program in fiscal year 1998 provided a program level of $691 million. For fiscal year 1999, the budget increases the BA to $126 million (nearly double) but the program level only increases to $764 million (roughly 10 percent).

Question. Please explain why the subsidy rate increase by this amount.

Answer. Provisions in the Balanced Budget Act of 1997 changed the economic assumption requirements for subsidy calculations on all Federal credit programs. Previously, economic assumptions provided by OMB assumed a declining baseline of Treasury interest rates used for the present value calculations of loan subsidy rates. This declining interest cost baseline assumption drove down the subsidy rate for loan programs that are long term disbursers. Under provisions of the new law, Treasury interest rates are held constant and are based on actual Treasury rates from the current year.

The water and wastewater loan program is a long term disbursing program, with loans expected to disburse over six or more years, and the bulk of the loan program level being disbursed in years two through four.

OMB economic assumptions for the fiscal year 1998 President's Budget assumed a baseline of Treasury interest rates used for discounting the present value calculation of loan subsidy costs as follows: 6.16 percent for fiscal year 1998, 5.76 percent for fiscal year 1999, 5.48 percent for fiscal year 2000, 5.29 percent, for fiscal year 2001, and 5.24 percent for fiscal year 2002 and thereafter. The average Treasury rate of this forecasted baseline is 5.586 percent. OMB economic assumptions for the fiscal year 1999 President's Budget assume a constant baseline of 6.11 percent for fiscal year 1999 and thereafter. This is an increase of over one half of one percent from the average Treasury rate baseline assumed in the preparation of the fiscal

year 1998 President's Budget and is enough of an increase to double the subsidy costs in fiscal year 1999.

Question. What would the subsidy rate have been if the process of previous fiscal years had been used?

Answer. We are unable to provide specific estimates of the subsidy rates, but it is reasonable to assume the rates would be lower than the rates used in the President's budget.

Question. Were the subsidy rates in the fiscal year 1999 budget directed by OMB and if so, did USDA appeal these rates?

Answer. These subsidy rates calculated for fiscal year 1999 were not directed by OMB. After the Balanced Budget Act of 1997 was passed, OMB and Agency officials realized that these new provisions in the Credit Reform Act would drive up subsidy costs, so we worked together to provide the budget authority necessary to offset these technical changes that were now required by law without exposing these loan program levels to substantial cuts.

RURAL COMMUNITY ADVANCEMENT PROGRAM (RCAP)

The 1996 Farm Bill created the RCAP with funding flexibility greater than provided in the appropriations acts. The Farm Bill envisioned USDA being able to transfer certain funds between rural development programs. This subcommittee has not provided you that full amount of flexibility. Still, you request this ability again for fiscal year 1999.

Question. Had you been granted full flexibility in fiscal year 1997 or fiscal year 1998, how would you have administered the programs differently?

Answer. It is impossible to predict how the funds would have been used differently if we had been granted full flexibility to transfer funds under RCAP. With the full authority to transfer funds, the State Directors would have been afforded the flexibility to respond to their unique, changing needs and circumstances.

Question. With the exception of natural disasters, what events have occurred that would have led you to shift funds from accounts where you had allocated the funds in the first place?

Answer. One example of an unanticipated occurrence was the dramatic increase in demands for the B&I program that appeared subsequent to the publication of revised regulations on December 23, 1996. Since that date demand for the B&I program has increased by 300 percent.

Question. In other words, if you wanted more funds for water and sewer, why didn't you allocate them to that account in presentation of the budget request?

Answer. The key concept in the RCAP program is the ability to provide State Directors the flexibility to respond to unanticipated needs or events. Our budget request reflects the best information that we have available at this time, but the ability to respond and reallocate funds in the future to changing situations, unique to states or regions and identified by local staff, would greatly increase Rural Development's effectiveness.

WATER AND WASTEWATER PROGRAMS

Question. Please provide information regarding attempts by private water distribution companies to acquire systems financed by RUS.

Answer. Nationwide, few attempts have been made by private companies to purchase RUS financed water systems. The most significant activity has been in the State of West Virginia, where at least three systems have been purchased and several others are under consideration. In Kentucky, one RUS-financed system is in the process of being purchased by a private company.

Question. Is this trend viewed as potentially harmful to RUS programs and customers?

Answer. Since the volume is so small, we do not anticipate that these sales will have a harmful impact on RUS programs. When RUS grant funds are used to finance all or a portion of a system, RUS' consent to the sale of the facilities is required under the terms of the grant agreement. Based upon information reviewed at the time of sale, customers have benefited from lower water rates and, in some cases, improved quality of water. Our concerns are the effect of water rates in future years and whether the private company will provide service to "pockets" of low income rural residents that may be less profitable for the company to serve.

Question. Is there a role in RUS programs for private well installations as a means to reduce total overall project costs and if so, what precautions would be necessary to ensure safety standards for customers and to protect overall RUS program integrity?

Answer. In rural America, most wells are, and will continue to be, privately owned and maintained by individual homeowners, farmers, and businesses. For RUS to finance individual or cluster wells with RUS water and waste disposal funds, applicants must be eligible public bodies, nonprofit organizations, or recognized Indian tribes that would own and operate the facilities. Even though our regulations have permitted such financing for many years, we have financed no projects recently. Applicants could propose individual or cluster wells rather than a piped water system as the solution to provide drinking water to residents of a particular community. We have discussed the possibility of three pilot projects with water well industry representatives. RUS regulations require that applicants comply with all applicable Federal, State, and local laws and regulations pertaining to water quality. If individual or cluster wells are proposed, the Federal and State rules that apply to community water systems may not apply, depending upon the circumstances and the States in which the facilities are located. Water systems proposing individual or cluster wells would be expected to provide essentially the same quality water that a community water system would. If the usual RUS requirement of complying with all applicable laws and regulations would not assure water quality, an appropriate loan condition would likely be added to the loan agreement.

ELECTRIC AND TELEPHONE PROGRAMS

Last week, a national news broadcast portrayed the rural electric programs as wasteful, misguided, or both. These are not new attacks. In fact, a GAO study released in January of this year also made suggestions on ways this program and the rural telephone program could be operated more efficiently.

Question. Please respond to the claims made by last weeks news story and the recommendations contained in the GAO study.

Answer. I am pleased to have the opportunity to respond to the statements made in this broadcast. The broadcast contained many half-truths and I appreciate the opportunity to clarify the information provided. The broadcast pointed out that America is now fully electrified. While this is generally true, the challenge today is to maintain the rural electric infrastructure intact and to provide the same high levels of service that all Americans have become accustomed to, while holding rates at reasonable levels.

Electric infrastructure, like all infrastructure, requires periodic maintenance to prevent the potholes from ruining the road, so to speak. Electric systems also require improvements to accommodate the new technologies that we all enjoy. This maintenance and improvement is inherently more expensive, on a per consumer basis, in rural areas than in urban areas, while revenue per mile of line is far lower for RUS borrowers than for most investor-owned utilities. Today, the main emphasis of the RUS program, and, in fact the electric industry as a whole is on ensuring the continuing availability of high quality electric service at affordable rates.

The broadcast discussed a number of specific RUS borrowers and provided isolated facts and statistical data about each—facts that, without a more complete discussion of the borrower's profile, were quite misleading. I appreciate the opportunity to provide background on each.

The borrower that serves Vail, Colorado, has not received an RUS loan since 1991. The borrower voluntarily rescinded this 1991 loan in 1995, before the loan was fully advanced.

The borrower that serves Hilton Head, South Carolina, serves four counties in that state. Three of these counties are classified as poverty counties, with one of the three having the lowest per capita income in the state. Recent RUS loans have been targeted only to provide service in those poverty-stricken counties. It should be noted that if the lucrative Hilton Head Island consumers were "cherry picked" off the system by an investor-owned utility, we estimate that rates to the RUS borrower's remaining consumers would increase by 20 percent.

Hoosier Energy Rural Electric Cooperative in Indiana submitted its last loan application to RUS in 1990. After resolution of all outstanding issues, RUS approved the loan in 1995 contingent upon Hoosier executing addenda to its wholesale power contracts with its member systems. Since Hoosier and the member systems could not agree on these addenda, RUS never released the loan and no funds have been advanced.

Withlacoochee River Electric Cooperative in Florida serves over 140,000 consumers, as stated in the broadcast. The number of customers served, however, is not truly indicative of an entity's need for RUS financing. Withlacoochee, for example, serves only about 17 consumers per mile of distribution line, about half the consumer density of the average investor owned utility. Moreover, 130,000 of Withlacoochee's 140,000 consumers (92 percent) are residential with very little com-

mercial or industrial base to support affordable service rates. This relatively low consumer density and the nature of the consumers allow Withlacoochee to meet the statutory tests for a municipal rate loan with a 7 percent cap on the interest rate. Its average revenue per kilowatt hour is higher than the state average, indicating that its service territory is indeed expensive to serve, and both the average per capita income and the median household income of its consumers are lower than the state average and median, respectively.

The broadcast also discusses Soyland Power Cooperative. As you are aware, Soyland's financial problems were the result of investments in nuclear power plants. RUS' loans to Soyland were made under the 1978 National Energy Policy Act that encouraged investment in nuclear plants, initially restricted the use of natural gas, and, by 1990 forbade its use in power plants. The assumptions behind this policy with respect to projections of costs of construction, load growth, and the economy turned out to be inaccurate.

Soyland's problems go back to a small minority share in the Clinton Nuclear Station. Because of cost overruns and significant delays in the construction of the Clinton Nuclear Station, and interest rates that were among the highest ever in this nation's history, Soyland's investment quadrupled. During the decade of the 1980's, Treasury did not allow RUS borrowers to refinance their high interest-rate loans. This investment, coupled with a sagging rural economy left Soyland economically unviable. Please also note that Soyland has not received an RUS loan since 1984.

GAO Study.—RUS provided GAO with a detailed response to the recommendations contained in the January 1998, study entitled "Rural Utilities Service: Opportunities to Operate Electricity and Telecommunications Loan Programs More Effectively. The complete text of the RUS response is provided for the record.

RURAL UTILITIES SERVICE'S RESPONSE TO GAO REPORT ENTITLED RURAL UTILITIES SERVICE: OPPORTUNITIES TO OPERATE ELECTRICITY AND TELECOMMUNICATIONS LOAN PROGRAMS MORE EFFECTIVELY

We appreciate the opportunity to review and comment on the draft General Accounting Office (GAO) report entitled "Rural Utilities Service: Opportunities to Operate Electricity and Telecommunications Loan Programs More Effectively."

The report offers a number of recommendations to make these loan programs more effective and less costly. The report mentions a portion of 7 U.S.C. 930. We believe that your abbreviated version of the provision does not accurately reflect the meaning of the provision. The provision in its entirety states:

"It is hereby declared to be the policy of the Congress that adequate funds should be made available to rural electric and telephone systems through direct, insured and guaranteed loans at interest rates which will allow them to achieve the objectives of the Rural Electrification Act of 1936, as amended, and that such rural electric and telephone systems should be encouraged and assisted to develop their resources and ability to achieve the financial strength needed to enable them to satisfy their credit needs from their own financial organizations and other sources at reasonable rates and terms consistent with the loan applicant's ability to pay and achievement of the Act's objectives."

We recognize that the goals of the report: "(1) make the electricity and telecommunications loan programs more effective and less costly for the government and (2) decrease RUS' vulnerability to loan losses" are, to some extent, contradictory. Financially stronger borrowers have easier access to reasonably priced private sector capital, while borrowers in greater need of a government subsidy are poorer credit risks. Nonetheless, these goals can be reconciled in order to support the electric and telecommunications infrastructure that is vital for rural communities, while maintaining the integrity of the RUS loan portfolio.

GENERAL COMMENTS

Since the report recommends fundamental changes in the RE Act, we believe that it is important for its readers to have a comprehensive understanding of the current characteristic of RUS borrowers and the uncertainty surrounding the industries in which they operate.

Rural communities

The Rural Electrification Act of 1936, (7 U.S.C. 901 et seq.) (RE Act) is intended to benefit rural communities by supporting their electric and telecommunications infrastructure. The residents of these communities are the true beneficiaries of the RE Act. The benefits of low interest loans are reflected in rates to residential electric and telecommunications customers in rural areas, and in rates for commercial and industrial service that make rural communities attractive to business opportunities.

The implication that a change in the composition of a borrower's service territory should disqualify that borrower from participating in the RUS loan programs is not fundamentally sound. Many borrowers' service territories include both rural and non-rural customers. This diversity of customer base contributes to the financial health of the utility, helps maintain reasonable rates for rural customers, and reduces the risk of RUS loans. We believe that this diversity of customer base will be critically important to the long-term financial stability of borrowers as their industries become more competitive at the local level.

Congress recognized this changing nature of borrower when it enacted the Rural Electrification Loan Restructuring Act of 1993. It set interest rate eligibility based upon per capita income of consumers, rate disparity, and consumer density. This Act also revised the definition of "rural" for new borrowers of both the electric and telecommunications loan programs. We suggest, therefore, that caution be used in strictly applying classifications such as rural, urban, and metropolitan to service territories as the measure of whether an RUS borrower is achieving the Congressionally stated policy objective of the RE Act.

The changing environment of the electric and telecommunications industries

The movement to a more competitive environment in both the electric and telecommunications industries substantially increases risk both for utilities and for customers in areas that are seen as less profitable to serve. New telecommunications regulations take effect January 1998, and their impacts will be felt gradually. The impacts of restructure of the wholesale end of the electric industry are just beginning to be felt. Statutes and regulations to make the retail end of the electric industry more competitive are under development at both the federal and state levels. The increased risk of both industries affects capital markets and the ability of utilities to attract private sector capital. RUS urges, therefore, that any recommended changes to RUS loan programs take this volatility into consideration.

The nature of RUS borrowers

The report makes repeated mention of what it terms borrowers' "profit". The repeated use of the term "profits" shows a lack of understanding of the characteristics of cooperative organizations. In fact, most electric borrowers and many telecommunications borrowers are cooperatives owned by the consumers they serve. Rather than earning profits that yield dividends to shareholders, these cooperatives allocate their "margins" earned during any reporting year as patronage capital to their members. These patronage capital allocations result in de facto rate reductions to the cooperative members, reducing the cooperative's operations to a break-even level. The benefits of these patronage allocations, therefore, flow to the consumers/subscribers who are, coincidentally, the intended beneficiaries of the RUS programs. The member-sourced earnings of RUS cooperative borrowers are not considered profits by the Internal Revenue Service and as such, are exempt from federal income tax.

OPPORTUNITIES TO MAKE THE LOAN PROGRAMS MORE EFFECTIVE AND LESS COSTLY

The report states that "opportunities exist to make the loan programs more effective and less costly." We have analyzed the report's conclusions and recommendations, along with the underlying premises and data, and we offer the following:

Loans are sometimes made to borrowers serving large customer populations

The report bases its findings to a great extent on significant mischaracterizations of RUS borrowers. While a few RUS borrowers do, in fact, serve large customer populations, most borrowers serve small subscriber populations and are considered small businesses according to the size standards established by the Small Business Administration (SBA). The telecommunications borrower specifically cited as an example illustrates this point. The borrower serves a city and the surrounding sparsely populated rural area. RUS financing was not used to provide service to the city because it does not meet the Urban/Rural test of the RE Act. The only telecommunications plant financed by RUS was that dedicated to serving rural subscribers outside the city. Absent RUS financing, prudent business practice would dictate that this borrower invest its higher cost capital in the areas in which it will earn the best return—the high density urban area. Ultimately rural area service would be improved only after the higher density city subscribers, if at all. Under the Telecommunications Act of 1996, as competition comes to rural areas, the pressure to invest in competitive markets will place even greater pressure on the availability of capital to improve service in rural areas. It is important to note that over 85 percent of RUS' telecommunications borrowers have less than 10,000 subscribers, near-

ly 70 percent serves less than 5,000, and the medium number of subscribers per borrower is less than 2,800.

We strongly disagree with the use of customer size as a criterion for determining eligibility for loans. Large customer population alone is not an accurate measure of a borrower's financial strength or its ability to attract capital. The average RUS electric borrower serves between 5 and 6 consumers per mile of distribution line, while the average investor owned utility (IOU) serves about 35 consumers per mile. Because the electric and telecommunications industries are highly capital intensive, a utility that serves a large number of mostly residential consumers over a large geographic area may not be able to achieve the economies of scale necessary to attract steady infusions of private sector capital at interest rates that can support reasonable electric and telecommunications rates for rural consumers.

Loans with subsidized interest rates are made to financially healthy borrowers that may not need RUS' assistance

The RUS electric and telecommunications programs provide a financial incentive to encourage rural electric and telecommunications utilities to provide modern service in areas that otherwise might not be well served, or served at all. RUS is, therefore, quite different from other Federal lending programs, particularly the single-family housing program. High financing costs of capital investments in sparsely populated areas may inhibit the construction of necessary facilities and/or dramatically increase electric and telecommunications rates. It is critical, therefore, to the provision of reliable service that all rural borrowers, including those that are financially healthy, be afforded the opportunity to obtain Federal financing to make improvements in rural service areas.

The report notes that many RUS borrowers have high equity levels and favorable debt to asset ratios and alleges that RUS borrowers do not invest significant amounts of their own funds in plant nor obtain non-Federal financing when opportunities exist. Many RUS borrowers maintain these somewhat favorable statistics because they have, in fact, invested considerable amounts of their internally generated capital in plant. In 1996 alone, a total of $1.5 billion was expended by RUS borrowers on telecommunications plant, of which RUS financing accounted for only $261 million.

By investing the cash generated by operating margins in plant, a borrower's debt-to-asset ratio improves as does its ability to generate positive margins. Plant that is financed by internally generated funds is, by definition, debt free thereby alleviating the impact that additional interest expense would have on a borrower's margins while increasing the borrower's equity. Equity, it should be noted, is a measure of an entity's operations and is not cash, as the report seems to imply.

The debt to asset ratio, (or similar measures of leverage such as equity to assets, or debt to equity) is certainly a valuable component of an analysis of creditworthiness but only when interpreted correctly. In evaluating creditworthiness, private sector lenders compare loan applicants to industry benchmarks. The report discusses debt-to-asset ratios for borrowers that obtained loans between 1994 and 1997. The figure cited is the ratio prior to obtaining the new debt, and the report implies that a debt to asset ratio of less than 70 percent is looked upon favorably by lenders. Comparisons to other electric utilities, however, show otherwise. DOE figures show that the average debt to equity ratio for IOU's is about 48 percent.[1] Virtually all IOU's are vertically integrated. RUS data for the same year shows that distribution borrowers had an average debt to asset ratio of about 40 percent, and G&T's about 70 percent. In the light of the IOU benchmarks, the ratios for RUS borrowers, even if the ratios are blended as a surrogate for vertical integration, do not seem as favorable. By this measure RUS borrowers have a distinct disadvantage in capital markets.

Finally, the current ratio can hardly be considered an appropriate tool for measuring ability to obtain long-term debt. A ratio that indicates to what extent current assets are available to meet current obligations simply does not demonstrate a borrower's long-term borrowing capability.

A graduation program could assist in moving financially healthy direct loan borrowers to commercial credit

The report correctly notes that the RE Act offers electric borrowers the opportunity to voluntarily graduate out of the direct loan program by prepaying direct loans at a discount. It is important to note that the discounted value is calculated on a net present value basis thereby resulting in no cost to the Government. To

[1] Financial Statistics of Major U.S. Investor-Owned Electric Utilities 1995, DOE/EIA–0437(95)/1, Department of Energy, Table 29.

date, 115 borrowers have prepaid their loans and we expect that there will be more. Borrowers who take advantage of this opportunity are ineligible for direct loans for 10 years

Specifically, the electric borrower cited in the report to support GAO's recommendation of forced graduation is, in fact, voluntarily moving away from the RUS program. RUS has not advanced loan Finds to this borrower since 1975, over 22 years ago. The borrower has been repaying its debt and now owes RUS only $128,000. Its total long-term debt from all sources is approximately $145,725 and interest on all long-term debt for 1996 was only $3,211. This borrower has achieved a high TIER and current ratio, and high levels of equity by avoiding all financial leverage, a rare feat, indeed, in the electric industry, or any industry today. By graduating itself from all lending programs, this borrower is truly an anomaly. The medium TIER for electric borrowers in the United States and in this borrower's state are 2.44 and 2.62, respectively.

A recent RUS analysis of borrowers who graduated out of RUS under this provision shows two significant trends. First, these borrowers tend to be stronger according to a number of measures. They are typically characterized by: ability to realize economies of scare measured by high consumer density and kWh sales per mile of line; size measured by larger number of consumers (as noted above, one of the report's suggested criteria for measuring strength), total kWh sold, and total utility plant; and newer plant. Interestingly, equity as a percent of total assets seems to be almost the same for borrowers who graduated and borrowers that did not. Also, most of these borrowers serve in states where electric rates are at or below the national average, and their territories show higher load growth.

Finally, while these graduated borrowers are not eligible for direct RUS loans for 10 years, the law leaves them the option of applying for a loan guarantee. As the report points out, the lender is almost always the Federal Financing Bank (FFB), part of the Treasury Department. The interest rate is one-eighth of one percent above Treasury's cost of borrowing, and RUS guarantees 100 percent of the loan. In other words, if these graduated borrowers find that private sector capital is no longer affordable, the RE Act offers a backstop.

Similarly, recent lending activity indicates that a number of RUS telecommunications borrowers have sought financing through non-Federal sources. Borrowers are, in fact, seeking alternative financing through CoBank and/or the Rural Telephone Finance Cooperative as indicated in the GAO report. We believe that this voluntary graduation protects rural communities against the capital risks inherent in the restructuring of the industry.

We are extremely concerned about requiring electric and telecommunications borrowers to refinance their direct loans with private sector financing at this time. In contrast to the relatively stable operating environment of the water and waste disposal program that currently graduates borrowers, the operating environment of the electric and telecommunications industries is highly volatile. The Federal Energy Regulatory Commission is implementing wholesale competition in the electric industry, and many provisions and impacts of wholesale restructuring are not yet clear. At the same time, the Federal Communications Commission (FCC) is implementing the Telecommunications Act of 1996 which will have a dramatic impact on revenue streams for rural telecommunications providers.

RUS direct loans for electric infrastructure are generally available only to borrowers that serve at retail, and restructuring of the retail side of the electric industry has barely begun. The 105th Congress has already seen five bills introduced in the Senate and seven in the House that would, in some form or another: allow, promote or require retail competition; revise or remove restrictions on utility holding companies; institute new requirements on sources of energy sold; or otherwise profoundly alter the industry. In a few states retail choice of electric supplier will be available to all consumers in a few months. Other states are still exploring options.

While not mentioned in the report, the Telecommunications Act of 1996 will have a profound effect on the telecommunications industry. RUS is closely following the FCC as it moves toward implementing the Telecommunications Act, and believes that rural telecommunications service providers will be affected in at least these ways. RUS telecommunications borrowers receive, on average, 65 percent of their revenues from long distance access charges and cost pooling; however, nationwide, telecommunications service providers receive only 44 percent of their revenues from these sources. The Telecommunications Act will change the way in which revenues from these sources are collected and distributed. Access charges will decline at a controlled rate and cost pooling (the current method for collecting and disbursing funds to cover high cost service) will be completely restructured. The rulemaking process intended to design the new universal service cost pooling support mechanism is scheduled to begin in 1998; however, until that mechanism is operational,

the degree of negative impact on borrowers' revenue streams cannot be fully determined.

While small rural telecommunications companies may be protected (depending upon the policies of their state regulatory commissions) in the short-term from competition in their service areas, competition will ultimately come, in some form, to all areas of the nation. Initially, competition will most likely come from another service provider who will attempt to serve the lowest cost subscribers in an area. This will leave RUS borrowers with only their high cost subscribers to serve, thereby reducing the density of the service area and increasing the average cost per subscriber.

Since the debate over retail choice in the electric industry has barely begun, impacts are even more uncertain. We believe that this uncertainty will be reflected in higher costs of private sector capital for electric and telecommunications utilities. Decreasing revenues and increasing costs will strain rural service providers and may endanger universal service. Forcing direct loan borrowers to private sector financing during this period of uncertainty may leave them paying extremely high interest rates that would be directly translated into higher electric rates for rural consumers. Since the vast majority of these borrowers are, as noted above, cooperatives, they cannot raise equity capital by selling stock. Since they are small businesses, as well, they may lack the large cash how cushion that can protect large businesses against such "sticker shock." Even borrowers that have been historically strong could be left with no alternative other than raising rural service rates.

OPPORTUNITIES TO DECREASE RUS' VULNERABILITY TO LOAN LOSSES

The report made several recommendations for decreasing RUS' vulnerability to loan losses: "(1) limit loan size and total amount of debt outstanding to a borrower, (2) reduce loan guarantees from 100 percent and (3) establish policies to preclude loans to risky borrowers. Second only to RUS' mission of financing high quality electric and telecommunications service to rural consumers reasonable rates, is its concern for the creditworthiness of its borrowers and the security of its loans. It is important to note that the telecommunications program, based upon its policies and procedures currently in place, has an outstanding record of loan repayments—zero defaults since its inception. Equally important to consider is the fact that the majority of loan losses in the electric program arise from investments in ill-fated nuclear plants that were either constructed at costs substantially higher than initial projections or totally abandoned during the construction phase.

Loan and debt limits could reduce RUS' vulnerability to losses

We do not agree that loan limits equate to a reduction in vulnerability to loan losses. RUS cannot make a direct loan or loan guarantee unless the agency determines that the borrower will be able to repay the loan according to its terms and conditions, and that the security for the loan is adequate. These determinations are based on the borrower's past performance, its management and operating environment at the time of loan approval, and projections of load growth and financial performance. Applications for electric loans include long-range financial forecasts as well as engineering studies of facilities that will be constructed with loan funds. The requirement that security for a loan be adequate effectively limits the borrower's total amount of secured debt.

Lending limits also constrain a borrower's ability to take advantage of certain economies that arise from system-wide improvements. A single loan may finance the upgrading and improvement of an entire electric or telecommunications system. All pertinent plant could be constructed under a single contract under one simplified competitive bidding process. This method is, by far, the most efficient way for small utilities to construct plant. If loan limits were imposed, system-wide construction would take place only in small segments thereby significantly increasing the cost to serve rural subscribers. increased subscriber costs are certainly not in the best interest of rural ratepayers, rural electric or telecommunications service providers, or the Federal lending programs that finance such service.

Establishing policies to preclude loans to certain risky borrowers would reduce future exposure to loss

We believe that this recommendation is based on faulty premises. The rule[2] in the report implements the new statutory authority of the Secretary of Agriculture to compromise, adjust, reduce, or charge off debts or claims owed to the govern-

[2] The rule, adding a new subpart Y to 7 CFR Part 1717, was published September 26, 1997, at 62 FR 50486.

ments. The rule adequately addresses the issues raised in the report by requiring credit support in the full amount of the loan as a condition of any subsequent loan.

ELECTRIC PROGRAM ISSUES

Impacts of the electric loan program in maintaining electric infrastructure

The electric loan program provides an efficient and effective use of taxpayer funds to support electric infrastructure. The subsidy amounts cited in the report actually support relatively high lending levels. The total subsidy for fiscal years 1994 through 1996 for electric hardship rate loans was $49.6 million while the lending level was $273.9 billion. For municipal rate loans during this period, $148.9 million in subsidy supported lending levels of $1,489.8 billion.

This subsidy actually generates increases in electric utility plant far greater than what lending levels indicate. For example, in calendar year 1995, RUS advanced a total of $860 million in direct and guaranteed loan funds to electric borrowers. During the same year, additions to plant by electric borrowers totaled almost four times this amount, $3.3 billion. In calendar year 1996, RUS advanced $1.02 billion to borrowers, and additions to plant totaled $3.3 billion. Borrowers make up part of this difference with internally generated funds, and part with loans from non-RUS sources. In the case of municipal rate loans, most borrowers are required to obtain part of their debt financing from a supplemental source with no RUS guarantee.

Financially healthy borrowers obtain municipal rate loans at interest rates lower than rates on hardship rate loans

The report's description of the interest rate structure for municipal rate loans is generally accurate. We emphasize only that, as a general principle, short-term interest rates are lower than long-term rates. A borrower that locks in a low rate for a short term runs the risk of a sharp increase in the rate when the advance rolls over.

Moreover, the federal subsidy is based on the difference between RUS interest rates and the rate at which RUS borrows from the Treasury. While the interest rates on RUS borrowings and municipal interest rates may not rise and fall strictly in tandem, they do follow similar trends. In other words, the subsidy rate does not necessarily increase when municipal rates fall, and vice versa.

TELECOMMUNICATIONS PROGRAM ISSUES

Nonrural Areas

RUS strongly supports its policy of making loans for service to nonrural areas when it is incidental to providing service in rural areas. In instances where telecommunications service is to be provided in a nonrural area, RUS applies a "necessary and incidental" test to determine that, without financing plant in a particular nonrural area, the rural area would suffer the consequences by receiving less or no service. In addition, when making a loan to a telecommunications borrower where funds are to used in a nonrural area, RUS conducts Urban/Rural studies to determine that the majority of the benefit from the financing will be derived by the rural residents. Defining a rural area is simply not as easy as assigning a number. These policies enable RUS to apply judgment in making loans that ultimately benefit the residents in rural areas, be they rural, extremely rural, or some mixture. The goal of "universal" service can only be achieved if service is provided in areas, both rural and nonrural.

Once again, we appreciate the opportunity to review and comment on the draft report. If you wish to discuss these comments on a more detailed basis, we are available at your request. While we welcome suggestions that will improve the operational efficiency of our loan programs, any recommendations that are forthcoming should take into consideration the revolution that is taking place in both the electric and telecommunications industries. Due to the numerous uncertainties surrounding the eventual evolution of these industries, it is important the RUS lending programs remain flexible in their abilities to provide financing to ensure modern, reliable electric and telecommunications service to rural America.

The report states that loans are sometimes made to borrowers serving large customer populations. I emphasize again that, although a few RUS borrowers serve large customer populations, the vast majority have customer bases that are, quite small, by industry standards. Furthermore, all but a handful are small businesses according to the Small Business Administration's size standards, which are based on MWH sales for electric utilities and number of employees for telecommunications companies.

I strongly disagree with the use of customer base as a criterion for determining loan eligibility. Large customer size alone is not an accurate measure of a borrower's

financial strength or its ability to attract capital. The electric and telecommunications industries are both capital intensive, and a utility that serves a large number of customers over a large geographic area may not be able to attract steady infusions of private capital at interest rates that can support reasonable electric and telecommunications rates for rural consumers.

The report also asserts that RUS makes loans to financially healthy borrowers that may not need RUS assistance. The measures of financial health used in the report do not accurately measure a borrower's true borrowing strength. High equity, for example, does not automatically translate to credit worthiness for a cooperative. The debt-to-asset ratio of RUS borrowers is not nearly as favorable as indicated in the report, when the ratio is compared with industry benchmarks. Similarly, the current ratio has little or no relevance to a utility's long-term borrowing capability.

GAO recommends a graduation program to forcibly move borrowers out of the RUS program and into private sector financing. RUS now offers electric borrowers the opportunity to voluntarily prepay their RUS debt at a discounted present value. Borrowers who choose this option are ineligible for direct loans for 10 years. To date, 115 borrowers have voluntarily moved to private sector financing, and I fully expect that there will be more.

I am also concerned that requiring electric and telecommunications borrowers to graduate to private sector financing would be detrimental to the rural economy at this time. In contrast to the relatively stable operating environment of the water and waste disposal program that currently graduates borrowers, both the electric and telecommunications industries are now in a state of flux. Forcing borrowers to "fire sale" refinancing could place them at a competitive disadvantage, leading to higher electric rates for rural consumers.

GAO believes that RUS' vulnerability to loan losses could be reduced through loan and debt limits, and by precluding loans to certain risky borrowers. I disagree. RUS cannot make a loan unless the agency determines that the borrower will be able to repay the loan according to its terms and conditions, and that the security for the loan is adequate. Imposing rigid limits on the size of individual loans, or the borrower's total debt could constrain the borrower's ability to take advantages of economies of scale, or to build facilities to serve consumers in areas of rapid growth.

An absolute prohibition on loans to risky borrowers could adversely impact electric and telecommunications service to needy consumers in rural areas. RUS prefers its current individualized approach, one in which the agency can place conditions on certain loans to mitigate risks.

Question. Please provide your views of the current trends in electricity deregulation and its effect on the rural electrification programs?

Answer. RUS is concerned about the potential impacts of electric industry restructuring on RUS borrowers and on Federal financial interests in these borrowers. RUS is also concerned about the continued availability of reliable, reasonably priced, electricity in rural areas.

Experience with deregulation in other industries has not been a positive one for many rural consumers. Too often, the unfortunate and unintended consequence of deregulation has been a decline in the quality and availability of service and an increase in costs in rural areas. Airline and railroad deregulation are prominent examples. If experience in other industries is any guide, the benefits and costs of electric industry restructuring will be spread unequally both geographically and among customer classes. This has prompted concern that if implemented too quickly and without adequate safeguards, electric utility restructuring could bring rural Americans higher prices and degradation of reliability and safety.

The underlying premise of deregulation is that competition among suppliers will result in lower prices, technological innovation, and more choices for consumers. In many cases, powerful industrial consumers are already negotiating lower electric rates either from their historical providers, or by switching to lower cost providers. In either case, the historical provider is left with fixed costs that must be recovered from a shrinking revenue base. To the extent that the historical provider is unable, in a competitive market, to charge rates sufficient to recover these costs, the costs are stranded. Because almost all RUS borrowers are consumer-owned entities, there are no shareholders with which to share stranded costs.

Competition in generation alone, is unlikely to significantly affect many of the factors that contribute to the higher costs of serving rural systems. To achieve the benefits offered by electric industry restructuring while preserving access to reliable and affordable electric service, the transition must take into account the special circumstances of rural electric systems and their customers.

The Administration is continuing to develop its comprehensive policies on electric industry restructuring. RUS believes that rural areas can share in the benefits of

a competitive retail electric market if adequate safeguards are provided to assist high-cost to serve rural areas, and reliability of service is ensured.

Many RUS borrowers serve small, scattered, mostly residential loads that may not attract competitive interest to produce significant savings for most consumers. RUS is concerned that as a result of competition, larger customers will increasingly be "cherry picked" from RUS borrowers, requiring these borrowers to raise rates to the remaining customers to meet fixed costs, including debt service payments. If rates rise too sharply for the remaining consumers, the economic base of the community could be threatened. If, however, competitive pressures prevent a borrower from charging sufficient rates, the borrower's ability to meet its debt service payments is threatened.

It is almost impossible today to determine the magnitude of stranded cost exposure of RUS borrowers, except to say that all generation assets are potentially at risk, and that nuclear facilities and other high cost producers are at the greatest risk. Various proposals for retail choice transition have been introduced in the 105th Congress and in various State legislatures and public service commissions. These proposals differ greatly in their likely impacts on power supply borrowers and on the extent of permissible recovery of stranded costs.

USDA is also concerned that the future availability of investment capital for rural electric infrastructure can be jeopardized if current and future investments are allowed to become stranded.

RUS currently has approximately $31 billion in outstanding electric loans. Typically, RUS loans are used to leverage two-thirds of investment capital from private sources. These loans are the lifeblood in maintaining and improving rural infrastructure. If these loans become stranded, the investment resources from federal programs as well as private sources could easily diminish.

Question. Please explain why you think the "universal service" concept should be applied to electrification programs?

Answer. The universal service concept dictates that all customers, including those that are high-risk, and or costly to serve, will be assured access to reliable electric service at just, reasonable, and affordable rates. The obligation imposed on utilities to provide universal service to all customers within their territories at just and reasonable rates has long been a fundamental and highly-valued premise of electric utility regulation.

Even today, providing electric service to rural areas requires more capital investment and higher costs of operation and maintenance and results in lower revenue per mile of line than service in most urban and suburban areas. The availability of universal service and the investment in a safe, reliable electric infrastructure in rural America should not be put at risk during or after the transition to a more competitive electric industry.

In a "deregulated" competitive electric industry, retail electric providers will be able to pick and choose the areas and customers they serve based upon their expectation of profits to be won, and not on the customer's need for service. In a competitive environment, profit-maximizing retail electricity providers will be attracted first to high-volume, high-load factor industrial and large commercial customers. They may demand unacceptably high prices to serve low-volume, low-load factor residential and small commercial consumers, if they are willing to serve them at all.

Question. Other than loan subsidy rates, why would the proposed Treasury rate direct loan program be an improvement over continued FFB activities?

Answer. The proposed Treasury rate loan program would supplement, not replace, the FFB loan guarantee program. A Treasury rate loan program would offer a number of advantages. It would be a direct loan program, not a loan guarantee. The borrower would have only one federal agency to work with. FFB loans offer a complex range of options for long- and short-term interest rates, amortization schedules, and the ability to prepay or refinance the loan. These options confuse many borrowers while a new direct loan program could be simpler. FFB interest rates reflect Treasury's cost of money plus one-eighth of one percent. FFB also charges a small annual servicing fee to cover certain administrative costs. The Treasury loan program would not have the interest rate adder or the fee.

The Treasury rate loan program would allow RUS to offer a range of financing options in a customer friendly format. FFB financing would still be available to power supply borrowers and to distribution borrowers that favor the range of choices offered by FFB.

Question. In what ways might the Treasury rate proposal be harmful to electric utility borrowers?

Answer. I do not believe the Treasury rate proposal could be harmful to electric utility borrowers, to rural Americans, or to the government.

Question. Has RUS engaged in a survey to determine the problems and costs associated with "an aging electric infrastructure" and if so, would you provide that information to the Committee?

Answer. RUS has not surveyed borrowers concerning the problems and costs associated with aging electric plant. Our understanding of the problems posed by aging electric system components is based on historical information on in-service dates of electric plant and trends in requests for loan funds and system upgrades. Electric systems, just like other forms of infrastructure, require maintenance and periodic replacement of components as the systems age. Demand for electricity has also been growing in many rural electric service areas thereby requiring distribution and transmission facilities to be upgraded to preserve safety and reliability.

EMPOWERMENT ZONES/ENTERPRISE COMMUNITIES (EZ/EC)—DELTA INITIATIVE

The USDA budget suggests legislation will be submitted to create additional rural Empowerment Zones. Additionally, the Appalachian Regional Commission is suggesting expansion of their activities to include the region of the Lower Mississippi River Delta.

Question. Do you think the ARC initiative for the Delta could largely be conducted under the EZ/EC initiative? Have you discussed the Delta initiative with the ARC? Please describe how the benefits from the current EZ/EC program have helped the Delta.

Answer. We believe that implementing the recommendations of the Lower Mississippi Delta Commission fits closely with the objectives and implementation methods of the EZ/EC Initiative. Two organizations in the Mississippi Delta region—the Lower Mississippi Delta Development Commission and the Southern EZ/EC Forum—have already taken major steps to build a coalition through which this can occur. We have met with the ARC to discuss the proposal to expand their service area to include the Delta. We are concerned about their proposal to increase the size of their organization and favor an approach that would direct a larger proportion of the funds to development projects in rural communities by using an organizational structure that is already in place. Since this Administration has come into office, USDA Rural Development has invested more than $446 million in the 219 counties of the Lower Mississippi Delta region. In addition, the EZ/EC Initiative will invest over $60 million in Social Services Block Grants. At the rate these dollars are being leveraged nationally, this will result in approximately $600 million in total investments in these poor communities.

Question. Since you note the importance of assistance for children to attain appropriate educational levels in regions like the Delta, are you aware of the work of the Delta Teachers Academy and if so, would you provide your views on this program?

Answer. I am not familiar with the Academy, I understand this is a project funded by the Extension Service.

CENTRALIZED SERVICE CENTER

Last year, there was much discussion about the effect of budget cuts and FTE ceilings on the work force at the St. Louis Service Center.

Question. Please provide an update on workload and FTE's currently employed and projected for fiscal year 1999 at the Service Center.

Answer. September of 1997 marked the completion of the conversion of loans from the field to the new Dedicated Loan Origination and Servicing system and the transfer of servicing activities to the Centralized Servicing Center (CSC) in St. Louis. The CSC provides full servicing of these loans from closing to acceleration of the account, with a Full Time Equivalency (FTE) authorized level of 633 employees, we project our workload to remain constant in fiscal year 1999 and our FTE requirements to remain at 633.

Question. What is the status or special needs of information technology at the Service Center?

Answer. All information technology initially planned is in place and operational in the Centralized Service Center (CSC). With any portfolio conversion of this size, modifications to the current system is an ongoing process. These modifications to the software are unique because of the Congressional mandated Supervised Credit that must be available to our borrowers to preserve home ownership though economic or other hardships individuals and families may experience. For this reason, we have had to modify the private sector serving software we purchased to ensure these servicing options were handled in a consistent and efficient manner. These servicing features include: 7 day a week, 24 hours voice response for detailed information on loans; nationwide consistency for servicing, including payment assistance, moratorium, reamoritization and other services; centralized cash management pro-

viding fiduciary control; a monthly statement sent to each borrower; escrow of taxes and insurance; and expanded (7:00 am–6:00 pm) customer service representatives to handle more complex issues for our borrowers.

We will continue to monitor our program needs in conjunction with the constant changes in technology, increased use of technology, and the needs to respond quickly to requests for information and prepare a plan to achieve this result.

Question. To what extent are you coordinating information technology for the Service Center with overall Department needs?

Answer. The Centralized Service Center (CSC) identifies their program needs, prepares the proper documentation for approval by the Information Resource Management organization. Like every other organization in the Department of Agriculture, the CSC is currently under a $25,000 limit on any technology purchase without a wavier from the Department. The waiver requires concurrence by all USDA mission areas involved in the CSC initiative and also ensures that any and all technology is Year 2000 compliant, unless emergency situations exist.

SECTION 502 SINGLE FAMILY HOUSING

You state the goal of the President's National Partnership for Home Ownership is to provide home ownership to an additional eight million Americans by the year 2000.

Question. What rate of program increase per year will we need to see in order to realize this goal?

Answer. For fiscal year 1999, we estimate that we will provide home ownership to approximately 65,000 individuals or families in rural America. RHS is only one of the 65 national organizations working together to meet this goal. Increases in our direct and guaranteed home ownership programs would assist additional home ownership in rural America, however, we have not formulated our appropriation request fiscal year 2000 at this point.

Question. What amount of this program do you intend to support through the direct and through the guaranteed program?

Answer. As mentioned in the previous answer, the fiscal year 1999 request would allow us to provide home ownership to approximately 65,000 rural individual or families. This figures includes the entire request for both the direct and guaranteed 502 programs.

Question. What is the policy rationale for the statutory prohibition of graduating a 502 "direct" borrower to the guaranteed program?

Answer. The Department does not have a rationale for the prohibition, in fact we have transmitted proposed legislation to Congress to repeal the statutory prohibition. One of the RHS goals is to graduate borrowers to commercial credit. Additionally, the 502 guaranteed program provides 100 percent financing which will enable direct borrowers to refinance who don't have the financial capability for a down payment.

SECTION 515 MULTI-FAMILY HOUSING

Question. Please describe the status of Section 515 housing rehabilitation and include the number of projects and, to the extent possible, the number of units for which rehabilitation has been complete and the number of projects/units still in need of repair or upgrades.

Answer. Since fiscal year 1995, the Agency has dedicated approximately $194 million in repairing and rehabilitating our existing portfolio, which equates to nearly 640 projects. Our most recent survey, conducted September 1997, indicated $106.4 million outstanding repair needs. For fiscal year 1998, we estimate approximately $50.5 million will be used for this purpose.

Question. The budget reduces the 515 program substantially and, instead, provides an increase for the Section 538 guaranteed program. What has been the response from developers in accepting the guaranteed program over the direct?

Answer. The Section 538 program is not a replacement or substitution for the 515 program, which is, a below-market-interest-rate loan program. Loan guarantees cannot significantly lower the costs of borrowing enough to allow occupancy by the low- and very-low-income households which the 515 program serves. However, developers understand that the Section 538 will play an important role in providing rental housing in rural America for low to moderate-low income families.

Question. Has shifting from the direct to the guaranteed program had any effect on the ability of developers to acquire tax credits?

Answer. As previously stated, the Section 538 program is not a replacement or substitution for the 515 program; however, many developers expect to use the LIHTC program in conjunction with the Section 538 Program as the two programs

are compatible. The combination of tax credits and a guaranteed loan achieves rents that are affordable to low-income households in those rural areas where median incomes are relatively high because the LIHTC program must be used for households with incomes at 60 percent of area median income, while households eligible for the Section 538 program are those whose incomes at the time of initial occupancy do not exceed 115 percent of the median income of the area.

GALT, CALIFORNIA

Last year, there was substantial debate about an amendment that would have affected rural housing programs in Galt, California. Had this amendment been adopted, it would have served as a precedent USDA felt detrimental to its mission.

Question. Please provide an update on continuing negotiations with the City of Galt regarding this problem.

Answer. The Department has worked with a mediator from Sacramento State University to access the scope and cost for the full mediation process. The mediator has met with the principals and is preparing a preliminary analysis for the Department to review for consideration of a contract. The principals have agreed to work together to identify the goals of the mediation process.

Question. Have other requests similar to those of Galt been brought to the Department's attention and if so, what is the status of those requests?

Answer. The grantees of the Mutual Self-Help Grant Program and farm labor housing providers have reported instances where communities have resisted the construction of affordable low-income housing. Barriers include local building approvals and zoning restrictions. Many of these cases are resolved on the local level with negotiations conducted between the housing provider and the local community, including elected officials. We are currently not aware of a situation similar to Galt where a City or local government is attempting to halt all construction of RHS low-income housing. Our experience has been that after the RHS housing has been constructed and occupied, the community and neighbors are very supportive. The Agency strives to ensure the housing reflect the local building styles including amenities and we take great measures to ensure the high quality of our rental housing is maintained.

BUSINESS AND INDUSTRY LOAN PROGRAM

You mention that since last December, the demand for the Business and Industry Guaranteed Loan Program has increased 300 percent.

Question. What is the explanation for this rate of increase?

Answer. This rate of increase is the result of three factors:

1. The streamlined Business and Industry Guaranteed loan program regulations were implemented, which reduced these regulations by 50 percent, reduced the number of forms required (from 19 to 6), and made the forms available to the public in an automated electronic format;
2. An aggressive program outreach initiative was conducted by National and State Office staff; and
3. The eligible loan purposes were expanded to include such purposes as the financing of hotels, motels, bed-and-breakfasts, and some recreational-type facilities.

Question. What is the source of the additional $75 million in Business and Industry loans resulting from the Community Adjustment and Investment Program under NAFTA?

Answer. In conjunction with the North America Free Trade Agreement (NAFTA), the U.S. Department of Treasury entered into a Memorandum of Understanding with USDA, which enabled USDA to administer a guaranteed loan program, with budget authority provided by funds available through the Community Adjustment and Investment Program (CAIP), using its RBS B&I Guaranteed Loan Program regulations. The funds for this program are available because of deposits made into the CAIP as the result of the provisions of NAFTA.

COOPERATIVE DEVELOPMENT

You mention that the role of cooperatives might replace some of the support of the traditional farm price support programs that were discontinued in the 1996 Farm Bill.

Question. What are some examples of cooperatives serving this function? Are any currently in place and if so, in what fashion? What are you doing to support this concept? Are you consulting with the Commission on 21st Century Agriculture on this issue?

Answer. Cooperative strategies can be adopted by farmers to assist them in increasing net farm incomes and reducing their exposure to fluctuating prices. There

are a range of roles that cooperatives can play, some strictly private sector initiatives that we in the public sector can encourage, and others requiring cooperatives to take on a more public role in the marketplace. These strategies have two basic dimensions: (1) Giving farmers more market power in negotiations relative to other players in the food sector, and (2) aiding farmers to get a larger share of the consumer's food dollar. Some of these strategies could include more use of pooling, value-added production, global marketing, enhanced bargaining, and operation of a cooperative managed supply control system. Cooperatives in some commodity areas, particularly non-program commodities, are currently involved in some of these activities. Cooperative investment in value-added processing has been particularly active in recent years.

RBS has historically promoted use of cooperative strategies for improving farm income through its program of research, technical assistance and education. These activities continue. The Department is presently examining possible strategies and contingencies for the post-price support era, including strictly cooperative-base strategies and others. We want to be prepared, with well thought out options, to ensure that the well being of American farms will be sustained over the long run. We are in the beginning stages of this process and not yet to the point where we are consulting actively with outside groups. When we get to that stage, however, we will involve a broad range of individuals and organizations to insure that our policies are effective and address the needs of all American farmers.

APPROPRIATED TECHNOLOGY TRANSFER RURAL AREAS (ATTRA)

The budget proposes $2 million for ATTRA, and increase of $700,000 above the fiscal year 1998 level.

Question. Please provide an update on the activities at ATTRA. Please describe any effects on ATTRA that have resulted from the program not receiving an increase for a number of years. Please describe the role ATTRA has served in USDA's overall strategy to attain sustainable farming methods on a national scale.

Answer. In fiscal year 1997, ATTRA responded to and provided information to more than 18,000 requests about sustainable agriculture received through its national toll-free phone lines, its new Web page, and direct contacts at workshops and agricultural trade shows. Already in fiscal year 1998, ATTRA staff are struggling to respond to more than 9,000 requests in the first 5 months of the fiscal year. ATTRA staff members provide leadership, technical training and materials to regional and national efforts on professional development in sustainable agriculture for extensionists, Natural Resources Conservation Service staff and others. The ATTRA newsletter updates 8,000–10,000 groups, individual farmers, educators and others about sustainable agriculture news and resources of interest.

The greatest impact of level funding has been on staffing. Key areas in the program are now severely understaffed because funding limitations have prevented filling positions to meet increased overall demand. The number of requests has more than doubled in 7 years while funding has remained level, but there has been no corresponding increase and, in some cases, reductions in the number of staff hours available to serve those needs. Especially hard hit have been the areas of pest management, marketing, livestock, and agronomy, as well as operational areas such as computer/information management and staffing for the toll-free phone lines. The program is now faced with implementing limitations on numbers and types of requests, and staff struggle with a backlog in updating of highly requested materials. Labor projections needed to meet current and future demands indicate that the program is understaffed by 50–60 percent, and the proposed increase would allow a modest staff increase to partially offset the impacts of chronic under staffing.

With its toll-free (and now electronic) access, ATTRA continues as the unique sustainable agriculture information source available to farmers across the country, and is in a special position to promote and interpret USDA efforts in sustainable agriculture, such as the results of the Sustainable Agriculture Research and Education (SARE) program, to a broad audience. ATTRA has been a visible and easily accessible place for farmers to start or to deepen their practice of sustainable farming methods, no matter what their geographic location. Several editions of a national expertise directory and other ongoing contacts have been produced and maintained by ATTRA and publicized through the USDA-sponsored Sustainable Agriculture Network (SAN). These and other networking tools have helped those practicing, researching and learning sustainable farming methods to more easily find each other across the United States. Also, ATTRA staff are in a unique position to provide information to USDA and other Federal agencies on farmer interests and needs in sustainable agriculture.

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION CORPORATION (AARCC)

You mention that a number of companies which have participated in AARC have repaid over $200,000 to the AARC Corporation.

Question. At what point do you think the program will be self-sustaining?

Answer. AARCC's 10-year business plan projects three repayment scenarios. The low case has AARCC recovering its investments on a dollar:dollar basis. Even at that rate, the American taxpayers still gain, as jobs have been created and unused land put to use.

In the intermediate case, the plan projects a 6 percent return on the money. The high case projects a 10 percent return. Presently, the repayments are tracking with the high case scenario.

We believe AARCC will have the financial resources to be independent of appropriated funds by the end of fiscal year 2002. The business plan projects that to be the case, regardless of which repayment scenario is realized.

RURAL UTILITIES SERVICE

Your testimony refers to a letter which Secretary Glickman recently sent to Energy Secretary Peña expressing concern that, even if rural coops are permitted to recover their stranded costs associated with generation (as provided for in the Bumpers/Gorton bill), rural coops may not be able to "maintain reasonably affordable rates for small consumers." As I understand this statement, Secretary Glickman is suggesting that a coop will not be able to recover all of its distribution costs.

Question. While a coop may lose generation customers as a result of retail electric competition, it won't lose distribution customers. Why would a coop not be able to recover all of its distribution costs as long as it retained all of its distribution customers?

Answer. Secretary Glickman did not assert, as a general matter, that a cooperative would not be able to recover all of its distribution costs under retail competition. Rather, the Secretary cautioned that "wires charges" imposed by distribution utilities to deliver another supplier's power may not be a sufficient replacement source of revenue to assure reasonably affordable electric service for smaller customers.

Secretary Glickman's letter expressed the Department's concern that the benefits of cost averaging—a key tool for assuring affordable universal electric service—could be lost under retail competition. Electric systems and regulators would no longer be able to rely on the practice of averaging the costs of servicing high and low cost customers to support reasonably affordable rates for smaller customers. The operating efficiencies and revenues from larger customers have historically helped to lower average systems costs and benefited smaller customers. With the loss of generation revenues from large industrial customers, an important source of revenue support for affordable service could disappear. Moreover, utilities could face higher costs to provide power to remaining customers with less attractive load profiles. The result is likely to be upward pressure on rates for residential and small commercial customers. This threat is one reason why USDA believes that it is essential that an adequate safety net be assured for rural and other costly to serve customers as part of electric industry restructuring.

Question. Secretary Glickman's letter seems to suggest that residential and commercial customers will have to pay more if a coop loses its industrial customers. However, a coop won't lose an industrial customer for distribution service and it will be able to recover all of its stranded costs from generation customer losses as a result of retail competition under the Bumpers/Gorton bill. Therefore, wouldn't you agree that rates charged to residential and small commercial customers should not rise when retail competition is implemented?

Answer. We do not agree that rates charged to residential and small commercial customers should not rise when retail competition is implemented. There is already evidence that they could rise, which prompts USDA's concerns over consumer impacts. Most state retail choice plans would impose transition charges on retail customer bills for stranded cost recovery, in addition to the costs of electric service. Unless a regulatory device is adopted to defer these costs—as in California and Massachusetts—the retail choice transition could increase costs for many customers in the short term. Additional costs for unbundling, customer education, and creation of power exchanges and independent system operators will be ultimately passed through to retail customers. These costs are likely to be proportionately higher on a per customer basis for smaller utilities.

Question. Please identify what you perceive to be the risks of retail electric competition, assuming the recovery of stranded costs from customers leaving a system, to residential and small commercial customers of rural coops.

Answer. Under several state plans, and, as we understand it, the Bumpers-Gorton bill, stranded costs will be recovered from all customers, not just those leaving the system to obtain the benefits of competitive supplies. This one-time, up-front recovery of stranded costs, if spread to all customers over a short transition period, could substantially raise rates in the short-term for residential and small commercial customers. While larger customers leaving the system to obtain lower wholesale energy costs may see no net increase in service costs, USDA has yet to see any indication that small residential and commercial customers in scattered rural communities will attract the aggressive attention of competitive energy providers or are likely to do so in the future. The recovery of stranded costs from all consumers, therefore, will only tend to raise rates to rural residential and small commercial customers.

Even today, providing electric service to rural areas requires more capital investment and higher costs of operation and maintenance and results in lower revenue per mile of line than service in most urban and suburban areas. The larger industrial loads have, in the past, provided rural electric cooperatives with a mechanism to average these higher costs of service, thereby allowing the cooperatives to provide residential service at rates that, while still higher than most urban and suburban areas, were more affordable rates. In a "deregulated" competitive electric industry, retail electric providers will be attracted first to high-volume, high-load factor industrial and large commercial customers. If these lucrative consumers are "cherry picked" from the system, all cost averaging mechanisms will disappear and residential and small commercial rates will, most certainly, rise. USDA does not view short-term stranded cost recovery for investments in generation assets as a substitute for the support for affordable universal electric service.

QUESTIONS SUBMITTED BY SENATOR HARKIN

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION CORPORATION (AARCC)

Question. AARC in some ways functions as a venture capital entity. To what degree do government accounting standards accurately reflect the AARC portfolio? How do those standards differ from the standards used in the private sector regarding the capture of audited financial statistics?

Answer. AARCC functions very much as a private sector venture capital (VC) fund does. Our expectations of return on investment (R.I.) are not as high, given our other concerns for job creation and use of agricultural land. However, our basic investment strategy and deal structure closely resemble private sector arrangements. Thus, we own shares in a lot of companies that at present are difficult to value. Moreover, the value of our equity positions change over time.

In the private sector, a venture capital firm receives its investment money from limited partners. In effect, AARCC has one limited partner—the U.S. taxpayer and their funds appropriated to the Corporation by Congress.

Private sector limited partners have an expectation that the overall value of the fund will appreciate over time. When money is invested, an exit strategy is negotiated that gives the fund an overall expected return at the end point. Calculation of the value of the investment at any point preceding the exit, however, is problematic, as discussed above. Typically, a private sector firm values the investment by looking at the price it paid for its shares and comparing that to the most recent purchase by another party. Thus, if the VC firm paid $10 per share last year and the most recent sale this year was for $20 per share, the firm would calculate its investment as having doubled in value. So, if the total investment was $1 million, the VC firm would show it to be worth $2 million today. From the perspective of the limited partners who provided the initial capital, their investment is appreciating in value, leading up to the exit.

Auditors, however, do not view the calculation of a portfolio's current value in the same manner. Their concern is with dollars out and dollars in. Thus, an investment of $1 million will appear as a debit, until money is recovered. Furthermore, they calculate an allowance, or discount factor, which is essentially a measure of the probability of loss. The allowance is calculated based on a number of objective and subjective measures. An investment of $1 million last year, with zero allowance—i.e., a 100 percent probability of recovery—is carried forward as a $1 million debit. There is no room for calculating any appreciation.

Thus, an investment will not show any record of appreciation until repayment begins, at which time income will be recognized. Because of the structure of venture capital investments, repayment may be several years in the future. AARCC's portfolio, then, may appear to be depreciating in the near-term, as it will show only debits.

Independent of the financial audits performed on AARCC, we have made our own informal estimation of the portfolio's value, based on procedures discussed above as being typical of the VC industry. Based on that approach, we estimate AARCC's portfolio has increased in value by about 20 percent since 1993.

Question. What is your assessment of the AARCC portfolio?

Answer. The AARCC Board of Directors prepared a 10-year business plan for the Corporation. It shows no appropriations following 2002, and it projects repayments through that same year. There are three repayment scenarios: low; medium; and high. The high case scenario anticipates $300,000 being repaid by the end of fiscal year 1998. To date, AARCC has received $247,713.75 in repayments. Thus, the portfolio is performing at the high end of the financial projections. Additionally, as part of the Corporation's 10-year strategic plan, the Board set goals of 10,000 new jobs created as a result of AARCC investments and 500,000 acres of unused farmland being put back into production. We estimate that halfway through the 10-year plan, approximately 5,000 jobs can be attributed to AARCC investments and 250,000 acres are in use as a result.

Question. How is the AARCC portfolio performing at this time?

Answer. The AARCC Board of Directors prepared a 10-year business plan for the Corporation. It shows no appropriations following 2002, and it projects repayments through that same year. There are three repayment scenarios: low; medium; and high. The high case scenario anticipates $300,000 being repaid by the end of fiscal year 1998. To date, AARCC has received $247,713.75 in repayments. Thus, the portfolio is performing at the high end of the financial projections. Additionally, as part of the Corporation's 10-year strategic plan, the Board set goals of 10,000 new jobs created as a result of AARCC investments and 500,000 acres of unused farmland being put back into production. We estimate that halfway through the 10-year plan, approximately 5,000 jobs can be attributed to AARCC investments and 250,000 acres are in use as a result.

Question. What is AARCC's capacity to effectively use a funding level of $20 million for fiscal year 1999?

Answer. AARCC's vision of agriculture in the 21st century sees a diverse crop mix, with fibers available for numerous industrial uses. Some of the fibers will be from waste, e.g. wheat straw, others will be from plants grown specifically for the fibers. In order to use the fibers, they will require a variety of processing/pulping steps. What we envision are regionally placed mini- mills that can process a variety of fibers for a variety of uses. We have held several meetings with pulping experts and farmers during the past year, all of whom agree with the agricultural, technical, and economic soundness of our vision. With additional funding, AARCC would move to establish a pilot facility, in conjunction with a grower's group, to demonstrate the feasibility of the concept.

Additionally, there is a group of companies that constitute the real financial opportunity in the AARCC portfolio. With additional funding we would make further investments in them, helping to move them towards an Initial Public Offering (IPO).

Question. What effect can the work of AARCC have on rural America in 20 years?

Answer. AARCC's role in the next 20 years will be part of its 100-year vision for the economy and rural America's role in that economy. Presently, the basic raw material for the world's economy is petroleum. We envision an economy where the basic raw material is derived from biological sources—primarily plants and animals. Given the physical and chemical nature of petroleum sources, it is profitable to extract the raw material from one part of the world, transport it halfway around the globe to process it, and transport it even further to manufacture a finished product. The physics and chemistry of biological raw materials do not allow for such economics, however. To be profitable, the processing and manufacturing of bio-based products must be done close to the source of the raw materials. Hence, the growth of jobs in this new bio-based economy takes place in rural America. As stated previously, our 10-year strategic plan estimates 10,000 new rural jobs as a result of AARCC investments.

There are other advantages to shifting from an economy based on geology to one founded on biology. By their chemical structure, the waste and by-products will be largely biodegradable and eco-friendly. Moreover, the raw materials will be domestically produced and annually renewable. To borrow a phrase used by just one group of producers: The U.S. is the Saudi Arabia of corn. The further national security

and geopolitical implications of such a bio-based economy are evident. Rural America will be the focal-point of this new economy.

Question. Some ask: if investing in value-added enterprises in rural areas is such a good idea, why isn't the private sector doing just that? What is your answer to that question?

Answer. AARCC's role has been and continues to be to serve as a catalyst for the development and manufacture of bio-based products, using the raw materials produced by our vast agricultural capacity. A catalyst is needed, because the price of petroleum still makes it difficult for such bio-based products to compete. However, with improvements in bio-processing, the cost differential is shrinking. Also, when two comparable products—one petroleum-based, the other bio-based—are subjected to life-cycle cost analysis, the disposal costs of the bio-based product usually make it more competitive. We are at the beginning of the transition from geology to biology, and AARCC's catalytic role is still needed.

The private sector is not ignoring the transition. For every dollar that AARCC invests, approximately $3.50 of private sector money is invested in AARCC projects. In addition, there are several examples of follow-on multi-million dollar investments in AARCC companies, where the private sector investment was initially attracted by AARCC's ''USDA Seal of Approval'' on a project.

The AARCC Board of Directors has a 10-year strategic plan and a 10-year business plan that do not anticipate appropriations after fiscal year 2002. During this transitional phase, however, it is the Board's view that AARCC needs to continue to identify and fund those companies that are the nucleus of the bio-based economy.

BUSINESS AND INDUSTRY LOAN PROGRAM

Question. What is the current level of demand for the B&I loan guarantee program? What is the expected value of applications for fiscal 1998 that the Department is likely to not be able to fulfill because of budget limitations.

Answer. As of March 6, 1998, there were 469 applications on hand for a total of $923,543,753, with approximately $500 million of the fiscal year 1998 $1 billion allocated amount either obligated or authorized for funding. The level of demand for the B&I Guaranteed Loan Program has remained relatively constant throughout the year. Based on the above, we expect $900 million of applications will not be funded due to funding limitations this fiscal year.

Question. If the Department promoted the program to a significant degree, what would be the likely increase in B&I applications?

Answer. Current efforts to promote the program are centered around informing lenders and local governments of its availability as well as responding to general inquiries from businesses. Since publication of the new regulation on December 23, 1996, the demand for the program has increased by over 300 percent. With increased promotion of the program, we can only anticipate the program will continue to grow at a significant rate.

Question. What is the Department's belief concerning the loss of employment and economic growth in rural America because of the shortage in B&I loan funds?

Answer. Based upon our response to your question 1. above and the expectation that $900 million of applications will not be funded in fiscal year 1998 due to the lack of available funding, we project 34,200 will not be either created or saved due to the lack of sufficient funding.

Question. In your personal opinion and based on your research, how critical is the need for enhanced credit in rural areas?

Answer. Numerous studies, including one conducted by the USDA Economic Research Service and testimonies at the September 4, 1997, Senate Agriculture Committee hearing on Rural Credit, indicated that there are areas in rural America that have a lack of access to sufficient capital to meet their economic development needs. Without this credit, these areas do not have the same opportunities other rural areas have in providing economic opportunity for their residents.

Question. What are your views concerning the proposal by Senator Bennett to expand the authority of the Farm Credit System and Farmer Mac to allow them to acquire business loans from rural banks?

Answer. We are currently evaluating the proposal by Senator Bennett to expand the authority to Farmer Mac. If that proposal provides additional capital to rural businesses, then we support it. Recently the Under Secretary for Rural Development has been asked to chair a task force to evaluate ways the Department may work with Farmer Mac in order for Farmer Mac to expand its involvement in providing economic opportunities for rural commercial lenders and businesses.

RURAL HOUSING SERVICE

Question. What would the impact of an increase in the FHA loan limits, as proposed by the Administration, be on rural housing and on the rural housing programs of the Rural Housing Service?

Answer. The base HUD 203(b) loan limit in much of rural America is currently $86,317. An increase in the loan limit, such as the one being proposed, could prompt an increase in lending activity. This is especially true for new construction type homes, where some have argued that the current base is not high enough to support building a new home in some areas.

Regarding the impact to the rural housing programs of the Rural Housing Service, the Agency has a mandate to ensure that the dwellings being financed are modest in design and cost. The proposed uniform HUD 203(b) level exceeds $200,000. Of course, given the incomes of the customers the Agency serves, it is unlikely that any could afford such a sizable loan. By statute, maximum loan limits for the Guaranteed Rural Housing loan program are tied to HUD 203(b) limits. The guaranteed program has an income gap that will constrain costs with an increased 203(b) limit. The section 502 Direct loan program currently uses 203(b) limits as an index for gauging maximum loan amounts and modest housing, and this philosophy may have to be examined if a single, uniform 203(b) limit is adopted. The Agency is currently exploring alternative definitions of modest housing and will publish the results in the Federal Register in the future.

QUESTIONS SUBMITTED BY SENATOR KOHL

SECTION 502 SINGLE FAMILY HOUSING

Question. Section 502, Direct Single Family Program Housing, has seen a fourfold increase in funding for guaranteeing housing loans since fiscal year 1994 while, your Direct 502 funding has been cut in half over that same time period. Has the Agency analyzed how higher equity requirements that banks have for loan approval will impact lower-income users of the program?

Answer. The Section 502 direct program serves low and very low-income rural residents who can not obtain commercial credit under similar terms. Additionally, we offer payment assistance which reduces the interest rate down to as little as 1 percent based on income. This program serves low and very low income residents under 80 percent and 50 percent median income respectively. The Guaranteed Rural Housing loan program is designed to serve low and moderate income families, under 115 percent median income, and provides for 100 percent financing. The Agency's loan guarantee takes the place of the traditional down payment terms lenders require. Approximately 27 percent of the Guaranteed loans made during fiscal year 1997 went to low income families primarily due to the prevailing low interest rates in the commercial market.

Question. The State of Wisconsin is the only state that has changed their Section 502 formula that establishes "targeted" counties. They found that the allocations formula approved by USDA inadvertently targeted larger urban counties. I have two concerns with this situation; first, why did Rural Development's national office create a formula that targeting funds to areas that not completely rural? Second, if the formula is skewed, are funds currently targeted to the rapidly developing rural/urban area?

Answer. The Agency's allocation formula is based on the following criteria for the Section 502 Housing Loan Program and the data source for each of these criteria is based on the latest census data available. The States use these same criterion adjusted with State and county census data to allocate to the filed offices:

—State's percentage of the National number of rural occupied substandard units;
—State's percentage of the National rural population;
—State's percentage of the National rural population in places of less that 2,500 population;
—State's percentage of the National number of rural households between 50 and 80 percent of the area median income; and
—State's percentage of the National number of rural households below 50 percent of the area median income.

There are a number of factors that contribute to larger numbers of loans being made in rural areas adjacent to more metropolitan areas. The first factor is the higher income limits as determined by HUD, of families living in these areas. The second is the higher section 203(b) loan limits that are allowed in higher cost areas. Another contributing factor is the proximity of these rural areas to metropolitan areas offering good and plentiful job opportunities. Also affordable, new housing is

more plentiful due in part to the more aggressive nature of the real estate market to serve the low-income population.

The Agency has included in its goals providing outreach and targeting areas with the greatest need and that have historically been underserved. Another goal is to use 30 percent of the guaranteed funds in these targeted counties. We believe the Agency is making every effort to offer and use its home ownership programs in areas with the greatest need.

RURAL TELECOMMUNICATIONS

Question. For the second year in a row, the Rural Utility Service hardship telecommunications loan program was cut. However, there is an increasing demand for loans from that program. Last year there was a $68 million backlog in requests, and for fiscal year 1998 the RUS is projecting a $60–$100 million backlog. With such high demands on the program, when can we expect funding to stabilize or increase?

Answer. As of March 1, 1998, hardship loans approved for fiscal year 1998 totaled $65.1 million, with an additional $61.5 million in applications on hand. With an authorized lending level for fiscal year 1998 of $75 million, we estimate that, based upon the number and amount of applications currently on hand and anticipated by the end of the fiscal year, the hardship program will have a backlog—or excess demand over available funding—of $79 million at the end of fiscal year 1998. As you are aware, the hardship loan program has a fixed interest rate of 5 percent per annum, thereby resulting in much higher subsidy appropriation per loan dollar than our Treasury or near Treasury rate programs.

QUESTIONS SUBMITTED BY SENATOR LEAHY

RURAL EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES

Despite the fact that Vermont is the most rural state in the nation, no area of the state qualified for designation as a Rural Empowerment Zone or Enterprise Community during the 1994 competition. I support the EZ/EC program, which has done a great deal to revitalize the Old North End in Burlington, Vermont. However, I am concerned that the areas facing the greatest long-term and persistent problems of unemployment and poverty—our rural areas—can not even compete for this valuable funding. In particular, a three-county area of the state known as "the Northeast Kingdom" has consistently held some of the highest unemployment rates in the state, with residents held back by the lack of job opportunities, training and investments.

As I mentioned in my questions last year, the National Science Foundation has shown that the way the government measures poverty today, a basic criteria for eligibility as an EZ/EC, is inaccurate and that shelter costs among other things should be factored into the measure. The findings of a report by the Peace & Justice Center in Vermont supports the argument that poverty in Vermont is underestimated. Other states have conducted similar surveys, with largely similar results.

Question. How will the proposed Rural Empowerment Zones be funded? Will Enterprise Communities be considered again as well, or will this competition be limited to Zones? If it will be limited to Zones, is that based on requirements of the authorizing language or was it a choice of the Administration.

Answer. Although new Zones have been authorized, funding legislation language has not been introduced as yet for Round II of the Empowerment Zone program. Since Round I was funded through Social Service Block Grant (SSBG) funds, it is assumed Congress may use the same vehicle for Round II.

The Taxpayer Relief Act of 1997 authorized five (5) Rural Zones and no Enterprise Communities for Round II. The President's budget called for $200 million ($100 million for USDA and $100 million for Housing and Urban Development (HUD) for the Rural Zone program in Round II, giving a total of $40 million for each of 5 Zones over a 10 year period. Unless that is changed in the funding legislation the new designations will be limited to Zones only.

Question. Can and will the Department take into consideration the National Science Foundation's recommendations and studies like the Vermont report I mentioned above when setting the eligibility criteria for the new round of awards?

Answer. The Empowerment Zone & Enterprise Community legislation requires that we use the 1990 census figures along with the poverty levels in determining eligibility. The criteria are as follows: legislation limits the program to rural communities of 30,000 population or less, and not exceeding 1,000 square miles in size. The pervasive poverty and distress criteria require a minimum poverty rate of 20 percent in each census tract, or 25 percent poverty rate in 90 percent of the census

tracts, or a 35 percent poverty level in 50 percent of all census tracts used in the application. For Round II the authorizing legislation drops the 35 percent poverty level criterion, and adds criteria for selecting communities with out-migration concerns. New legislation would be required to change the basic criteria to include such factors as underemployment.

Question. I understand that communities which applied for EZ/EC status during the 1994 competition but were unsuccessful, have still been able to tap into program funding that the Department has set-aside for EZ/EC's. Will that option continue to be available for unsuccessful applicants, and if so, please describe the programs affected and how communities can tap into them?

Answer. It has been our experience that more potential designations provide greater incentives for community participation. Community participation is essential to the success of this program. With only five Rural Empowerment Zones in Round II the likelihood of small, impoverished rural communities taking the time, effort and money to prepare an in-depth proposal is greatly diminished. The new Round II legislation also allows, for the first time, tribal lands and the problem of out-migration to be addressed, thus further reducing the potential for success of an individual community.

Even participating communities that are not designated end up winners by going through the rigorous strategic planning process required by the program. At USDA we call them our Champion Communities. In Round I, over 225 rural communities participated by pulling together community resources and developing a strategic plan, only 33 communities were designated, the rest were champion communities.

Champion Communities.—Today there are nearly 200 Rural Champion Communities who lost out in the Round I designation competition, yet they have been successful in attracting federal and state dollars to their communities over $100 million federal dollars in housing, water/sewer funding, business programs and other assistance. They have been successful because they had developed a strategic plan of action for the Round I EZ/EC Application. These were not special set-asides, they were normal USDA programs available to most rural communities, but these Champion Communities had strategic plans that put them a step or two up on competing rural communities for federal, state and private programs designed to improve their economic and social conditions.

VENTURE CAPITAL PROGRAM

Question. Administration testimony indicates that rural America is losing business opportunities because we don't fund programs that help diversify local rural economies. Everyone acknowledges there is a lack of investment capital in rural areas. Yet the administration does not support a demonstration program which would work to get venture capital to rural America. Section 761 of the 1996 farm bill provides for the use of a limited amount of guarantee authority to attract private investor funding for rural venture capital pools. Why is no funding requested for this program in fiscal year 1999? On December 11, 1997 I wrote to Secretary Glickman clarifying the intent of the fiscal year 1998 Agriculture Appropriations Report language regarding the Venture Capital funding and requesting that the Department proceed with the development of rules for this program. Three months later I have not yet received a response to that letter, and have received no indication that work on these regulations is proceeding. When does the Department expect regulations for the program to be published? Is the Department consulting with outside organizations with experience in venture capital in the development of those regulations?

Answer. The Agency is considering options available for promulgating regulations to implement this program. As part of that process, an advanced notice of proposed rule making was published in the Federal Register on April 9, 1997, requesting comments for implementing this authority. Five comments were received and are being considered in the drafting of the regulation. The fiscal year 1998 Appropriations Bill does not appropriate funding for this program, and the President's fiscal year 1999 Budget does not request funding for this program. However, we are in the process of developing a proposed rule. We anticipate publication of the proposed rule by early calendar year 1999.

In addition, the Department has consulted with House and Senate staff on implementation of the program and have had limited consultation with outside organizations. Since regulations will be published as a proposed rule, with a public comment period, additional opportunities will be afforded to outside organizations with experience in venture capital funding to comment.

CENTRALIZED LOAN SERVICING

I am hearing from an increasing number of Vermonters about problems they have experienced with the USDA Centralized Loan Servicing program. Some have told of treatment at the hands of Rural Housing personnel that would not be acceptable in any lending situation. An example of these problems follow.

One constituent initially wrote to me in January when RHS raised her payments from $300 to $451, even though her husband's income had decreased and she was not working. An RHS worker in St. Louis was rude to her on several occasions and told her the Vermont office had been doing the calculations wrong all along, resulting in a history of underpayment. The Vermont office advised her to apply for a review of interest credit and she got permission to continue paying the $300 a month. By February 10, RHS did reduce the payment amount to $210 a month, but the constituent no longer trusts RHS and wants to refinance because the fluctuating interest rates (up to 13½ percent) are hard to take. Her next problem was getting the information she needed regarding the recapture fee. When she finally got her payoff packet, she couldn't believe they still owed $48,000 recapture fee on a loan that was originally $43,000 sixteen years ago. When she called centralized servicing with questions, she couldn't find anyone who could answer her questions. A month later she finally found a bank to refinance her home, but the bank pulled out after all the paperwork was approved and the appraisal was scheduled. The reason given: the bank didn't agree to RHS subordination requirements. This came up after she had put the appraiser in touch with St. Louis to make sure he understood the specific requirements that RHS had been telling her. The branch manager told her the bank was afraid of being sued by RHS if, for instance, the bank had to foreclose on the mortgage and failed to contact RHS. Instead, the bank is only willing to finance the entire amount, including the amount subordinated by RHS, and option the constituent would not be able to afford. She is now searching for another lender who will refinance the home and work with RHS subordination requirements.

Question. What is the current first year delinquency rate for loans serviced at the centralized servicing center?

Answer. As of March 14, 1998, the first year delinquency rate at the Centralized Service Center (CSC) was 11.7 percent for borrower delinquency and 11.0 percent for loan delinquency. The borrower figure represents subsequent loans for repair or rehabilitation work on their homes. Some of these loans are delinquent due to the impact of conversion of all of the single family direct loans in the field to the CSC and the transition to a new system.

Question. What is the current overall delinquency rate?

Answer. As of March 20, 1998, the overall delinquency rate for all loans serviced at the CSC is 19.8 percent. This includes subsequent loans that many borrowers have taken for repair or rehabilitation work on their homes. In any conversion of a large portfolio, whether public or private, the delinquency rate is expected to spike initially as staff and customers adjust to a new system and implementation conversion problems are fixed. We expect the delinquency rate to fall significantly by the end of the fiscal year.

Question. What were the first year delinquency rates and overall delinquency rates during the year preceding the switch to the centralized servicing system.

Answer. The first year delinquency rate was 7.3 percent during 1996. The overall delinquency rate on September 30, 1997, (the effective date of the last conversion) was 15.0 percent.

Question. What is being done to correct problems which appear to be causing RHS personnel to contact loan recipients with inaccurate information on loan delinquency or payment levels?

Answer. The Section 502 borrowers initially receive payment assistance which subsidizes the interest rate down to 1 percent based on income. Our regulations require that we verify the income for each borrower on an annual basis and make adjustments to the subsidy if there were changes in income. In the conversion of the loan portfolio to the Centralized Service Center (CSC), we experienced delays in recertifying the payment assistance to borrowers. Performance in the processing of expired payment assistance has improved significantly. There were many issues in obtaining complete subsidy renewal packages from borrowers. If necessary documentation for subsidy renewal was not forwarded to the CSC in a timely manner, the borrower would be billed at the note rate of their mortgage. Plans are under way to utilize field personnel to assist in those cases where the borrower has not sent in the complete package. Currently, approximately 70 percent of recertification packages received at the CSC are completed and processed immediately. The remaining 30 percent of incomplete packages require additional contact to obtain the necessary information needed to certify income. The 70 percent completion rate of recertifi-

cation packages is a significant from when the CSC first began operations, as the borrowers adapted to the new system.

Question. What difficulties are harried RHS loan recipients who seek to refinance their homes in the private market facing from RHS and what is RHS doing to make this transition smoother for clients who feel they can be better served in the private market?

Answer. The Section 502 borrowers initially receive payment assistance which subsidizes the interest rate down to 1 percent based on income. Our regulations require that we verify the income for each borrower on an annual basis and make adjustments to the subsidy if there were changes in income. In the conversion of the loan portfolio to the Centralized Service Center (CSC), we experienced delays in recertifying the payment assistance to borrowers. Performance in the processing of expired payment assistance has improved significantly. There were many issues in obtaining complete subsidy renewal packages from borrowers. If necessary documentation for subsidy renewal was not forwarded to the CSC in a timely manner, the borrower would be billed at the note rate of their mortgage. Plans are under way to utilize field personnel to assist in those cases where the borrower has not sent in the complete package. Currently, approximately 70 percent of recertification packages received at the CSC are completed and processed immediately. The remaining 30 percent of incomplete packages require additional contact to obtain the necessary information needed to certify income. The CSC modified request forms to educate our borrowers when completing the recertification packages. This has resulted in a significant improvement from the 30 percent rate of completed forms received in the CSC in March of 1997 compared to the current rate of 70 percent.

FUND FOR RURAL AMERICA

Question. The Senate Agriculture Committee, on which I am also a member, is currently in conference with the House on a bill to reauthorize agricultural research programs. The Senate bill also corrected a technical error in the Farm Bill which eliminated funding for the Fund for Rural America in fiscal year 1998. If funding for the program is restored for fiscal year 1998, will the Department be ready to publish a Request for Proposals and administer a competition in fiscal year 1998, and when would that RFP be published? What division of funding between research and rural development would you anticipate? During the fiscal year 1997 competition virtually all of the funding for rural development was used to simply boost funding for current programs. The role of the Appropriations Committee has traditionally been to establish the appropriate program funding levels. I was very disappointed that the Department chose to dedicate such a large percentage of the rural development dollars in the Fund to changing those program levels. If funding is restored for fiscal year 1998 will the Department take a more creative approach to the rural development funding piece? In particular, there is a real need for funding for initiatives which do not fit neatly within a specific rural development program, but achieve the same goals such as economic and infrastructure development. Will the Department consult with the authorizing and appropriating committees when deciding on the focus of a potential fiscal year 1998 competition?

Answer. The Department's ability to respond to restored funding for fiscal year 1998 will depend on the timing of the funding restoration and the legislation itself. The Department has made no decisions on the division of funding between research and rural development. Regarding the use of funds for rural development in fiscal year 1997, the statute required the funding to go through existing programs. Our ability to be innovative was constrained by the statute and existing program regulations. We chose to dedicate a significant amount of funding to Section 502 housing because of the decrease in the program level. If funding is restored for fiscal year 1998, the Department will still be restricted, by the statute and program regulations, in its ability to be creative. The Department would be pleased to discuss with the authorizing and appropriating committees your views on how the funds should be used.

LAN/WAN/VOICE

Question. Can you comment on how the Department is implementing the cost savings from a common computing and telecommunications environment in local USDA service centers?

Answer. The Business Process Reengineering (BPR) efforts underway are the foundation for all Information Technology investments. The base infrastructure provided by Service Center implementation initiatives like the Common Computing Environment and the LAN/WAN/VOICE project are essential to implement reengineered business processes such as Rural Development's Dedicated Loan Origination

and Servicing (DLOS) System. For example, LAN/WAN/VOICE installations at the DLOS sites permitted timely implementation of the DLOS system. The cost savings from DLOS implementation are already reflected in Rural Development's budget which has already been reduced by Congress to account for the DLOS reengineering effort. In the future, the Service Center implementation's BPR's underway will result in additional cost savings to Rural Development and the other partner Agencies. We are in the process of validating the cost savings resulting from BPR.

SECTION 515 HOUSING PROGRAM

I am very concerned with the continuing decline in funding for the Section 515 Multi-Family housing program. In fiscal year 1999 the Department is proposing a decrease in funding of approximately $30 million.

Question. What would the impact of this reduction be on the number of people served and the number of units created or rehabilitated in comparison to fiscal year 1998?

Answer. With a program level of $150 million for the Section 515 program, in fiscal year 1998, the Agency will use approximately $99.5 million for new construction and $50.5 million for repair/rehabilitation purposes. At these levels, the Agency estimates that we will build 2,287 new units and repair or rehabilitate 5,012 existing units. A reduction of $50 million for fiscal year 1999 would result in only 1,667 new units and the repair or rehabilitation of 2,445 existing units, if costs remained constant. Consequently, less families will be served with the reduced funding.

Question. Please provide me with this same data over a 10 year period of time—I am interested in seeing the comparative funding levels and number of units created over the past 10 years.

Answer. The information follows:

SECTION 515 APPROPRIATIONS AND OBLIGATIONS—FISCAL YEARS 1988–1998

[Run Date: March 9, 1998]

Fiscal year	Allocations	Obligations to date	Units built
1998 [1]	$150,000,000	$110,000,000	2,468
1997 [2]	153,132,327	152,497,187	1,913
1996 [3]	151,009,628	151,009,628	2,853
1995	183,319,000	182,037,517	11,542
1994	540,107,000	509,380,278	15,340
1993	573,900,000	569,704,650	14,787
1992	573,900,000	564,262,480	15,396
1991	576,185,201	573,904,776	16,063
1990	571,904,000	568,236,051	15,996
1989	554,934,000	551,503,713	16,465
1988	554,935,000	551,503,713	16,465

[1] The $110 million figure represents obligations to date including one subsequent loan. Approximately $94 million will be used for new construction.

[2] $95.9 million was used for new construction. The balance was used for rehabilitation/repair.

[3] Approximately $74.4 million was used for new construction. The balance was used for critical health and safety and deferred maintenance.

QUESTIONS SUBMITTED BY SENATOR BYRD

WATER AND WASTE

Chairman Cochran, Senator Bumpers, members of the subcommittee, and Undersecretary Thompson, I am pleased to be here today to review the U.S. Department of Agriculture's (USDA) Rural Development (RD) programs. These programs address one of my long-standing priorities—community infrastructure that meets the basic needs of our citizens. In particular, the Rural Utilities Service (RUS) programs provide small rural communities with grants and loans for water and waste disposal systems—infrastructure that I deem a fundamental element of modern civilization.

Incredibly, in these United States, nearly 8 million people do not have access to safe drinking water. Now, let me repeat that, 8 million people in the United States of America, the most prosperous and powerful nation on the face of the earth, do not have access to a reliable source of clean drinking water. That, in my view, is

a national disgrace. National safe drinking water needs are assessed at some $10 billion. In West Virginia, in 1995, 176,000 families were without an adequate supply of safe drinking water, and the estimated cost of needed water development projects in my state alone is $1 billion dollars.

The USDA's efforts to provide safe drinking water to American families are generally laudable, if underfunded. I have maintained for years that our budget slights the most basic needs of the people, and that we must take action to restore common sense to our budget priorities. This hearing is a welcome opportunity to renew attention to the critical need for federal investment in basic infrastructure, and I have several questions regarding the President's proposed budget in this regard.

First, I am pleased that the proposed budget for water and waste water systems includes an approximately $100 million increase for the loan programs. You state in your prepared remarks that this proposed budget will provide new water service to about 500,000 rural residents. I would be interested in reviewing a state-by-state breakdown of the residents expected to benefit from this budget.

Question. Do you have such a breakdown?

Answer. The estimate was based upon nationwide averages. We can allocate this estimate, by state, using the amount of funds initially allocated per state and the same ratio of loan and grant dollars to people served.

Question. If not, I would appreciate your providing me with such a chart.

Answer. The following table is submitted for the record.

RUS water systems—estimate of people to be serviced in fiscal year 1999

Alabama	12,061
Alaska	1,172
Arizona	3,976
Arkansas	9,148
California	12,777
Colorado	3,872
Connecticut	3,173
Delaware	1,010
Florida	11,310
Georgia	15,815
Hawaii	899
Idaho	3,496
Illinois	12,469
Indiana	11,554
Iowa	7,369
Kansas	5,112
Kentucky	14,376
Louisiana	10,022
Maine	4,443
Maryland	4,459
Massachusetts	3,884
Michigan	16,931
Minnesota	8,858
Mississippi	12,910
Missouri	11,463
Montana	3,197
Nebraska	3,123
Nevada	965
New Hampshire	3,043
New Jersey	3,144
New Mexico	3,982
New York	14,489
North Carolina	19,548
North Dakota	2,116
Ohio	17,152
Oklahoma	7,819
Oregon	6,013
Pennsylvania	20,298
Puerto Rico	21,008
Rhode Island	742
South Carolina	10,131
South Dakota	2,525
Tennessee	13,296
Texas	21,008
Utah	1,689

Vermont	2,403
Virginia	11,889
Virgin Islands	515
Washington	7,194
West Pacific Areas	515
West Virginia	9,319
Wisconsin	10,126
Wyoming	1,373
Unallocated	83,593
Totals	504,774

It is my understanding that Water 2000 was designed to assist those communities with the most limited financial resources and highest poverty rates. I have been advised that many West Virginia communities awaiting federal assistance for water and waste disposal systems would require substantial grant funds to make water or waste water systems economically feasible for the community to operate.

Question. Do you agree with this assessment? Does a similar assessment exist nationwide?

Answer. We agree that there are rural communities in West Virginia and in other parts of the country that need substantial grant funds in order to construct or improve a water or waste disposal system. However, the majority of rural communities across the nation can afford to repay a loan to cover some, if not all, of the construction-related costs and successfully operate the system. We assist communities in constructing facilities that are modest in size, design and cost which helps lower the overall project cost and the need for grant funds. Additionally, the lowest income communities can qualify for a loan with an interest rate of 4.5 percent thereby helping to lower user rates. A majority of the loans made by the Agency were at the 4.5 percent rate or the intermediate rate, which is currently 4.875 percent. Higher income communities pay the market rate which is now 5.25 percent.

If this assessment is accurate, the loan programs are effectively worthless to many small towns, unless accompanied by a grant.

Question. Given this situation, why has there been no proposed increase in funding for the water and waste disposal grant program?

Answer. The requested budget authority levels for water and waste disposal loans and grants reflects budgetary considerations and the funding needs of all Rural Development programs. The Rural Development State Directors have been given authority to transfer budget authority between the water and waste loan and grant accounts. This provides them with the flexibility necessary to match dollars with the needs of their States.

Question. Under your proposed budget, when will the goals of Water 2000—to provide reliable, clean water for rural Americans—finally be reached in the nation? In West Virginia?

Answer. We see the policy initiative of Water 2000 as a continuing effort to help rural people achieve a better quality of life. Bringing clean water to rural households is only part of the battle. Once water is available, it must continue to meet Safe Drinking Water Act standards. Over 60 percent of the water and waste loan and grant funds is used for expansion, replacement, and renovation of existing systems, replacements and renovations necessary for the systems to provide quality service to their rural customers.

Question. If additional funding were provided for Rural Development programs, would you agree with me that priority should be given to the water and waste disposal accounts?

Answer. The water and waste programs have over $3 billion in funding requests on hand. If additional funding were provided for Rural Development programs, the water and waste programs should receive consideration for these funds.

QUESTIONS SUBMITTED BY SENATOR BUMPERS FOR SENATOR DORGAN

RURAL AREA ECONOMIC PARTNERSHIP (REAP)

In fulfillment of a promise made by the President in 1993 to address rural out migration and the resulting economic hardship, the USDA's Office of Rural Development signed a Memorandum of Understanding with several entities in North Dakota to create the Rural Area Economic Partnership (REAP) Pilot Program. The President made a commitment to the REAP zones because the standard EZ/EC programs did not work for areas of high out migration.

I think the grassroots organization of the REAP zones is going well. However, I have some concerns that USDA is presenting what might be usual Department expenditures in these zones as commitments toward the President's promise of $10-$25 million for each of the zones as demonstration areas.

Question. I have received a report from USDA on expenditures in the REAP zones, but I would like the Department to provide for the record a dollar figure on what it believes was provided to the REAP demonstration areas in fiscal year 1997 above and beyond the funds these areas would normally receive through USDA programs.

Answer. USDA Rural Development assistance to participating North Dakota counties has risen sharply over the level for the period of 1991–1995. The 14 county area encompassed within the two REAP zones show an average of less than $3 million a year in Rural Development funding dollars (not including single family housing) during 1991–95. During the fiscal years 1996 and 1997 and a small portion of fiscal year 1998 the annual average to the REAP counties is approximately $12 million annually.

Question. What formal planning and accounting mechanism is in place to assure that funding promised to the REAP zones is delivered?

Answer. The Office of Community Development is in the process of completing a data base program for all related rural development programs that will provide an annual tabulation of all of this information for the future.

Currently, applications for certain USDA grant and loan programs submitted from the REAP zones receive up to five additional points. These programs are the Rural Business Enterprise Grants (RBEG), Rural Economic Development Loan and Grant Program (REDLG), Business and Industry (B&I) and the Community Facilities (CF) Program.

This means that the REAP zones receive no additional points for the Water and Waste Program, the Intermediary Relending Program, several important rural housing programs, and the Forest Service economic development programs.

Question. What is the rationale for applying the additional points only to those four programs listed? What steps are being taken to incorporate the REAP zones into all aspects of Rural Development's portfolio?

Answer. With the exception of the Forest Service economic development program, which is not in the North Dakota Rural Development portfolio, the North Dakota State Director for Rural Development gives maximum points to all Rural Development programs to the extent allowed by regulations.

Currently USDA is working to establish the first ever rural Enterprise Zone (EZ) based on, in part, out migration. Rural North Dakota has suffered from staggering net outmigration (more than 15 percent) and the accompanying economic stagnation.

Question. How is USDA going to inform and involve local entities interested in pursuing the designation for the Rural EZ?

Answer. In coordination with the official announcement of Round II during the month of April, USDA has tentatively scheduled 12 Regional Workshops strategically placed around the country. One workshop, which will have a large concentration of communities with problems of outmigration, is tentatively scheduled to be held in South Dakota.

We will officially notify all Members of Congress with the specific dates, times and places of these workshops as they are finalized. We would hope that Members would provide this information to their communities and to other special interest groups within their states and Districts.

All State Rural Development offices will be involved in contacting and informing state agencies, community interest groups, and others. The USDA Office of Intergovernmental Affairs.

SUBCOMMITTEE RECESS

Senator COCHRAN. This will conclude our hearing today. We will continue to review the Department of Agriculture budget at another hearing on Tuesday, March 10 in this room 138 of the Dirksen Senate Office Building. At that time, we will be looking at the budget request for the Department's food, nutrition, and consumer services programs. Until then, the subcommittee stands in recess.

Ms. THOMPSON. May I?

Senator COCHRAN. Please.

Ms. THOMPSON. Mr. Chairman, I do not know that I have appropriately thanked you for your leadership on rural development issues. I sort of went into my budget testimony without doing that. As I have traveled around the country and had an opportunity to meet with community leaders in communities that are really challenged, I know from firsthand experience talking with these leaders, these folks, that your leadership is truly making a difference. Your leadership here in the U.S. Senate is truly making a difference. Because I continue to live in a rural community and my husband sits on a local school board of a small school, I also know from that experience how valuable your leadership is. Thank you for the very strong support that you give to rural America.

Senator COCHRAN. Well, I appreciate very much the kind remarks. I am grateful to you for saying that, and I look forward to continuing to work with you and your staff and associates in helping achieve even better success in the future. Thank you very much.

The hearing is adjourned.

[Whereupon, at 11:30 a.m., Tuesday, March 3, the subcommittee was recessed, to reconvene at 10:11 a.m., Tuesday, March 10.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, MARCH 10, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:11 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burns, and Bumpers.

DEPARTMENT OF AGRICULTURE

STATEMENT OF SHIRLEY R. WATKINS, UNDER SECRETARY, FOOD, NUTRITION, AND CONSUMER SERVICES

ACCOMPANIED BY DENNIS KAPLAN, BUDGET OFFICE

FOOD AND NUTRITION SERVICE

STATEMENT OF YVETTE JACKSON, ADMINISTRATOR

ACCOMPANIED BY RONALD J. VOGEL, ASSOCIATE DEPUTY ADMINISTRATOR, SPECIAL NUTRITION PROGRAMS

CENTER FOR NUTRITION POLICY AND PROMOTION

STATEMENT OF RAJEN ANAND, EXECUTIVE DIRECTOR

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order.

Today we continue our review of the budget request for fiscal year 1999 submitted by the President for the Department of Agriculture and related agencies. We are specifically reviewing today the request for programs and activities of the Food and Nutrition Service of the Department of Agriculture.

The Under Secretary for Food, Nutrition, and Consumer Services is Ms. Shirley R. Watkins, whom we welcome to the hearing today. She is accompanied by others responsible for activities in the Service. We will invite her to introduce her associates and colleagues on the panel.

I notice that this year's request represents about 68 percent of the total budget authority proposed for all USDA programs and activities under the jurisdiction of this committee. Sixty-eight percent. Now, that ought to illustrate to everyone how important it is for us to review this budget proposal carefully and to understand the programs that are funded by this appropriations request.

Some of the better known programs, of course, are the Child Nutrition Programs. We see a $1.5 billion increase in mandatory funding is required to support these programs for fiscal year 1999. We have the Food Stamp Program; the Special Supplemental Nutrition Program for Women, Infants, and Children [WIC]; and other food assistance programs to review in this hearing.

We appreciate very much the cooperation with the subcommittee of Ms. Watkins and others who have endeavored to stay in touch with us and keep us aware of problems and situations regarding the funding of these programs. We had a difficult time last year resolving some of these differences with our friends over in the other body, but nonetheless, we worked our way through a number of issues and we were happy to see the administration become creative, as we have suggested they might have to, in order to continue to carry out responsibilities that are required of them by law.

I have been impressed with the work of Ms. Watkins and others who have tried very hard to see that those who do need assistance in meeting their own nutrition needs have that assistance available.

We cannot do it all through these programs. There are many others who are involved, many private organizations, foundations, churches, neighbors, friends, and others who all are committed, I think, to the proposition that nobody in America ought to go without food. That we are a rich country; we are a caring country; and that working together, Federal, State, and local governments and private associations and charities surely can meet all these needs that exist out there.

So, we are not in this alone. That is another point that I want to make. To assume the responsibility for trying to solve every problem that we have in this country and the world too through appropriations from this committee is probably a mistake from the beginning. But we do feel that we have a role to play and a very important one—a role of leadership.

So, we will seek to work with the administration to define that role in a thoughtful way and a responsible way and to provide the funds that are available to us under the allocation process. We cannot generate money out of the air. We have to have it allocated to us under a budget resolution, and that is yet to be completed.

So, with those realities in mind, we welcome Ms. Watkins and her associates. I am happy to now yield to my distinguished friend and colleague from the State of Arkansas, Senator Bumpers.

STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Thank you very much, Mr. Chairman.

Do you know why you are impressed with Secretary Watkins? She is from Arkansas. [Laughter.]

And you know what else? She is from Hope, AR.

Senator COCHRAN. Oh, my goodness.

Senator BUMPERS. Is this nepotism? Did you go to school with you know who? [Laughter.]

We are very proud of Secretary Watkins, and I agree with you, Mr. Chairman. She is doing an excellent job.

I just wanted to welcome her and her colleagues to the hearing this morning. This is something that should not be terribly con-

troversial, just a few questions about how some of these programs are working.

PREPARED STATEMENT

With that, Mr. Chairman, I will ask unanimous consent that I be permitted to insert my opening remarks for the record.

Senator COCHRAN. Without objection, it is so ordered.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

It is a pleasure to welcome Secretary Watkins to our subcommittee not only as a representative of the Department of Agriculture, but also as a fellow native Arkansan. I also want to extend my welcome to the other USDA officials who are with us today.

I am often asked by constituents why food stamps and other programs associated with "welfare" are included in "farm" legislation. It seems to make little difference to them whether that legislation is a farm bill or an agriculture appropriations bill. The more cynical answer to that question is that you have to include programs in farm legislation that have the support of urban Members of Congress in order to assure passage. In other words, if you want to pass legislation for agricultural research, conservation, or rural development, you had better include provisions to provide assistance to large numbers of people in the cities as well.

As is usually the case, a more accurate answer can be found in history. In 1936, the forbearer of the Food Stamp program began as the Commodity Distribution to Needy Families Program. This New Deal era program was not designed primarily as a "food assistance" program. Instead, the main purpose of this program was to create markets for farm assistance purposes. The original federal food assistance program was a farm program. Gradually, the program evolved by 1975 into the nation-wide Food Stamp program it is today, by far the largest single program in this subcommittee's jurisdiction.

The Food Stamp program may be the largest single program we fund every year, but it is by no means the only food assistance program in our appropriations bill. The Child Nutrition Programs, the WIC program, the various commodity distribution programs, and others, all contribute to our national standard that there is no place in the United States for hunger. These programs are expensive, but they go far to reduce future health care costs and to calm the national conscience in a recognition that the well being of all our people does matter.

In recent times, the Congress has given much attention to so-called Welfare Reform and the concept that people need to take greater responsibility for themselves. To a large extent, Welfare Reform is tied to food assistance. Changes in the Food Stamp program were a part of Welfare Reform. We are now presented with proposals to revisit some of the reform provisions that have been concluded as overly harsh. There is certainly nothing wrong with expecting more responsibility, especially among our adult populations, but we must keep in mind our own responsibilities to children and other members of our society who may have nowhere else to turn but to a benevolent government.

I do not mean to imply that food assistance is totally a governmental responsibility. For many years before the government linked farm and food assistance together in 1936, churches, synagogues, and numerous charities and civic groups joined together in a common cause to protect the most vulnerable among us. The USDA food assistance programs are not designed to replace the traditional charitable efforts, but supplement and support them. In fact, this subcommittee has provided funding to help with transportation and other administrative costs to facilitate the donation of food from various donors through the TEFAP program. In addition, the Secretary is now committed to develop a nation-wide food gleaning program to make use of the billions of pounds of food that is wasted every year at our retail and food service outlets. Just because the United States is a land of plenty does not excuse ours being a land of wastefulness.

Concurrent with consideration with the fiscal year 1999 appropriations bill is congressional attention to reauthorization of the Child Nutrition Programs and WIC. The purpose of that legislation, as with this subcommittee's responsibility, is to assure that national resources are put to best use and that all our people are given adequate opportunities to proper nutrition and a healthy life. I look forward to hearing today's testimony by our friends from USDA and to working with Senator Coch-

ran and others on this subcommittee in crafting the coming year's appropriations bill to assure the mission of us all is properly achieved.

STATEMENT OF SHIRLEY R. WATKINS

Senator COCHRAN. Ms. Watkins, we have a copy of your statement, which we appreciate very much. It will be printed in full in the record. We encourage you to make whatever comments you think would be helpful to the committee. Please introduce those who are with you.

Ms. WATKINS. Mr. Chairman and Senator Bumpers, thank you very much for letting us appear before you this morning. I would like to present the staff who are joining me today. Yvette Jackson, the Administrator for the Food and Nutrition Service. She has previously appeared before this committee as the Deputy Administrator for the Food Stamp Program. We also have to my right Ron Vogel who is the Associate Deputy Administrator for Special Nutrition Programs for the Food and Nutrition Service; Dr. Rajen Anand who is the Executive Director for the Center for Nutrition Policy and Promotion; and Dennis Kaplan who is the Department's Deputy Director for Budget, Legislative, and Regulatory Systems in the Office of Budget and Program Analysis. And in the audience, we also have the Deputy Under Secretary for the Food and Nutrition Service, Julie Paradis.

FOOD AND NUTRITION SERVICE FISCAL YEAR 1999 BUDGET REQUEST

Mr. Chairman, I appreciate so much this committee's support for these programs and you have shown that throughout the years.

As you have indicated, I am submitting my written testimony for the record, and I do have a few comments that I would like to make.

The fiscal year 1999 budget request for the Food and Nutrition and Consumer Services totals some $39.2 billion. This includes $25.1 billion for the Food Stamp Program, another $9.2 billion for the Child Nutrition Programs, $4.1 billion for the WIC Program, $317.1 million for the Commodity Assistance Program, and $111.8 million for our Food Program Administration.

The Food and Nutrition Service funds more than 100 million meals every day, and most of these go to poor families. We strive to enhance the public's confidence in these programs by ensuring that they are efficient, that they have program integrity, and that there is fairness in the programs.

Additionally, these programs support American agriculture by providing families and individuals the means to purchase food products and by purchasing commodities for donation to many of the public and private cooperators at both the State and the local levels.

We view the 15 food assistance programs—and I like to call them Nutrition Assistance Programs—collectively as the critical link to alleviating hunger in this country. Each one of these programs plays a significant role in the nutrition and health of children and families.

THE FOOD STAMP PROGRAM

I want to address first our largest program and that is the Food Stamp Program.

The Clinton-Gore administration will submit legislative proposals to restore food stamp benefits to legal immigrants with certain exceptions and to ensure that common administrative costs are allocated fairly among TANF, food stamps, and Medicaid.

In fiscal year 1997, FNS had significant success in the Food Stamp Program, and I would just like to cite some of those.

Continuing the nationwide campaign to increase payment accuracy. In the last 5 years, there has been a steady decline in the overpayment error rate. The rate has fallen from 8.3 percent in fiscal year 1993 to 6.9 percent in fiscal year 1996. This reduction has resulted in a savings of nearly $665 million.

Increasing recipient fraud disqualification from 94,000 in fiscal year 1996 to 105,000 in fiscal year 1997. This is an increase of about 12 percent.

Some 28 States have implemented EBT, and 13 of those systems are statewide, as of the end of December 1997.

We are going to contract for approximately 35,000 onsite and postauthorization store visits annually beginning in fiscal year 1998 to supplement FNS' oversight of retailers. We disqualified over 1,500 retailers for violations during fiscal year 1997. Of those, 933 were permanent disqualifications for trafficking violations. This represents a 23-percent increase from fiscal year 1996.

THE CHILD NUTRITION PROGRAM

The next area I would like to address is the Child Nutrition Program whose authorization expires at the end of this fiscal year. We do have a legislative proposal to reauthorize WIC and several child nutrition programs as they expire at the end of this fiscal year. That should be in your hands sometime before the day is over.

Beginning with the school meals, these programs we feel are the foundation in nutrition supplying children with food that they need and low-income adults with the help to meet their families' food budget. Every day we serve 26 million schoolchildren a nutritious school lunch, while about 7 million children eat a school breakfast.

Low-income children served by the National School Lunch and School Breakfast Programs need basic nutrition assistance not just during the school year, but they also need that assistance in the summer as well. The Summer Food Service Program fills that critical need in providing meals at schools and at recreational sites during the summer. We have made a concerted effort to reach more children in the Summer Food Service Programs. Only a fraction of the needy children who eat a school lunch during the regular school year also receive a meal in the Summer Food Service Programs.

In fiscal year 1999 we estimate that in excess of 149 million meals will be served. That is an increase of about 8.6 million meals over the fiscal year 1998 projections. In addition, we estimate that the summer program will serve almost 2.6 million children. That is an increase of almost 150,000 children over 1998.

In our Nutrition Education and Training Program, that program has a 19-year history of delivering cost-effective nutrition education, training, technical assistance as a component of our Child Nutrition Programs. Funding NET at the requested $10 million level will enable State and local food authorities to use the established NET infrastructure to deliver nutrition education to students, educators, and parents, as well as our food service personnel in the schools and in child care centers. The NET infrastructure offers an effective and cost-efficient vehicle for reaching some 94,000 schools across the Nation.

The other area is our Child and Adult Care Food Program. That program provides assistance in reimbursements and commodities to child and adult care programs across the country. This includes providing nutritious meals to serve preschoolers and elementary school age children in child care arrangements, and also to impaired adults who need day care services. Last year our CACFP subsidized over 1½ billion meals to children in day care homes, children in family day care, and the impaired adults in the adult day care setting.

THE WIC PROGRAM

The other area I would like to comment on is our WIC Program. It is a program whose purpose is to improve the health and nutrition of at-risk, low-income, pregnant, breastfeeding, postpartum women, infants, and children up to their fifth birthday. This program is one of our stars. The fiscal year 1999 budget request meets the President's full commitment to fully fund the WIC Program. The requested funding of $4.1 billion will maintain the projected fiscal year 1998 participation level of approximately 7.5 million participants.

In the WIC Program, we are striving to improve the overall program management and again program integrity. This spring we plan to issue guidance to State agencies on more uniform application of science-based nutritional risk criteria. The core risk criteria were developed through a yearlong process with Federal-State partnerships. The criteria will ensure the consistency in the nutritional assessment of WIC applicants. This budget request also assumes the continued success of State agencies to obtain significant savings in the cost of infant formula to the program.

In fiscal year 1997, an additional 1.9 million participants per month were served because of the great success States had in collecting almost $1.3 billion from infant formula manufacturers. This program continues to collectively save money and contribute to healthier mothers, babies, and children who will enter school unfettered by the consequences of poor nutrition and inadequate health care in their formative years.

Mr. Chairman, every dollar that is spent on WIC services for low-income pregnant women saves $1.77 to almost $3.13 in Medicaid costs for the first 60 days after birth. That is a success.

I am aware of this committee's concern about the level of funds that were carried over from one year to the next. Our fiscal year 1999 request assumes that $130 million will be carried into and out of fiscal year 1999. This level is about $20 million less than what we project as being carried into fiscal year 1998. We believe that

these are the minimum levels necessary for our State and Indian tribal organizations to maintain the current participation levels in this grant program. These State and local operators must live within their budgets. Collectively these States underspend their available resources from about 3 to 4 percent so that they can ensure that they are on target.

These carryover issues manifested themselves during the four WIC listening sessions I had around the country with a diverse group of recipients and program operators, health care providers, and State officials. They disclosed a variety of issues. Because the Federal grant is only one source, and sometimes the only source for WIC funds in most States, the States exercise extreme caution to ensure that they do not spend more than their Federal grant.

In addition, because the States commonly distribute WIC food benefits to participants in the form of checks and vouchers, it is difficult for them sometimes to determine the program's cost until after those vouchers and checks have been redeemed and processed. So, the unspent funds relate to specific situations or circumstances that sometimes limit program participation.

In one State, as an example, they described that they were installing a new computer system, so they wanted to use that to verify WIC eligibility and to issue WIC food vouchers temporarily. That reduced the amount of time that they had for the clinical staff to certify and serve new clients, because they instead had to spend more time learning the new software and operating procedures.

Having unspent Federal WIC funds did not necessarily indicate a lack of need for the program benefits. Some States even reported that more eligible individuals could have been served by WIC had it not been for the reasons related to the program's structure and/or State-specific situations or circumstances.

Another program area where we have made some changes is the WIC Farmers' Market Nutrition Program. It has been moved from our WIC account to the Commodity Assistance Program account. This was done to ensure that we had funds available for the operation of the program. We believe that this change will enable States to improve the program for WIC recipients as well as facilitate better program planning for our farmers.

CENTER FOR NUTRITION POLICY AND PROMOTION

Our budget supports the Center for Nutrition Policy and Promotion that was established in 1994. The focal point for this program is for USDA to promote the health of all Americans through good nutrition by linking the scientific research for the dietary needs of the consumer. The importance of this mission cannot be overstated particularly when 4 of the 10 leading causes of death in our country are related to poor diet. That is a significant contributing factor. The budget for the Center is shown in our FPA account which is over some $2.5 million.

STUDIES AND EVALUATION

As I come to closure, Mr. Chairman, there are four more issues that I would like to address.

One, the administration strongly believes the funding for studies and evaluation should be with the entity administering the pro-

grams in order to maximize the value of these efforts in our food assistance programs. As such, this budget proposes the return of funding for studies and evaluations to the Food and Nutrition Service agency.

TRAINING AND TECHNICAL ASSISTANCE

Two, we are requesting $2 million to provide training and technical assistance to State and local school cooperators to promote safe food handling in our school meals preparation.

FOOD GLEANING

Three, one of Secretary Glickman's top priorities is ensuring that USDA does everything within its power to expand the recovery and food gleaning process so that we can have wholesome food for distribution to Americans in need. While this administration firmly believes that the fundamental Federal nutrition assistance program, such as food stamps and WIC and our National School Lunch and School Breakfast Programs, will continue to be the first line of defense for Americans facing hunger, recovered and gleaned food can increasingly provide nutritious additions to the diets of low income Americans and provide some access to food banks and soup kitchens.

FOOD PROGRAM ADMINISTRATION

Finally, our budget request for our Food Program Administration account is $111.8 million. In recent years our FPA account has not been enough to keep demand with the rising demands made on this agency. As you indicated, Mr. Chairman, over 68 percent of Agriculture's budget is in food assistance programs, and these reduced administrative funds has required that more than 18 percent reduction be made in our staffing since 1993 and nearly a 40-percent reduction since the early 1980's. Recent OIG and GAO audits have cited FNS for insufficient staff to ensure program compliance with statutory requirements in program areas. And clearly, ensuring proper program and financial management for an agency managing almost $40 billion in program funds must be a top priority.

Mr. Chairman, I appreciate your allowing me to make these brief remarks. This concludes my oral presentation. I would be happy to answer any questions that you and the other members may have. Thank you very much.

PREPARED STATEMENTS

Senator COCHRAN. Thank you, Madam Secretary. We appreciate your comments and the full statements which you have submitted for our hearing record.

[The statements follow:]

PREPARED STATEMENT OF SHIRLEY R. WATKINS

Mr. Chairman. Members of the Subcommittee, it is my pleasure to appear before you for the first time to discuss the President's Fiscal Year 1999 Budget Request for USDA's Food and Nutrition Programs. In July, 1997 I was confirmed as the Under Secretary for Food, Nutrition, and Consumer Services (FNCS), responsible for the Nation's domestic nutrition assistance programs which provide access to a more nutritious diet for persons with low incomes and which encourage better eating

choices among the Nation's children and their families. These programs include the anchor programs of Food Stamps, Child Nutrition and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). I am accompanied today by Yvette Jackson, the Administrator of the Food and Nutrition Service, who has previously appeared before you as the Deputy Administrator for the Food Stamp Program, George Braley, the Associate Administrator of the Food and Nutrition Service, Dr. Rajen Anand, Executive Director of the Center for Nutrition Policy and Promotion and Stephen Dewhurst, the Department's Director of the Office of Budget and Program Analysis.

The Food, Nutrition and Consumer Services is responsible for ensuring that all Americans have access to healthful diets and nutrition information. We accomplish this by providing nutrition assistance to needy families, school-age children and women, infants and children at nutritional risk. We make available nutrition education and information to all Americans, regardless of income, and provide health referrals to certain program participants. FNCS sponsors and supports research aimed at improving the nutritional quality of diets consumed not only by the participants in our programs, but by all Americans. We strive to enhance the public's confidence in our programs by ensuring the efficiency, integrity and fairness of our programs. Finally, we support American Agriculture by providing families and individuals the means to purchase food and food products and by purchasing commodities for donation to our many public and private cooperators at the State and local levels. Together, these programs provide a nutrition safety net for low-income Americans. We view the food assistance programs collectively as the critical link in alleviating hunger in this country. They are absolutely crucial to many millions of Americans. I do not wish to forget for one minute the responsibility that this Administration and I have to ensure both the program and financial integrity of each program and that the delivery of benefits to all qualified recipients be accomplished with integrity and timeliness.

The Department is the lead Federal Agency in human nutrition and is charged with the goal of promoting a healthy and well nourished population through research and nutrition education. The Center for Nutrition Policy and Promotion, established in 1994, serves as the focal point within USDA to promote the health of all Americans, including those participating in the food assistance programs, through good nutrition by linking scientific research to the dietary needs of the consumer.

The importance of this mission cannot be overstated when one considers that in 4 of the 10 leading causes of death in our country, poor diet is a significant contributing factor: heart disease, cancer, stroke and diabetes account for 1.4 million deaths annually, nearly two-thirds of the total deaths in the U.S. Diet also plays a critical role in other health concerns such as obesity, hypertension, and osteoporosis. Taken together, these diet-related diseases cost society an estimated $250 billion each year in medical cost and lost productivity.

ECONOMIC SUCCESS

Our Administration has led the Country to exceptional economic success. The Country is currently experiencing record job creation, extremely low unemployment rates and projections of continuing low inflation. Our budget projections reflect these strong economic conditions; notwithstanding these successes, there continue to be many, many people who genuinely need the food assistance these programs provide. FNS programs, particularly WIC, the Child Nutrition Programs and the Commodity Assistance Programs are in increasing demand insofar as they help low-income Americans transition from welfare to work.

PROGRAM HIGHLIGHTS AND INITIATIVES

LEGISLATION

The Clinton Administration will submit legislative proposals to restore food stamp benefits to legal immigrants with certain exceptions and to ensure that common administrative costs are allocated fairly among Temporary Assistance to Needy Families (TANF), Food Stamps and Medicaid. There will be proposals to reclassify recipient claims as State rather than Federal debt and to reauthorize WIC and several Child Nutrition Programs whose authorization expires at the end of this fiscal year.

FOOD STAMP PROGRAM

Restore Benefits To Legal Immigrants

The Administration proposes to restore Food Stamp benefits for vulnerable groups of legal immigrants. Upon signing the 1996 welfare law, the President pledged to

work toward reversing the harsh, unnecessary cuts in benefits to legal immigrants that had nothing to do with moving people from welfare to work. The President believes that legal immigrants should have the same opportunity, and bear the same responsibility, as other members of society. The fiscal year 1999 budget would provide Food Stamp benefits to 730,000 legal immigrants at a cost of $2.5 billion over five years. The proposal expands access to Food Stamps for families with children, people with disabilities, the elderly, and refugees and asylees.

The Balanced Budget Act of 1997 helped somewhat by restoring SSI and Medicaid eligibility to elderly and disabled legal immigrants who were already in the United States at time of enactment.

This proposal would restore food stamp benefits to the most vulnerable groups of immigrants—children and their families; the elderly; and the disabled. This proposal also recognizes that refugees often need more than five years to become established in this country; thus, it lengthens eligibility from five years to seven for refugees and those granted political asylum. It also provides food stamp eligibility to certain Hmong and highland Lao tribal members who entered the United States after the Vietnam conflict. Finally, it restores eligibility to certain Native Americans in reservations that span United States/Canadian borders.

Allocate Administrative Costs Fairly

An unanticipated consequence of the landmark welfare reform legislation is the ability of States to gain a windfall by reallocating common administrative costs to the Food Stamp and Medicaid Programs. Prior to welfare reform, common administrative costs in the Food Stamp, Medicaid, and Aid to Families with Dependent Children (AFDC) programs were charged primarily to AFDC. These charges were included in the State TANF grants created by welfare reform. As a result, if States now share common administrative cost among the programs, they can claim additional payments from the Federal Government in the Food Stamp and Medicaid Programs without a reduction in their TANF grant thereby experiencing a windfall.

To mitigate this windfall, starting in fiscal year 1999 States will be required to allocate common administrative costs among all three programs in a manner which results in each program paying its fair share. Costs will be shifted from TANF to Food Stamps and Medicaid; however, the TANF block grant will not be reduced. Instead, the Federal share of administrative costs for the Food Stamp and Medicaid programs will be reduced from 50 percent to 47 percent. This proposal is administratively simple to implement and it removes the incentive for inflated cost allocation by establishing a uniform Federal share of administrative costs.

Recipient Claims

Finally, we will be submitting legislation to reclassify claims against food stamp recipients for erroneous benefit issuance as State debt rather than Federal debt. We believe this proposal's effect to be cost-neutral in the near term; however, we think that if States respond to the incentives being proposed, it has great potential to substantially increase collections in the future.

REAUTHORIZATION

The authorization for several of our programs expires at the end of this fiscal year. We will be submitting cost-neutral legislation to reauthorize the WIC, Summer Food Service, Child Nutrition Commodity Distribution Program, and State Administrative Expense Programs. We will also submit proposals to improve the operation, management and integrity of the National School Lunch and School Breakfast Programs, the Child and Adult Care Food Program and the WIC Program.

PROGRAM INTEGRITY

In fiscal year 1997, FNS had success in combating fraud and abuse while promoting program integrity. In the Food Stamp Program, FNS aggressively continued its Nationwide campaign to increase payment accuracy and has been successful in obtaining commitments from many States to make payment accuracy a top priority. Since fiscal year 1993, there has been a steady decline in the overpayment error rate. During this period, that rate has fallen from 8.3 percent in fiscal year 1993 to 6.9 percent in fiscal year 1996, resulting in a savings of nearly $665 million. The payment (overpayment and underpayment) error rate in fiscal year 1996 was 9.22 percent. This is down about 12 percent from the 1995 rate of 10.30 percent.

FNS collected a total of $186 million in recipient claims in fiscal year 1997. Recipient fraud represented $60 million of the total, errors by households represented $104 million and errors by the State Agency represented $22 million of this total.

The Federal Debt Collection processes (Federal Tax Refund Offset and Federal Salary Offset) resulted in collections of almost $60 million in fiscal year 1997. This represents an approximate 50 percent increase from the previous fiscal year.

Recipient fraud disqualifications have increased from 94,124 in fiscal year 1996 to 105,759 in fiscal year 1997, an increase of about 12 percent over fiscal year 1996. Although Federal reimbursement and retention rates have dropped over time, States have continued to invest increasing amounts of State funds into fraud control.

During fiscal year 1997, FNS' Compliance Branch completed intensive investigative efforts in several major urban areas—Detroit, New Orleans, Los Angeles, Jersey City, Miami, and Philadelphia—in which almost 1200 suspect stores were investigated. Approximately 550 of those stores were found to have committed food stamp violations and, of those, almost 200 were found to have trafficked in food stamp benefits. Based on Compliance Branch cases, Department of Justice (DOJ) levied penalties of over $1 million against retailers convicted of making false claims.

Electronic Benefit Transfer (EBT) continues to be a positive means of combating food stamp trafficking. At the end of December 1997, 28 States had implemented EBT systems, 13 of those being Statewide.

During fiscal year 1997, FNS successfully deployed an automated anti-fraud profile system known as ALERT in all active EBT areas. The ALERT system analyzes individual EBT transactions for patterns of violations both for investigation selection and support as well as for taking direct administrative action against retailers found in violation.

Funds provided by this Committee resulted in successful contracting for pre- and post-authorization visits to participating stores. In fiscal year 1997, FNS tested contracting for on-site store visits and will contract for approximately 35,000 on-site store visits annually beginning in fiscal year 1998 to supplement FNS oversight of retailers. This effort should significantly improve program integrity.

FNS disqualified 1,561 retailers for violations during fiscal year 1997; of those, 933 were permanent disqualification for trafficking violations. This represents a 23 percent increase over fiscal year 1996 and reflects results from combining the use of EBT data, targeted sweeps and joint efforts involving FNS, USDA/Office of the Inspector General (OIG) and State Law Enforcement Bureaus (SLEB's).

In the School Nutrition Programs, each school food authority must be reviewed over a 5-year cycle. In conducting these reviews, we assist States in determining whether Federal reimbursement is properly claimed. We believe this information indicates that these reviews are useful in recovering improperly paid Federal funds as well as providing a tool to improve the management of local food services.

Also on the business side of the school food service programs, FNS has continued its review of dairy and other food vendors' pricing practices and has followed through with active suspension and debarment when warranted.

In the WIC Program, we are striving to improve overall program management and integrity. This spring we plan to issue guidance to State agencies on more uniform application of science-based nutritional risk criteria. The core risk criteria were developed through a year-long Federal/State partnership and will ensure consistency in the nutritional assessment of WIC applicants. In the near future we will propose new vendor regulations that will establish mandatory uniform sanctions across WIC State agencies for the most serious WIC violations, and require the disqualification of any WIC vendor who has been disqualified from the Food Stamp Program. In addition, we plan to address issues of income documentation in policy as well as during the reauthorization process.

HIGHLIGHTS

Child Nutrition Participation

We are proud that the Child Nutrition Programs continue to be a source of nutritious meals for our Nation's children. We are also aware that a large portion of our participating children are needy, and in some cases the meals they receive in schools or child care facilities may be all that they have to eat all day. It is vital that sufficient funds continue to be available for these programs. In view of this, I wish to bring to the Committee's attention the fact that we are experiencing an increase in the total number of meals served in the School Lunch Program. After remaining stable through the 1980's and the first part of the decade of the 1990's, we have seen the total number of school lunches served rise by more than a million a year. This increase is attributable at least in part to increased enrollment in schools caused by our recent "mini-baby boom" and improved quality and service. Consequently, the total reimbursement in the Program will increase beyond the nor-

mal adjustment for changes in the Consumer Price Index, and our appropriation request reflects this.

WIC PROGRAM

Consistent with this Administration's long-standing goal, this budget proposes funding to continue WIC participation at its expected fiscal year 1998 level of 7.5 million women, infants and children every month. This budget request assumes the continued success of State agencies to obtain significant savings in the cost of infant formula to the Program. In fiscal year 1997, an additional 1.9 million participants per month were served because of the great success States had in collecting almost $1.3 billion in rebates from infant formula manufacturers. This program continues to collectively save money and contribute to healthier mothers and babies and children who will enter school unfettered by the consequences of poor nutrition and inadequate health care in their formative years. President Clinton and this Administration is committed to this continued success.

WIC FARMERS' MARKET NUTRITION PROGRAM

The funding request for this popular adjunct to the main WIC Program has been moved in the fiscal year 1999 budget from the WIC account to the Commodity Assistance Program account. This was done to ensure that funds for FMNP are not dependent on the WIC Program and can be allocated on a timely basis to ensure effective operation of the program. We believe this change will enable States to improve their program planning and development.

STUDIES AND EVALUATIONS

In this budget, the Administration reiterates its belief that the studies and evaluations for the Food Assistance Programs should remain with the entity administering these programs. Both the President and the Secretary of Agriculture have stated their belief that the funding for studies and evaluations of the Food Assistance Programs belongs with FNS and this budget supports that belief.

The three FNS research accounts are used to determine if policy objectives are met; test innovations; and describe what works, what does not work, and why. These accounts are instrumental in enabling the Agency to respond to the oversight responsibilities of Congress. FNS research has a proven track record of improved government performance. For example, FNS research established a basis for future assessments of the efficacy of food assistance programs by developing the first credible measure of the food security of the American population; provided the foundation for historic changes in domestic nutrition programs by providing the only nationally representative data on the nutrients provided to children in the Child Care, School Lunch and School Breakfast Programs; made critical contributions to the emergence and expansion of EBT, supporting the first demonstrations of feasibility and cost-effectiveness; helped fight fraud and abuse and improve program operations; generated the only data-based estimates of the prevalence of food stamp trafficking and WIC overcharging; and documented the Federal cost savings associated with participation in the WIC Program.

With the funding requested for fiscal year 1999, the Agency will be able to support efforts to help States identify effective ways to design programs using the new flexibility provided by welfare reform and understand the consequences of change, continue critical updates of basic program information; address Congressional questions about the impact of legislative changes and collect and analyze data to provide Congress with outcome measures of program performance.

The relatively small investment made on FNS research will help to protect the $37 billion investment made in the Federal nutrition programs. This research is most effective when done in conjunction with food assistance program operations. Without such research support, we run the very real risk of making crucial policy decisions without adequate information which may lead to unforeseen consequences.

FOOD SAFETY

We are requesting $2 million to provide technical assistance to State and local school cooperators to promote and enhance safe food handling in school meals preparation. We would use these funds to provide training and technical assistance on safe food handling to cooperators. The funding would be used to enhance the health and safety of children participating in school meal programs by operating training workshops for local food service professionals and revise, print and distribute an updated version of "Serving it Safe".

FOOD RECOVERY AND GLEANING

One of the top priorities of Secretary Glickman is ensuring that USDA is doing everything within its power to expand the recovery and gleaning of excess, wholesome food for distribution to Americans in need. While this Administration firmly believes that the bedrock Federal nutrition assistance programs—such as Food Stamps, WIC, and the National School Lunch and Breakfast programs—will continue to be the first line of defense for Americans facing hunger, recovered and gleaned food can provide nutritious additions to the diets of low-income Americans.

In June of 1997, USDA released a study indicating that 96 billion pounds—or 27 percent—of the 356 billion pounds of food produced in this Country each year is lost to human consumption at the retail and food service levels. In response to the study, USDA joined with key non-profit organizations in co-sponsoring the first-ever National Summit on Food Recovery and Gleaning—at which we jointly set a National goal of increasing the amount of food recovered by 33 percent over the 1.5 billion pounds currently recovered by the year 2000, which will provide an additional 500 million pounds of food a year to feeding organizations. At a time when food banks across the Nation are reporting increasing need but decreasing donations, such a boost is vitally needed.

USDA has taken a wide variety of steps to begin reaching the goal of a 33 percent increase, such as: working with the National Restaurant Association to produce a food recovery handbook for their members; facilitating the ability of hunters to donate venison to food banks; empowering schools to do more to donate excess food from the National School Lunch Program, encouraging airlines to donate meals not served; working with the Department of Transportation to develop a comprehensive way to boost the transportation of recovered foods; facilitating the donation of excess food from the Department of Defense; and providing technical assistance to thousands of community-based groups and private citizens across the Country who seek to help.

As we have intensified these efforts, we have heard more and more requests from States and nonprofit groups for limited Federal funds to help implement and expand such efforts as a cost-effective way to supplement traditional ways of fighting hunger. That is why we are proposing the creation of a $20 million food recovery and gleaning grant program to provide limited seed money for such efforts; we anticipate this Federal money will leverage a great deal of matching funds from private, nonprofit, and State and local governmental sectors. We are not seeking to create a large-scale Federal bureaucracy, but rather to empower community-based efforts. The funds are needed primarily to support start-up costs so that local communities can develop an infrastructure to begin their own food rescue operations.

FOOD PROGRAM ADMINISTRATION [FPA]

Our budget request for FPA is $111.8 million. In recent years, FPA funding has not been sufficient to keep up with the rising demands made on the Agency. Reduced administrative funding has required more than an 18 percent reduction in staffing since 1993 and nearly a 40 percent reduction since the early 1980's.

Recent OIG and GAO audits have cited FNS for insufficient staff to ensure program compliance with statutory requirements. Reported areas of insufficient oversight include retailer integrity and food stamp fraud, the Agency's financial statements, documentation and collection of food stamp recipient claims, frequency of management evaluations required by program regulations, oversight of the Child and Adult Care Food Program, oversight of State information technology, and State cost allocation and claiming.

Clearly, ensuring proper program and financial management for an Agency managing almost $40 billion in program funds must be a top priority. It is imperative that FNS maintain a minimum work force to meet the challenges of program delivery and keep pace with new legislation and changing program needs. This budget is the bare minimum needed to effectively deliver our programs to children, needy families and individuals to help those less fortunate obtain access to a more healthful diet, and provide nutrition education to the American public.

CNPP is charged with developing nutrition policy and providing research-based human nutrition education and information to all Americans, including those involved in Food Assistance Programs, and has become the Department of Agriculture's focal point for linking nutrition research to the consumer. Center staff develop integrated nutrition education research programs and assist policy makers in devising better strategies to target nutrition programs cost-effectively to different customers in order to assist all Americans in adopting healthy, nutritious eating patterns that match lifestyles.

The CNPP staff strive to improve the dietary behavior of all Americans by translating nutrition guidance into consumer-oriented promotion programs. The Center has already accomplished many valuable activities that have helped Americans to gain a better understanding of good nutrition and proper diet. As an integral part of the FNS Food Program Administration budget, we are requesting $2.542 million to continue the work of the Center and help Americans enjoy healthier diets and lives.

CONCLUSION

In conclusion, Mr. Chairman, I appreciate the support this Committee has shown throughout the years for these programs. I am also grateful for the opportunity to present the fiscal year 1999 budget proposals for the Food and Nutrition Assistance Programs. I will be happy to answer any questions that you or the other Members may have.

PREPARED STATEMENT OF YVETTE JACKSON

Mr. Chairman, thank you for the opportunity to appear before this subcommittee to discuss the fiscal year 1999 budget request proposed for the U.S. Department of Agriculture's Food and Nutrition Service (FNS).

1999 BUDGET REQUEST

The Food and Nutrition Service requests $39.2 billion in new budget authority in fiscal year 1999. This includes contingency reserves of $1.0 billion for the Food Stamp Program and $20 million for the Supplemental Nutrition Program for Women, Infants, and Children (WIC). The request is an increase of $1.5 billion above the fiscal year 1998 appropriation level. The increase is driven by legislative proposals in the Food Stamp Program, food recovery and gleaning initiatives, program integrity initiatives, increased meal service and overall inflationary adjustments. Our budget request reflects this administration's continued commitment to providing access to healthful, nutritious diets to low income families and to maintaining effective and efficient program operations.

FOOD STAMP PROGRAM

The Food Stamp Program is the primary source of federal nutrition assistance for low-income Americans. The mission of this program is to assure access to a nutritious, healthful diet for low-income Americans and improve their knowledge of good nutrition, thereby improving the nutritional status of low-income households and strengthening the food and agriculture economy. We are requesting $25.1 billion for the Food Stamp Program, including a benefit reserve of $1.0 billion to ensure funding availability to meet any unforeseen economic disturbances, natural disasters and changes in the estimated savings due to welfare reform. The amount includes $1.2 billion for the Nutrition Assistance Program for Puerto Rico, as well as funds for nutrition assistance for the Northern Marianas, $75.0 million for the Food Distribution Program on Indian Reservations and $100 million for commodity purchases in the Emergency Food Assistance Program. Based on the current economic forecast for fiscal year 1999:

—The average unemployment rate is projected to be 5.1 percent;

—Food Stamp Program participation is projected to average 21.6 million persons monthly; and

—The average monthly benefit is projected to be $76.41 per person.

In fiscal year 1998, all welfare reform changes have been fully implemented and unemployment is at a record low. As a result, average monthly participation is estimated to be 21.07 million compared to 22.859 million in fiscal year 1997. However, beginning in fiscal year 1999 we project that participation will rise slightly to 21.64 million due to a projected slight increase in both the unemployment rate and the overall population.

Although we have requested a benefit reserve since the early 1990's, the need for this reserve has become increasingly important given the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. More than one-third of all food stamp households receive Temporary Assistance for Needy Families (TANF), and these households receive over half of all food stamp benefits. The combination of these households encountering time limits on their TANF eligibility, the flexibility afforded States under Welfare Reform and the uncertainty of some of the effects of welfare reform makes it difficult to anticipate the direction and magnitude of changes in food stamp costs. This benefit reserve is necessary in the event of un-

predictable changes and protects the program's ability to get food to people who need it.

FOOD STAMP PROGRAM INTEGRITY

In fiscal year 1999, FNS will continue its efforts for increased integrity in the Food Stamp Program. The budget request includes funding for increased investigative sweeps. Approximately 850 stores redeeming over $100 million in food stamps annually will be investigated during these sweeps. Funding is also requested for increased error reduction activities, as well as funding to support enhanced Integrated Quality Control and Disqualified Recipient Systems.

FOOD STAMP PROGRAM LEGISLATIVE PROPOSALS

The Food Stamp Program legislative proposals offer two changes to the Personal Responsibility and Work Opportunity Act of 1996 (PRWORA). The first proposal would provide exemptions to the restrictions on eligibility for permanent non-citizen residents. When the President signed welfare reform legislation in 1996, he indicated that some provisions were too harsh on some program participants. Legal immigrants are one such group being affected by the legislation. The Balanced Budget Act of 1997 helped by restoring SSI and Medicaid eligibility to elderly and disabled legal immigrants who were already in the United States at the time of enactment. The changes proposed in this budget would:

—Restore food stamp eligibility to permanent resident families with children without regard to the date of entry into the U.S.;
—Restore eligibility to permanent residents who are age 65 and over or who are disabled provided they had permanent resident status prior to passage of the PRWORA;
—Extend the refugee and asylee exemption from the strict eligibility requirements for non-citizens from 5 years to 7 years from their date of entry;
—Restore eligibility to Hmong immigrants who came to the U.S. after the Vietnam War; and
—Restore eligibility to certain Native Americans whose reservations straddle the U.S. and Canadian borders.

This proposal will increase spending on food stamp benefits by $535 million in fiscal year 1999.

Another unanticipated consequence of the welfare reform legislation is that it allows States to claim reimbursement for common administrative costs in the Food Stamp and Medicaid programs that are already included in the TANF block grant programs, thereby providing the States a financial windfall. Our second proposal would alter the allocation of administrative costs between the TANF, Medicaid, and Food Stamp Programs. The change will require States to allocate common administrative costs equally among all benefiting programs in fiscal year 1999. To address the windfall to States from the new cost allocation (costs will be shifted out of TANF to Food Stamps and Medicaid, but the TANF block grant will not be reduced), the federal share of food stamp administrative costs will be reduced from 50 percent to 47 percent starting in fiscal year 1999. This proposal is administratively simple to implement and will save an estimated $180 million in fiscal year 1999 in the Food Stamp Program.

In addition, we intend to submit a proposal that would reclassify claims against food stamp recipients for erroneous benefit issuances as State debt rather than Federal debt. We estimate that this proposal will be cost-neutral in the immediate future; however, if States respond to our proposed incentives, collections may be substantially increased in the long run.

ELECTRONIC BENEFITS TRANSFER [EBT]

EBT continues to greatly assist the FNS effort to reduce food stamp trafficking. By December 1997, 28 states had implemented EBT systems—13 of them Statewide. FNS successfully deployed an automated anti-fraud profile system known as ALERT in all active EBT areas. The ALERT system analyzes individual EBT transactions for patterns of violations both for investigation selection and support as well as for taking direct administrative sanction action. The ALERT system helps us target limited resources to deal with the most egregious violators.

FOOD STAMP PARTICIPATION UNDER DEBT COLLECTION ACT OF 1966

FNS's early work with the Federal Tax Refund Offset Program (FTROP) as a debt collection initiative for Food Stamp State agencies has expanded in 1996 and 1997 to incorporate provisions of the Debt Collection Improvement Act. Under this Act

and under the authority provided by the Food Stamp Act, FTROP is now a mandatory part of Food Stamp State agency operations. FNS is working with cooperating State agencies to implement Treasury's offset programs, which include the Federal Tax, Salary, and Administrative Offset Programs. In 1997, 43 State agencies participated in the Federal Tax Refund Offset Program and as a result, collected almost $60 million. Since the effort began in 1992, Food Stamp State agencies have collected more than $170 million in delinquent recipient claims using these two forms of offset. In December 1997, 47 State agencies submitted 380,000 records valued at $216 million to Treasury. Based on past collection trends, FNS conservatively projects 1998 collections to be about $85 million. FNS is working with the remaining nonparticipating State agencies to bring them into the effort for the fiscal year 1999 offset activity.

THE FOOD DISTRIBUTION PROGRAM ON INDIAN RESERVATIONS [FDPIR]

FDPIR delivers benefits under the authority of the Food Stamp Act to needy Native Americans who do not have access to the regular Food Stamp Program. There is currently $75 million available in fiscal year 1998 and $75 million is budgeted for fiscal year 1999. Participation estimates for fiscal year 1999 average 127,000 persons monthly. Participation in this program has increased in recent years and our budget request reflects this trend.

CHILD NUTRITION PROGRAMS

The purpose of the Child Nutrition Programs is to assist State and local governments to deliver healthful, nutritious meals to children in public and nonprofit private schools, child care institutions, certain adult day care centers, and summer recreation programs. We are requesting a total of $9.2 billion for the Child Nutrition Programs. The request is $1.5 billion more than the fiscal year 1998 appropriation. The increase is largely attributable to growth in meals served in the National School Lunch Program, the School Breakfast Program, and the Child Care Program and an increase in the number of free meals served. This budget request will provide the funding necessary to support the National School Lunch, the School Breakfast, Summer Food Service, the Child and Adult Care Food and the Special Milk Programs. We estimate that in fiscal year 1999 the requested funds will support: 4.5 billion school lunches, 1.3 billion school breakfasts, 1.6 billion meals in centers and family day care homes, 149.3 million summer food service meals, and 143.5 million half-pints of milk.

FNS will continue its efforts to streamline the administration of the Child Nutrition Programs at the State and local levels through regulations and policy guidance.

The Agency is not requesting major changes in the Child Nutrition account since authorization of the Summer Food Service Program, State Administrative Expense, Commodity Distribution and other Child Nutrition authorizations expire at the end of this fiscal year. We will be proposing some cost neutral simplification and integrity enhancing measures as part of a reauthorization package, which is forthcoming.

CHILD NUTRITION PROGRAM INTEGRITY

Since 1988, the Department of Justice and a number of States have been investigating and prosecuting dairies for illegal bidrigging. The Food and Nutrition Service is committed to promoting integrity in all of its programs. The School Lunch Program is not an exception; for example, we established a task force dedicated to pursuing procurement and nonprocurement suspension and debarment activities whenever and wherever suitable cause is present. The Agency joined forces with the Department of Justice and the Defense Logistics Agency to identify offenders including companies involved in the food, juice, and dairy businesses, as well as Food Service Management Companies. In accordance with Child Nutrition Program regulations and the Federal Acquisition Regulation, FNS proposed debarment of those companies who have been convicted of a criminal offense, entered into a civil settlement or involved in illegal activities such as price fixing, bidrigging and food adulteration.

At the time of our budget request, FNS had identified 199 companies and individuals subject to suspension and debarment. Of these, actions have been initiated against 161. FNS has taken final administrative action in 142 cases with 85 entities debarred for 3 years from future involvement on a nonprocurement or procurement basis with all Federal programs. Compliance agreements aimed at protecting the Federal interest have been signed or are under discussion for an additional 50 corporations. Voluntary Exclusions have been signed or are under discussion with 6 corporations. Actions are currently pending on 38 cases. FNS will continue to pursue appropriate debarment action as deemed necessary.

SCHOOL MEALS INITIATIVE, TEAM NUTRITION AND COORDINATED REVIEW

The School Meals Initiative for Healthy Children involves a comprehensive, integrated plan for improving the nutritional standards of school meals, including dramatically improving the quality of USDA commodities provided to local school districts as well as improving their availability. On May 29, 1996, President Clinton signed the Healthy Meals for Children Act (Public Law 104–149), which further increases flexibility for local school meal planners and reaffirms the nutrition standards established in prior law and regulations. The new law authorizes schools to continue using the traditional meal pattern and authorizes States to approve schools to use "any reasonable approach," within guidelines established by the Secretary. In fiscal year 1997, the Department initiated action to formalize regulations to allow the use of the traditional meal pattern. At the request of State agencies, FNS will be conducting extensive training in fiscal year 1998 on how to conduct nutrition assessment reviews of school food authorities. These nutrition assessment reviews will determine how well school food authorities are progressing towards meeting the Dietary Guidelines for Americans and other nutrition standards. Training sessions are planned for all seven regions.

In fiscal year 1999, we are requesting a total of $10.0 million for Team Nutrition. This represents an increase of $2.0 million over the fiscal year 1998 appropriation. The increase in funds will continue and expand training and technical assistance and nutrition education efforts begun under the School Meals Initiative. Training efforts will focus on assisting school food service authorities in improving business practices and extending nutrition education efforts to the Child Care and Summer Programs. Almost half of the requested funds will provide support directly to the school food service community through technical assistance materials and training provided by either the States or the Federal government.

Our budget also requests $4.3 million for Coordinated Review. We are planning to make this program more effective, more user-friendly more useful for the schools.

SUPPLEMENTAL NUTRITIONAL PROGRAM FOR WOMEN, INFANTS AND CHILDREN [WIC]

The purpose of the WIC Program is to improve the health of nutritionally at-risk, low-income pregnant, breastfeeding and postpartum women, infants and children up to their fifth birthday. The fiscal year 1999 request meets the President's commitment to full funding in the WIC Program. The requested funding of $4.1 billion will maintain the projected fiscal year 1998 participation level of 7.5 million participants. We have also requested a $20 million contingency reserve for WIC, to be used if unforeseen increases in food prices jeopardize maintenance of participation levels.

We believe a major reason for WIC's success is its emphasis on nutrition education through the provision of educational materials, as well as, individual and group counseling. One-sixth of funds available for administrative and program services are earmarked for nutrition education activities which totaled over $165 million in 1997. Also, special emphasis is placed on alerting participants to the dangers of substance abuse during pregnancy, including smoking and alcohol use. During pregnancy, participants are also alerted to the benefits of breastfeeding their newborns. Breastfeeding is further promoted by providing an enhanced food package to women who receive no infant formula, by permitting breastfeeding women to participate for a longer period of time than other postpartum women, and by providing breast pumps and other aids that directly support breastfeeding. WIC also works in conjunction with the Centers for Disease Control and Prevention and other public and private organizations to increase access to immunization services and coverage rates.

WIC EBT

FNS is engaging in activities complementary to the FSP to advance EBT systems to improve program benefit delivery and client services for the WIC Program. In April 1995, Wyoming implemented an EBT system which uses smart card technology and off-line authorization to deliver FSP and WIC benefits and to facilitate the exchange of client data during clinic visits. Current operations include WIC/FSP in Natrona County, Wyoming and WIC in six other counties, projected to total 2,100 FSP households and 3,000 WIC families, 39 WIC-authorized retailers and 45 FSP-authorized retailers. Statewide expansion is being considered. Our strategic goal is to increase the number of States issuing WIC benefits via EBT to 4 in 1999.

COST CONTAINMENT INITIATIVES

In an effort to use their food grants more efficiently, all geographic WIC State agencies and most Indian Tribal State agencies have implemented cost containment

activities. Savings generated by competitive bidding, rebates, least cost brands, use of economical package sizes, etc., as well as home delivery or direct distribution systems allow State agencies to provide benefits to more participants by reducing food package costs.

The most successful strategy has been competitive rebate contracts between State agencies and infant formula companies. Rebates have enabled WIC Programs to dramatically decrease the cost of infant food packages. In addition, ten State agencies are involved in three multi-State contracts, relating to infant juice and cereal. Fiscal year 1997 rebate savings were estimated to be almost $1.3 billion. The average monthly food cost has been kept stable for the past 10 years.

MANAGEMENT IMPROVEMENTS

As part of WIC's reauthorization this year, we will be proposing several integrity improvement measures. For example, we are concerned that not all States are assessing WIC income eligibility evenly. We are proposing new laws to require that income documentation, sufficient to demonstrate eligibility, be presented at certification. We will also be proposing tighter controls over vendors.

COMMODITY ASSISTANCE PROGRAMS

The Commodity Assistance Program combines funding for the Commodity Supplemental Food Program (CSFP), administrative funding for The Emergency Food Assistance Program (TEFAP), the Nutrition Program for the Elderly (NPE) and Pacific Island Assistance, the Farmer's Market Nutrition Program, which was formerly included in the WIC appropriation and the Food Recovery and Gleaning Program. The budget requests:

—$96 million in support of women, infants, and children and elderly caseload in CSFP,
—$45 million for TEFAP administrative expenses plus the $100 million for commodity purchases available in the Food Stamp Account, allowing for a total program of $145 million.
—$140 million for NPE which will fund an estimated 250.6 million meals at a payment rate of 55.86 cents per meal, and
—$15.0 million for the Farmer's Market Nutrition Program.
—$20.0 million for the Food Recovery and Gleaning Program.

FOOD RECOVERY AND GLEANING

The budget includes $20.0 million for a new grant program to aid community-based gleaning and food recovery efforts. Given that a USDA study indicates that 27 percent of the food produced in this country is lost to human consumption at the retail and food service level, and given that food banks around the country are reporting an increasing need but a decreasing supply of food, there is an urgent need to intensify pubic/private partnerships to glean and recover excess food for distribution to Americans in need.

Of the $20.0 million, about $19.5 million will be used for competitive grants, cooperative agreements, and other assistance to community-based food recovery efforts. Non-profit groups—as well as state, local, and Tribal governments—have increasingly indicated to USDA that they need additional resources to help the Nation reach the goal of increasing the amount of excess food recovered by 33 percent over the current baseline of 1.5 billion pounds a year. While such entities are willing to bring significant resources of their own to aid food recovery—and while volunteers will provide much of the labor for such efforts—additional Federal assistance is needed to help these entities pay for vital items such as: vehicles and fuel to transport recovered and gleaned food; salaries for volunteer coordinators and training programs for volunteers; heating and refrigeration equipment and facilities to ensure food safety; printing for handbooks and instructional materials; equipment to harvest, sort, load, and process food; computer programs to match up donors to recipients; offices from which to operate; containers to hold the food, etc.

We anticipate this Federal money will leverage significant matching funds from the private, non-profit, and state and local governmental sectors. We are not seeking to create a large-scale Federal bureaucracy, but rather to empower community-based efforts and encourage community volunteerism.

STUDIES AND EVALUATION

In fiscal year 1998 FNS' funds for research on our food assistance programs were transferred to Economic Research Service. The fiscal year 1999 request includes restoration of research funds at FNS. Both the President and the Secretary of Agri-

culture have expressed their strong belief that funding for studies and evaluation should remain with FNS, the agency which administers the programs to be studied.

Prudent use of these funds requires that research on our programs be based on expert knowledge of program detail. FNS needs relevant, practical and focused research to enhance our ability to manage our programs effectively, measure the effectiveness of program operations and alternatives, and identify reliable program performance measures. Therefore, we strongly urge you to restore this funding to FNS.

GOVERNMENT PERFORMANCE AND RESULTS ACT

The FNS Annual Performance Plan (APP) has been submitted as part of the fiscal year 1999 budget request. The goals outlined in the APP are directly linked to the achievement of the Agency's strategic goals and objectives.

FOOD PROGRAM ADMINISTRATION

Funding for Food Program Administration (FPA) is requested in the amount of $111.8 million. The FPA appropriation funds the majority of salaries and administrative expenses of the Agency. In recent years, FPA funding has not been sufficient to keep up with the rising demands made on the Agency. In fact, reduced funding has required more than an 18 percent reduction in staffing since 1993—a 37 percent reduction since 1980. FNS understands the importance of downsizing in the Federal government. Toward that goal, the Agency has been diligent in implementing efficiencies and met its fiscal year 1999 target quite some time ago.

Since the FPA appropriation finances 90 percent of the work force administering FNS programs, it is the critical account that ensures program and financial integrity and effective use of other FNS program appropriations. Recent OIG and GAO audits, between 1995 and 1997, have cited FNS for insufficient staff to ensure program compliance with statutory requirements. Reported areas of insufficient oversight include retailer integrity and food stamp fraud, the Agency's financial statements, documentation and collection of food stamp recipient claims, frequency of management evaluations required by program regulations, oversight of the Child and Adult Care Food Program, oversight of State information technology, and State cost allocation and claiming. Many of FNS' functions are labor-intensive and require constant staff attention. Payment accuracy, store investigations, and on-site reviews are critical to our Agency's mission and require intensive staff focus and travel funding.

The Food Stamp Program loses more than $1.4 billion a year in overpaid benefits. More dollars are lost through inaccurate State requests for federal administrative funds. Current staffing levels are clearly insufficient to provide adequate oversight, conduct claims collections reviews, and provide needed technical assistance to States to make improvements. Although we have made great strides in reducing error rates over the last three years, which saved approximately $660 million during this period, reduced staff is making it difficult to continue these efforts. Management evaluations of state operations in all our programs require additional attention. For example, in WIC, we need to strengthen our review of state information systems, our review of administrative funds and state caseload management. These areas are essential to ensure the sound management of the resources Congress has made available for WIC. Additionally, new data analysis tools, EBT and new authorities in Welfare Reform provide the Agency with a tremendous opportunity to increase program integrity among food stamp retailers. Unfortunately our limited and overburdened staff cannot utilize these tools to crack down on fraud.

New legislation and changing program needs have imposed significant new and ongoing administrative burdens on the already strained staff. Diminishing staff resources do not allow the Agency to keep pace with legislative changes, such as Welfare Reform, Government Performance and Results Act, the Chief Financial Officers Act, the Debt Collection Improvement Act, and the Healthy Meals for Healthy Americans Act, to name a few. At the same time, the Agency is called on to improve the nutrition of program recipients, strengthen program integrity, and implement EBT Nationwide.

Clearly, ensuring proper fiscal and program management for an Agency managing almost $40 billion in program funds must be a top priority. It is imperative that FNS maintain a steady work force to meet the challenges of program delivery and keep pace with new legislation and changing program needs. Mr. Chairman, we strongly believe the request is the smallest budget feasible to ensure that we maintain adequate vigilance over the resources entrusted to us by the Congress on behalf of the American taxpayer.

Included in the FPA request level of $111.8 million is $2.542 million to continue the work of the Center for Nutrition Policy and Promotion.

CONCLUSION

FNS is committed to providing food and nutrition assistance for the Nation's children and low-income families. Our fiscal year 1999 request reflects this commitment. Further, we believe that our request of $39.2 billion is crucial to continued efficient program operations.

Mr. Chairman, this summarizes the fiscal year 1999 FNS budget request. I will be happy to answer any questions that you may have.

BIOGRAPHICAL SKETCHES

SHIRLEY R. WATKINS

Shirley Robinson Watkins was nominated Under Secretary of Food, Nutrition and Consumer Services (FNCS) by President Clinton on May 19, 1997. She was confirmed by the Senate on July 31, 1997. As Under Secretary, she has authority over the Food and Nutrition Service and the Center for Nutrition Policy and Promotion. In this position, she oversees a budget of over $40 billion for USDA's 15 food assistance programs, including the Food Stamp Program, the National School Meals Programs, and the WIC Program.

Mrs. Watkins is the first African-American to be named FNCS Under Secretary, as well as the first person named with direct management experience in the school meals programs at the local level. She brings to this position a life-long commitment to the health and nutritional well-being of children and families.

Prior to this appointment, Mrs. Watkins was USDA Deputy Assistant Secretary for Marketing and Regulatory Programs, where, from 1995 until 1997, she oversaw 80 domestic programs and 8,000 domestic and international employees charged with protecting U.S. agricultural interests. From 1993 to 1995, she served as the FNCS Deputy Under Secretary, where she worked closely with all aspects of USDA-administered domestic food assistance programs.

Before joining USDA in 1993, Mrs. Watkins served as Director of Nutrition Services for the Memphis (Tennessee) City Schools for 17 years, where the school lunch program received national recognition. Previous positions within the school system included food service supervisor, home economics teacher, and elementary teacher. From 1960 to 1962, she served as a home demonstration agent with the University of Arkansas Extension Service.

Mrs. Watkins received a bachelor of science degree from the University of Arkansas at Pine Bluff, and master of education from the University of Memphis.

YVETTE JACKSON

WASHINGTON, Sept. 2, 1997—Agriculture Secretary Dan Glickman today announced he has named Yvette Jackson the Administrator of the U.S. Department of Agriculture's Food and Consumer Service. FCS oversees federal nutrition assistance programs.

Jackson is the first African-American women to head the Food and Consumer Service. Since 1994, she has served as the agency's Deputy Administrator in charge of the Food Stamp Program. As FCS Administrator, Jackson will oversee USDA's 15 nutrition assistance programs, including the School Lunch and School Breakfast Programs, the Special Supplemental Nutrition Program for Women, Infants, and Children—the WIC program—and the Food Stamp Program. She will manage an agency budget of $40 billion and a staff of 1,700.

"I take great pleasure in announcing the appointment of Yvette Jackson as the Administrator of the Food and Consumer Service," Glickman said. "She has done an outstanding job directing the Food Stamp Program, and she has made a career out of helping people in need. I look forward to working with her to continue to make our programs even more responsive to the people who need them."

Jackson began her career with the Pennsylvania Department of Public Welfare 26 years ago as a caseworker in the Philadelphia County Assistance Office. She assumed increasing management responsibilities, culminating in her appointment as Pennsylvania's Deputy Secretary of Income Maintenance in March, 1991. As deputy secretary, Jackson oversaw the administration of the state's income security and medical assistance eligibility programs—including the Food Stamp Program, Aid to Families with Dependent Children, State General Assistance, Child Support Enforcement, and Medicaid.

A native of Philadelphia, Jackson holds a bachelor's degree in social welfare from Temple University and a Masters of Social Work from Rutgers University.

RONALD J. VOGEL

Career Highlights

Mr. Vogel has been with the Food and Nutrition Service for 17 years. He is presently the Associate Deputy Administrator for Special Nutrition Programs. In this position, he has operational responsibility for programs such as WIC, the Child and Adult Care Food Program, the National School Lunch and Breakfast Programs, the Summer Food Service Program, and a variety of commodity distribution programs, including TEFAP and the Food Distribution Program for Indian Reservations.

Prior to his current position, Mr. Vogel was Director of the Supplemental Food Programs Division, which includes WIC and the Commodity Supplemental Food Program. During his tenure in this position, he received the Secretary's Distinguished Service Award for promoting the health and well-being of low-income women, infants, and children and received a Public Health Service commendation for efforts to promote childhood immunization through WIC.

Previous assignments included Director of the Program Information Division in which he was responsible for FNS' financial and program information management information systems. In this position he also developed and implemented the Agency's long-range Financial Management Automation Plan and the National Data Bank, an executive-level program information and reporting system.

Before coming to FNS, Mr. Vogel was employed in the private sector as a program evaluation specialist. His work in this capacity focused on a variety of federal social service programs including Head Start, the Basic Educational Opportunity Grant Program (Pell Grants) and the Section 8 Public Housing Assistance Program.

Education

Mr. Vogel received his undergraduate degree from the University of Virginia. He holds a Master of Arts degree in sociology from Duke University. He pursued post-Masters studies at Duke as a James B. Duke Fellow.

RAJEN S. ANAND

Dr. Rajen S. Anand serves as the Executive Director and chief executive officer of the Center for Nutrition Policy and Promotion in the United States Department of Agriculture.

The mission of the Center is to improve the nutritional status of all Americans by serving as the focal point for linking scientific research to the dietary and socioeconomic needs of the consumer. The Center coordinates the overall nutrition education policy within the Federal government.

Before joining the Department of Agriculture in 1995, Dr. Anand was Professor of Physiology at the California State University, Long Beach, where he had taught physiology, pathophysiology and metabolism since 1970. He served as the founding chair of the Department of Anatomy Physiology (1985–1989), which was started from scratch under his leadership. He served as chair of the Department of Communicative Disorders (1990–1992) on a special assignment. As the Department head, he was responsible for recruitment, evaluation and supervision of faculty and staff and served as an advocate and leader of the academic unit. He managed the fiscal resources, developed the budget, and carried out the administrative operation, space allocation and equipment maintenance.

In 1994, Dr. Anand was appointed by Education Secretary Richard Riley to serve on the 11-member National Committee on Foreign Medical Education and Accreditation. He was reappointed for another 3-year term in 1997.

He received his Ph.D. in human physiology, nutrition and biochemistry from the University of California, Davis in 1969. He also holds a doctorate in veterinary medicine (D.V.M). He completed post-doctoral fellowships at U.C. Davis in metabolism, and at the UCLA-Harbor Medical Center in pediatric endocrinology.

Dr. Anand was honored with several academic awards including the Outstanding Professor Award at the Long Beach campus. He also was twice recipient of the Meritorious Performance and Professional Promise Award. At the University of California, Davis he was bestowed with the Outstanding Student Award in 1967 and 1968, and Hertzendorf Memorial Award in Physiology in 1969 (for outstanding academic achievements and humanitarian qualities).

Dr. Anand is a member of the American Physiological Society, Sigma Xi, Phi Kappa Phi Honor Society and American Association for Advancement of Science.

Dr. Anand has published more than 35 scientific research articles in national and international journals. He is also a freelance journalist and has written over 350 news stories and articles for various newspapers and magazines.

FOOD GLEANING AND RECOVERY

Senator COCHRAN. I am going to ask a couple of questions, then yield to my colleagues on the committee for any questions or additional comments that they have.

You mentioned at the conclusion of your remarks the Food Recovery and Gleaning Program. When the Secretary was before our committee, he talked about this program too, and he indicated that the Government could be a facilitator without costing any money, but I noticed that the budget proposes that we spend $20 million on the program. That seems to me to raise a question as to why the administration has now determined that Federal funding is required for a program that appeared to be one where we would be a facilitator.

There is also a statement in the prepared testimony talking about a Department study indicating that 27 percent of the food produced in the country is lost to human consumption at the retail and food service level. We would like to have a copy of that study if you could submit that for our review.

What is your reaction to the question that we have to ask, and that is, what are you going to do with the money? How are you going to spend $20 million facilitating a gleaning and food recovery program?

Ms. WATKINS. Mr. Chairman, I appreciate you asking that question, and this is an area that both the Secretary and I are very concerned about. We will provide you with a copy of the study.

[The information follows:]

ESTIMATING AND ADDRESSING AMERICA'S FOOD LOSSES

(By Linda Scott Kantor, Kathryn Lipton, Alden Manchester, and Victor Oliveira)

The U.S. food supply is the most varied and abundant in the world. Americans spend a smaller share of their disposable income on food than citizens of any other country and choose from an average of 50,000 different food products on a typical outing to the supermarket. In 1994, the food supply provided an estimated 3,800 calories per person per day, enough to supply every American with more than one and a half times their average daily energy needs. Given this abundance, few of the Nation's resources have traditionally been devoted to measuring or reducing food waste.

In recent years, growing concern about hunger, resource conservation, and the environmental and economic costs associated with food waste have raised public awareness of food loss. This in turn has accelerated public and private efforts to make better use of available food supplies by recovering safe and nutritious food that would otherwise be wasted.

Of course, not all food that is lost is suitable for consumption (fig. 1). Some losses—like the condemnation of diseased animals at the slaughtering house, or the discard of moldy fruit from the produce shelf at the supermarket—are necessary to ensure the safety and wholesomeness of the U.S. food supply. Such foods are not recoverable for human use.

FIGURE 1

WHILE SOME FOOD IS RECOVERABLE, SOME IS NOT

Not recoverable for human consumption

—Livestock condemned at slaughter because of disease.
—Diseased or otherwise unsafe produce.
—Spoiled perishable food, including meat, dairy, and prepared items.
—Plate waste from foodservice establishments.
—Losses of edible portions associated with processing, such as skin and fat from meat and poultry, and peels from produce.

Recoverable for human consumption

—Edible crops remaining in farmers' fields after harvest.
—Produce rejected because of market "cosmetics" (blemishes, misshapen, etc.)
—Unsold fresh produce from wholesalers and farmers' markets.
—Surplus perishable food from restaurants, cafeterias, caterers, grocery stores, and other foodservice establishments.
—Packaged foods from grocery stores, including overstocked items, dented cans, and seasonal.

Likewise, plate scraps are appropriately discarded at eating establishments out of health considerations. In addition, not all food that is lost is economically recoverable. Food recovery efforts are often limited by financial and logistical constraints that make it difficult to match recovered food with potential recipients.

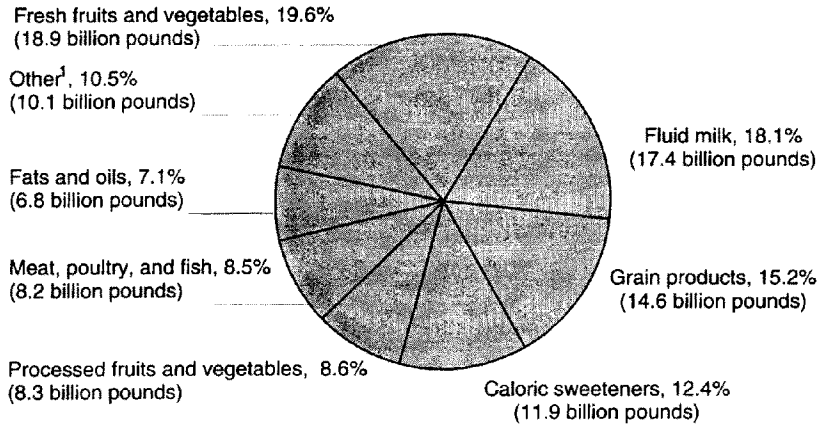
Nevertheless, large quantities of wholesome, edible food, are lost at every stage of the marketing system. Examples of such losses include meats, bread, and other foods prepared by a restaurant or caterer but never served and the discard of blemished or overripe produce, which may be unmarketable for cosmetic reasons, but are otherwise nutritious and safe.

Even a modest increase in the recovery of such wholesome foods could reduce hunger by supplementing existing food-assistance efforts; provide tax savings to farmers, supermarkets, and foodservice establishments that donate food; and lessen the environmental impacts of waste disposal. Understanding where and how much food is lost is an important step in reducing waste and increasing the efficiency of food recovery efforts.

USDA's Economic Research Service (ERS) recently undertook a review of the current data on food waste and built on this knowledge to generate new estimates of food loss by food retailers (supermarkets, convenience stores, and other retail outlets), and consumers and foodservice establishments (storage, preparation, and plate waste in households and foodservice establishments). These losses were estimated by applying known waste factors, gathered from published studies and discussions with commodity experts, to the amount of edible food available for human consumption in the United States. However, losses of nonedible food parts such as bones, pits, seeds, and peels, were excluded (see box about measuring food loss).

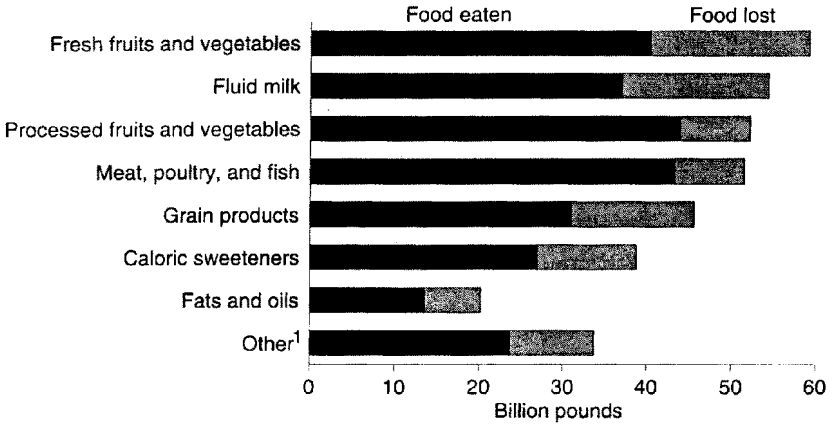
According to the new ERS estimates, about 96 billion pounds of food, or 27 percent of the 356 billion pounds of the edible food available for human consumption in the United States, were lost to human use at these three marketing stages in 1995 (fig. 2). Fresh fruits and vegetables, fluid milk, grain products, and sweeteners (mostly sugar and high-fructose corn syrup) accounted for two-thirds of these losses (fig. 3).

Figure 2
More Than 96 Billion Pounds of Edible Food Was Lost by Retailers, Foodservice, and Consumers in 1995



[1] Includes eggs, peanuts, tree nuts, dry beans, peas, and lentils, and dairy products other than fluid milk.
Source: Economic Research Service, U.S. Department of Agriculture.

Figure 3
Food Losses Vary by Commodity--Largest Losses Were in the Fresh Fruits and Vegetables, Fluid Milk, and Grain Products Sectors in 1995



[1]Other includes eggs, peanuts, tree nuts, dry beans, peas, and lentils, and dairy products other than fluid milk.
Source: Economic Research Service, U.S. Department of Agriculture.

ERS does not know the share of these losses that are recoverable. However, we can get an idea of the significance of loss by calculating the potential benefit of recovery. On average, each American consumes about 3 pounds of food each day. If even 5 percent of the 96 billion pounds were recovered, that quantity would represent the equivalent of a day's food for each of 4 million people. Recovery rates of

10 percent and 25 percent would provide enough food for the equivalent of 8 million and 20 million people, respectively.

The loss estimates presented here are tentative and are intended to serve as a starting point for additional research. Many of the studies on which these estimates are based date from the mid-1970's or before. Dramatic changes have occurred in the food marketing system since then, including innovations in food processing technology and unprecedented growth in the foodservice sector. While we made crude adjustments for these changes in our analysis, additional research—especially updated data on foodservice, processing, and household food losses—is needed to add precision to these estimates and to provide a more complete picture of food loss across the entire marketing system.

FOOD LOSSES BEGIN ON THE FARM . . .

Food losses begin on the farm even before a commodity moves into the marketing system. Although ERS was not able to quantify food losses that occur on the farm or between the farm and retail levels, anecdotal evidence suggests that such losses can be significant for some commodities.

Periodic preharvest losses occur, for example, because of severe weather, such as droughts and floods, or pest infestations. For example, each year an average 7 percent of U.S. planted acreage was not harvested during 1994–96. Freezes that periodically damage Florida's citrus crop and natural disasters like Hurricane Fran, which destroyed agricultural crops in North Carolina in the fall of 1996, are examples of causes of such losses. Most of these commodities are not recoverable for human use.

On the other hand, many harvesting losses, especially losses of commodities like fruits and vegetables, are often well-suited for recovery efforts. Economic factors, which affect producers' willingness to bring their product to market, are the most common source of such losses.

For example, minimum quality standards for fresh produce set by State and Federal marketing orders, bumper crops that reduce commodity prices, and consumer demand for blemish-free produce often result in the removal of safe and edible produce from the food marketing system. With such requirements in mind, fruit and vegetable producers often harvest selectively, leaving small, misshapen, or otherwise blemished produce in the field, since these commodities would likely be discarded in the packing shed or processing plant.

Harvesting losses can also be attributed to technological factors, such as increased mechanization, equipment malfunction, and new management practices. Commodities can be lost because mechanized harvesters cannot retrieve the entire item or because the machines are unable to discriminate between immature and ripe products. However, these losses are often viewed as an acceptable tradeoff between field efficiency (lower production costs and faster operation) and increased yields.

Many farmers mitigate harvesting losses by using leftover crops as fertilizer or animal feed. Harvesting losses are also reduced through gleaning efforts, in which volunteers collect leftover crops from farmers' fields where it is not economically profitable to harvest a crop or after a field has been mechanically harvested.

. . . AND CONTINUE INTO PROCESSING AND MARKETING

Food is subject to additional loss as it leaves the farm and enters the food marketing system.

Some loss occurs in storage, due to insect infestations or mold, deterioration, or improper transportation and handling. Produce, dairy, meat, and other fresh items are subject to shrinkage (loss in weight or volume) due to inadequate packaging or simply the passage of time. Also, fresh foods stored or transported at improper temperatures can deteriorate, wilt, or suffer bacterial degradation or microbial growth. Frequent handling by food processors, brokers, and wholesalers can lead to additional losses. According to published studies, a typical food product is handled an average of 33 times before it is ever touched by a consumer in the supermarket.

Food-safety regulations also divert some product from the human food chain. According to USDA's Food Safety and Inspection Service (FSIS), 0.2 percent of hogs, 1.7 percent of calves, and 0.4 percent of chickens and turkeys were "condemned" or otherwise rejected at slaughter in 1993 and could not be used for human food. After slaughter, some meat is trimmed away because of bruises and other defects. In addition, some viscera, especially livers, are condemned due to safety concerns. Although some of these losses may be preventable through improved farm management and marketing practices, once food becomes spoiled, it is no longer available for human use.

Food losses also occur when raw agricultural commodities are made into final food products. Some of these losses, like removing edible skins from fresh produce, are a normal and necessary part of food processing. For example, about 20 percent of the weight of a fresh apple is lost when it is processed into applesauce. Other processing losses, such as the removal of skin and trimming of fat from meat and poultry, are due to consumer demand for more healthful food choices. Still others, like the increased trimming associated with precut produce, are the result of increased demand for convenience foods from consumers and the foodservice industry.

Although such losses are usually not suitable for direct human consumption, they are often diverted for use in animal feed or as ingredients in other food products. For instance, fresh potatoes lose about half of their weight when they are processed into frozen french fries. Although this appears to represent a "loss" of edible fresh potatoes, most of the "loss" is actually recovered and used by processors for other potato products, such as dehydrated potato flakes and potato starch; and potato skins are often sold to renderers for animal feed.

DAIRY PRODUCTS AND FRESH PRODUCE ACCOUNT FOR LARGEST SHARE OF RETAIL FOOD LOSSES

An estimated 5.4 billion pounds of food, less than 2 percent of edible food supplies, was discarded at the retail level in 1995 (table 1). Nearly half of these retail losses came from fluid milk and other dairy products and fresh fruits and vegetables. These findings are consistent with published studies on supermarket discard, which show that fresh produce, dairy products, and other perishable items make up the largest share of retail food losses. Overstocking, overtrimming, improper stock rotation, and post-holiday discard of seasonal items like Halloween cookies are the main reasons that retailers discard food.

TABLE 1.—LARGE FOOD LOSSES OCCURRED AT THE RETAIL, FOODSERVICE, AND CONSUMER LEVELS IN 1995

Commodity	Edible food supply,[1] million pounds	Losses from edible food supply—					
		Retail food loss		Foodservice and consumer food loss		Total retail, foodservice, and consumer food loss	
		Million pounds	Percent	Million pounds	Percent	Million pounds	Percent
Grain products	45,606	912	2	13,682	30	14,594	32
Fruit	48,338	707	2	10,609	23	11,316	23
Fresh	22,389	448	2	6,717	30	7,165	32
Processed	25,949	259	1	3,892	15	4,152	16
Vegetables	63,077	999	2	14,947	24	15,946	25
Fresh	36,830	737	2	11,049	30	11,786	32
Processed	26,247	262	1	3,898	15	4,160	16
Dairy products	76,276	1,525	2	22,883	30	24,408	32
Fluid milk	54,474	1,089	2	16,342	30	17,431	32
Other dairy products	21,802	436	2	6,541	30	6,977	32
Meat, poultry, and fish	51,466	515	1	7,720	15	8,235	16
Red meat	30,350	303	1	4,552	15	4,856	16
Poultry	17,108	171	1	2,566	15	2,737	16
Fish and seafood	4,008	40	1	601	15	641	16
Eggs	7,918	158	2	2,328	29	2,486	31
Dry beans, peas, and lentils	2,263	23	1	336	15	359	16
Tree nuts and peanuts	1,861	19	1	276	15	295	16
Caloric sweeteners	38,827	388	1	11,473	30	11,861	31
Fats and oils	20,250	203	1	6,564	32	6,767	33
Total[2]	355,883	5,449	2	90,818	26	96,266	27

[1] Excludes nonedible food parts such as bones, hides, peels, skins, pits, cores, and seeds.
[2] Totals may not add due to rounding.
Source: Economic Research Service, U.S. Department of Agriculture.

Another important component of food loss is stock removed from retail shelves because it has reached its "sell-by" date. Such losses chiefly apply to fresh perishable items such as dairy and bakery products. A rise in the number of instore bakeries and freshly prepared specialty and deli items may mean that supermarkets are managing larger quantities of highly perishable food products with shelf lives as short as a few days. Some of these items, such as day-old bread and expired dairy products, are safe to eat for a short time and are potentially recoverable.

Canned fruits and vegetables, breakfast cereals, pasta, and other nonperishable food products get discarded because of crushed, dented, or otherwise damaged packaging, and expired shelf dates. For example, losses of processed fruit and vegetables, including fruit juices (on a fresh-fruit equivalent basis), were estimated at 521 million pounds, or almost 10 percent of total retail food losses in 1995. Most of these losses occur in inventory control, storage, and handling.

High failure rates for new food products may have increased retail food losses in recent years as the number of new product introductions has risen. More than 16,000 new food products—including new sizes, packaging, flavors, and brands of existing products—were placed on U.S. grocery store shelves in 1995, more than double the fewer than 8,000 introduced in 1988. Although ERS does not know the success rate for such products, industry experts estimate that more than 90 percent of new food products are removed from the market.

Food recovery programs, which collect such damaged or unmarketable products from food retailers and distribute them to charitable food organizations, can convert these safe but otherwise "unsaleable" items into consumable food and provide a tax benefit to food retailers who donate their products.

PLATE WASTE CONTRIBUTES TO LARGE LOSSES

From foods forgotten and spoiled in the refrigerator to the uneaten vegetables tossed in the garbage, consumer and foodservice food waste is the single largest source of food loss in the marketing chain. Estimated at 91 billion pounds, this food loss accounted for 26 percent of the edible food available for human consumption in 1995. Fresh fruits and vegetables accounted for 19 percent of consumer and foodservice food losses, with an estimated 18 billion pounds discarded annually. An additional 16 billion pounds of fluid milk—the equivalent of one-third of an 8-ounce glass per person per day—and 14 billion pounds of grain products were also lost. Together these foods accounted for more than half of total estimated consumer and foodservice food losses in 1995, partially reflecting their relative importance in the diet when consumption is measured by the weight of food.

Common sources of foodservice food losses include overpreparation of menu items, expanded menu choices (which can make management of food inventories more difficult), and unexpected fluctuations in food sales due to sudden changes in the weather or other factors beyond the control of foodservice operators. In addition, consumer plate loss may be on the rise at restaurants and other eating places due to a growing trend toward the "upsizing" of food portions.

Unless consumers take home uneaten portions for later consumption, restaurants must discard such plate leftovers for health considerations, meaning that increasing amounts of food may be going to waste.

Household food losses occur because of overpreparation, preparation discard, plate waste, cooking losses, spoiled leftovers, and breakage, spillage, and package failure, either in the home or en route from the point of purchase. A variety of factors, including household size, income, and food-safety concerns, influence the type and quantity of foods lost at this level.

Archaeological examinations of household garbage by researchers at the University of Arizona's Garbage Project revealed that household waste is generally lower for frequently purchased staple items like bread, milk, and cereal than for less frequently used specialty products such as sour cream, hot dog buns, or items bought on impulse. They also concluded that large quantities of single food items, entire heads of lettuce, half-eaten boxes of crackers, and sprouted potatoes—rather than plate scraps—account for the largest share of household food loss.

A 1987 study by the University of Oregon, which examined the reasons that households discard food, suggests that consumer education may play an important role in reducing consumer food loss. In the case of perishable food, knowledge of, or misconceptions about, food safety were the single most important determinants of household food discard. The study indicated that many main meal planners confused quality defects with edibility and were unable to accurately assess whether a food was safe to eat. Such assessments were particularly difficult for consumers under the age of 35. All households had difficulty interpreting package dating information, such as "sell-by" dates or expiration codes.

LOOKING FOR SOLUTIONS: FOOD RECOVERY, RECYCLING, AND EDUCATION

Many public and private assistance groups, food retailers, food manufacturers, policymakers, and consumers have looked for ways to prevent food losses, recover lost food, and reduce solid waste. These efforts reach into every corner of the food marketing system. They include food recovery projects to feed the hungry, recycling projects to conserve resources and reduce waste disposal costs, and educational campaigns and economic incentives to prevent food loss.

FOOD RECOVERY EFFORTS FEED THE HUNGRY

Despite the abundance of food in the United States, hunger is a reality for some Americans with limited financial resources. In 1995, 36.4 million people in this country were living in poverty (annual income of less than $15,569 for a family of four). According to USDA food consumption data for the early 1990's, almost 12 percent of U.S. households with annual incomes below the poverty line reported that they sometimes or often did not get enough to eat. USDA spent almost $38 billion providing food assistance to an estimated 45 million people—about 1 in every 6 Americans—at some time during 1996. In addition, an estimated 150,000 nonprofit organizations, including food banks and neighborhood charity outlets, provided more than 10 percent of the U.S. population with a portion of their nutritional needs. However, even with the extensive network of Federal and private food-assistance programs, almost 20 percent of requests for emergency food assistance went unmet in 1995, according to the U.S. Conference of Mayors.

Thus, other sources of food must be utilized.

The term food "recovery" refers to the collection, or recovery, of wholesome food from farmers' fields, retail stores, or foodservice establishments for distribution to the poor and hungry. Food recovery programs operate across the United States and target many different levels of the food marketing system (see box on food recovery efforts). A few are large operations with offices in many States, but most are small local programs that depend largely on the efforts of volunteers from the surrounding community.

"A Citizen's Guide to Food Recovery," recently published by USDA, classifies these efforts into four major types:

Field gleaning—the collection of crops from farmers' fields that have already been mechanically harvested or on fields where it is not economically profitable to harvest;

Perishable food rescue or salvage—the collection of perishable produce from wholesale and retail sources such as supermarkets;

Food rescue—the collection of prepared foods from the foodservice industry, including restaurants, hotels, and caterers; and

Nonperishable food collection—the collection of processed foods with longer shelf lives.

Once surplus food has been "recovered" or prevented from going to waste, volunteers pick up and deliver the food to groups that serve the needy, either directly through neighborhood charitable organizations, such as food pantries and soup kitchens, or indirectly through food banks. In addition to providing additional quantities of food to hungry people, food recovery efforts can also provide food banks with the ability to offer clients more variety and nutrients in their diets by adding fiber-rich fresh fruits and vegetables and grain products to the typical offerings of nonperishable canned and boxed goods.

Food recovery also has benefits that extend beyond providing food to the needy. For example, the additional food supplied by recovery programs allows agencies that serve the disadvantaged to reallocate money to other needed services, money that they would have otherwise spent on food.

These efforts also provide clean fields and tax savings for farmers who donate unharvested crops and reduce waste-removal fees for supermarkets and foodservice establishments. For example, if 5 percent of retail, foodservice, and consumer food losses in 1995 were recovered rather than discarded as solid waste, about $50 million dollars annually could be saved in solid waste disposal costs for landfills alone. If 10 percent of food losses were recovered, savings for landfill disposal costs would be about $90 million. These savings would increase to $200 million with a 25-percent recovery rate.

In addition, large amounts of labor, energy, and other inputs are dedicated to producing food. For example, ERS estimated total U.S. farm production expenses—including seed, fertilizer, and other inputs, and labor, machinery, and other operating expenditures—to be $180 billion in 1995. Food recovery and other loss reduction programs can make more efficient use of these resources by reducing the amount of food that goes to waste.

Food recovery, however, is not without cost. Recovery operations face a number of logistical and financial obstacles in the course of turning "lost" food into food suitable for consumption. At times, these obstacles are quite formidable. They include locating food donors and making them aware of organizations that channel donated food to the needy; obtaining financial resources for transporting, storing, and packaging donated foods; securing labor, whether paid or volunteer; and training those workers in safe food handling and preparation methods. Second Harvest, the Nation's largest domestic charitable hunger relief organization, spends more than $5 million annually transporting food from fields, restaurants, and supermarkets to local food banks that serve the needy.

Until recently, many potential food donors were reluctant to participate in food recovery efforts because they feared legal liability if someone were to become ill from eating their donated foods. The Bill Emerson Good Samaritan Food Donation Act, passed by Congress and signed into law by President Clinton in 1996, promotes food recovery by limiting the liability of food donors to instances of gross negligence or intentional misconduct. It also establishes basic nationwide uniform definitions pertaining to the donation and distribution of nutritious foods, which will ensure that donated foods meet all quality and labeling standards of Federal, State, and local laws and regulations.

FOOD WASTE RECYCLING AND BYPRODUCT USE

Technological advances in food processing and food byproduct development can reduce food loss. For example, many food parts that would have been discarded by food processors 10 years ago are finding new value in industrial raw materials or in other food products. These products include livestock feeds, biodiesel (a fuel made from vegetable oils and animal fats), adhesives and solvents derived from citrus oils, pharmaceutical products made from cow's and goat's milk, and juice products and vinegar made from apple peels.

The large volume of shells from raw eggs processed into liquid egg products, for instance, can be used as a source of calcium in poultry feed or as fertilizer. Eggs taken out of their shells by processing machines may also mean lower rates of processing loss, since up to 30 percent of the egg white can stay with the shell when shells from raw eggs are removed manually. Similarly, the introduction of frozen concentrated orange juice has reduced marketing losses for fresh fruit by enabling processors to use bruised or blemished fruit for juice and the nonjuice portions for cattle feed.

Current research on alternative uses for recycled food waste is focusing on animal feed and compost. For example, research is being conducted on the efficient extraction of food waste materials, known as wash water solids, from dairy processing plants. Extraction of these solids reduces waste disposal fees and results in additional income for dairy processors who sell the recovered material for animal feed.

Food waste can also be blended with other organic compounds, such as newspaper, and composted. The resulting organic material could be developed into a soil-conditioning product. Research is also being conducted on converting food waste into a biodegradable film similar to that used for plastic trash bags. The goal is to develop an organic film that would decompose rapidly and could be used in lawn waste composting operations.

CONSUMER EDUCATION AND ECONOMIC INCENTIVES

While food recovery and recycling technologies may help to utilize food that would otherwise be discarded, programs designed to prevent food loss in the first place may be particularly useful in reducing consumer and foodservice food losses. A number of programs are currently being implemented.

According to The Wall Street Journal, economic incentives are largely behind the Boston Market restaurant chain's recent adoption of a computer program that monitors food inventories. As menu items are sold and entered into the cash register, the program converts these items, such as cole slaw or mashed potatoes, into raw ingredients. At the end of each day, food inventories that remain in the kitchen are weighed and entered into the computer where they are compared with estimated food uses based on product sales. The difference between used and remaining inventories provides an instant estimate of preparation and storage losses. Since initiating the program, the chain's self-reported food loss has declined from 5 percent to 1 percent of food inventories.

Some local communities are successfully reducing food and other waste by requiring households and businesses to pay for solid waste disposal based on the amount of trash that they generate, usually by charging higher fees for each additional trash container used. According to the U.S. Environmental Protection Agency (EPA),

there are currently more than 2,000 such programs in place nationwide, with average reductions in household solid waste of 25 to 45 percent. A 1994 study conducted for the EPA reported that food accounted for about 8.5 percent of municipal solid waste collected from households and businesses.

Education programs that help consumers change their food discard behavior may also be effective in preventing food loss. For instance, educational programs that help meal planners determine appropriate portion sizes and distinguish between spoiled and safe food can help consumers reduce plate waste and better utilize leftovers. Improved meal planning and purchasing skills—including information that helps consumers understand the meaning of manufacturers' expiration codes, and "use-by" and "sell-by" dates—can reduce the discard of food items.

Government-sponsored initiatives, such as USDA's publication of A Citizen's Guide to Food Recovery, along with local efforts to train food recovery volunteers in the safe handling and preparation of rescued food, can increase the safety and efficiency of food recovery efforts. Recent legislation that reduces the liability of food donors has increased the amount of food recovered to feed the needy. Educational programs that increase the awareness of food loss by manufacturers, retailers, and consumers may reduce the amount of food loss and in turn the environmental and economic costs of waste disposal.

Over the long run, the reduction and recovery of uneaten food in the United States is a complex undertaking requiring the involvement of public and private institutions, as well as consumers. Efforts to reduce or prevent food loss must be balanced against the cost of conserving and recovering food. However, successful food recovery programs can provide many benefits to society which can offset a portion of these costs. Among other things, food recovery programs can help to reduce hunger; provide tax savings to farmers, food manufacturers, retailers, foodservice operators, and others that donate food; conserve landfill space; and lessen the costs and environmental impact of solid waste disposal. While our estimates of food loss lack precision, they identify an important issue in the food system that deserves closer attention.

FOOD RECOVERY EFFORTS REACH ACROSS MARKETING SYSTEM

A Citizen's Guide to Food Recovery.—USDA has recently published A Citizen's Guide to Food Recovery, a resource guide on food recovery programs for businesses, community-based organizations, private citizens, and local governments. The Guide is designed to support food recovery by showing communities, individuals, and businesses how to support existing food recovery efforts or to begin new programs in their communities. The Citizen's Guide and other sources of information about gleaning and food rescue efforts, including most of those listed below, are available free of charge by calling toll-free 1–800–GLEAN–IT or through the Internet at http://www.usda.gov/fcs/glean.htm.

In addition to creating the Citizen's Guide, USDA has taken a wide variety of steps to promote citizen service related to food recovery and gleaning:

Food Recovery Roundtables.—Secretary of Agriculture Dan Glickman has convened "round tables" around the country to bring together interested nonprofit groups, corporate leaders, social service agencies, and Government officials for collaborative action on food recovery.

AmeriCorps Summer of Gleaning.—In the Summer of 1996, as one part of its AmeriCorps program, USDA sponsored a special AmeriCorps "Summer of Gleaning" program that implemented 22 food recovery projects in 20 States. The program was based on the so-called "volunteer generator" model, in which a handful of compensated AmeriCorps members recruit volunteers to help implement large-scale tasks. The 88 AmeriCorps members in the summer program recruited over 1,600 volunteers who helped pick, sort, deliver, and prepare recovered foods.

USDA National Hunger Clearinghouse.—USDA has contracted with World Hunger Year, a national nonprofit organization, to develop the USDA National Hunger Clearinghouse. The Clearinghouse established a communications network and comprehensive database identifying all known organizations providing hunger and poverty-related services, particularly organizations supporting food recovery efforts.

Food Safety Training for Food Recovery.—USDA's Cooperative State Research, Education and Extension Service (CSREES), in conjunction with the Cooperative Extension System, is helping local hunger groups recover food safely. Nationwide outreach programs like Purdue University's Safe Food for the Hungry and S.T.R.E.T.C.H. (Safety, Training, Resources, and Education to Combat Hunger) teach food-assistance workers how to transport, store, and prepare food safely. They also show groups dedicated to feeding the hungry how to create nutritious meals from the most commonly donated foodstuffs and bulk supplies.

USDA's Food Safety and Inspection Service (FSIS) is working with the Chef and Child Foundation, the philanthropic arm of the American Culinary Federation, to expand food-safety training for people serving food to the needy at nonprofit feeding program sites, including soup kitchens and shelters.

National Collaboration of Youth.—USDA signed a Memorandum of Understanding with NCY, an umbrella group for such youth organizations as the Boy and Girl Scouts, Big Brothers/Big Sisters, YMCA of America, and the Boys and Girls Clubs. The agreement specifies how the over 40 million members of NCY organizations will be encouraged to volunteer to recover food.

Federal Cafeterias, Schools, and Farmers' Markets.—In conjunction with USDA efforts, the Washington cafeterias of the Department of Justice, the Department of Energy, and the Office of Personnel Management are donating excess food to the DC Central Kitchen in Washington, DC. The DC Central Kitchen plans and distributes 3,000 meals per day, 7 days a week, to 95 charity outlets across the Washington metropolitan area. The Kitchen is in part staffed by homeless workers 48 per year who receive 3 months of on-the-job training in food preparation and management from professional chefs who volunteer their skills.

USDA is also helping school districts in both the Washington, DC, and Wichita, KS, areas to involve students in community service activities related to fighting hunger and recovering food. USDA is also working with the nonprofit groups Rock & Wrap It Up! and FoodChain to help students recover food from the School Lunch Program, restaurants, and concerts.

In addition, USDA is helping to promote food recovery from farmers' markets nationwide, including markets held at Federal agencies.

Public Service Announcements.—USDA worked with the Fox Television Network to air a plot-related public service announcement on the television show Party of Five that promoted food recovery and provided viewers with the 1–800–GLEAN–IT telephone number to obtain the Citizen's Guide and other information about gleaning and food rescue.

National Summit on Food Recovery.—USDA, the Congressional Hunger Center, and the nonprofit groups Second Harvest and FoodChain will cosponsor a National Summit on Food Recovery, which will be modeled on President Clinton's Summit on America's Future. The Summit will bring together leaders from State, county, and city governments, Indian tribes, nonprofit organizations, religious groups, large corporations, and small businesses. All attendees will be asked to make specific commitments to increase food recovery prior to the event.

National Week of Food Recovery.—President Clinton will declare a National Week of Food Recovery, during which food recovery volunteer projects will occur nationally.

The Federal Government is not alone in its food recovery efforts. Foodservice operators, retailers, nonprofit organizations, and individual citizens are also involved.

FoodChain.—FoodChain is the Nation's largest network of prepared and perishable food rescue programs. It opened its doors in 1992 with a staff of one. Today, 116 member programs and 22 associate programs participate in FoodChain, distributing nearly 100 million pounds of food to some 7,000 social service agencies each year.

Foodservice.—Hundreds of nationwide and regional restaurant chains of various sizes, along with individual foodservice outlets, are channeling unsold food to local food recovery programs.

Second Harvest.—Second Harvest, the largest domestic hunger relief organization, rescued 811.3 million pounds of food in 1995 from going to waste by soliciting donations of food and grocery products from the Nation's food industry.

Society of Saint Andrew (SoSA).—The SoSA Gleaning Network has recovered more than 200 million pounds of fresh fruits and vegetables since its founding in 1979, and distributed them to food pantries and soup kitchens across the United States.

"Unsaleable" Food Products.—The food industry has developed a Joint Industry Task Force on Unsaleables to develop new strategies and incentives to improve the condition of dented, bruised, or otherwise damaged food products for food banks. These "unsaleables" are channeled through Product Reclamation Centers, which help retailers recover the food for organizations that assist the needy.

MEASURING FOOD LOSS: ABOUT THE ESTIMATES AND THE DATA

Food is lost at every stage of the U.S. marketing system. However, due to the enormous size and diversity of the American food industry, few studies estimate aggregate marketing losses across the entire food sector. Typically, researchers report food losses as a percentage of food servings, household food stocks, or retail inven-

tories at specific points in the marketing system, such as fresh fruit and vegetable losses in supermarket produce departments, household plate waste, or preparation and storage losses in foodservice operations.

In this study, food loss was estimated by applying these loss factors, gleaned from published studies and discussions with commodity experts, to the amount of food available for human consumption in the United States in 1995. Losses at the retail, foodservice, and consumer level were estimated for 260 individual foods, which were aggregated into the food groups listed in table 1. However, preharvest, on-the-farm, and farm-to-retail losses were not measured.

The amount of food available for human consumption was obtained from national food supply and utilization data, collected and published annually by USDA's Economic Research Service (ERS). These data measure flows from production to end uses of several hundred commodities. ERS commodity specialists construct supply and utilization data sets from a wide variety of sources within the Government and food industry. Food available for consumption is calculated as the difference between available commodity supplies (the sum of production, beginning stocks, and imports) and other uses (seed, feed, and industrial consumption, and exports). These components are either directly measurable or estimated by Government agencies using sampling and statistical techniques.

In this study, the amount of food available for consumption was estimated by adjusting these food supply estimates for the removal of nonedible food parts—peels, skins, bones, pits, and seeds. These adjustments were based on ERS conversion factors that account for processing, trimming, and other weight reductions that occur as raw agricultural commodities are made into semiprocessed and final food products available for consumption at the retail, household, and foodservice levels. These reductions ranged from 5 percent for fresh fruit to more than 30 percent for meat, poultry, and processed vegetables.

Limitations inherent in the food supply data suggest that the loss estimates for the consumer, retail, and foodservice sectors presented in table 1 understate total losses for most agricultural commodities. For example, the food supply data for dairy products measure the consumption of manufactured foods, such as ice cream, skim milk, and mozzarella cheese. As a result, the loss estimate for this group includes only the share of processed dairy foods lost to human use. It does not include the loss of raw milk that occurs earlier in the marketing system as the milk is shipped from the farm to the processing plant and used in manufacturing.

Also, estimates of retail, foodservice, and consumer food losses are likely understated due to limitations in the published studies on which these estimates were based. Food loss, particularly at the consumer level, is by nature difficult to measure accurately. Participants in household surveys on food waste, for example, tend to be highly "reactive"—changing their behavior during the survey period out of reluctance to acknowledge how much food they typically discard. Also, archeological examinations of household garbage may underestimate losses due to some food being fed to pets or being discarded in drains and garbage disposals. In addition, only a very limited number of studies, most of them conducted in school and university cafeterias, have successfully measured plate waste at the institutional and foodservice levels.

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TRANSPORTATION AND STORAGE

Ms. WATKINS. What we have done is that we have had opportunity, since the food recovery and gleaning summit that was held in September, to visit many gleaning centers and operations around the country and listen to the concerns that people are having. One of the things that we are finding is that 27 percent and sometimes greater amounts of food are being left in the fields and in other areas. Food banks and soup kitchens are having difficulty with transportation. They need some way to go in and recover those foods. Storage facilities and bins are another issue, as well as how do you get the food stored properly so it is safe and the handling done in the appropriate manner for those foods that are being gleaned.

It is our opinion that if we are to facilitate the removal of all of this food and make it so that it is accessible to food banks and soup kitchens and to other entities in the communities, that we provide seed money to communities to actually provide the infrastructure that they need for food recovery and gleaning.

We have heard people, even in the District, tell us that they would love to go out and glean the food, but they have no way to go out there to get it. They have no place to put it once it is returned. If you are gleaning perishable products, those products need to be stored in a safe and sanitary environment so that we would not have foodborne illnesses from food products that are recovered or gleaned.

PROGRAM AND FINANCIAL INTEGRITY

Senator COCHRAN. One other provision of the budget that caught my attention is the proposal for appropriating a $1.45 million increase over this year's level for program and financial integrity advancement. I noticed in your statement, in your comments too, that a new initiative is underway to try to crack down on abuse and fraud in the Food Stamp Program. This is an important undertaking and I commend you for that. I know that progress has been made in this area from meetings with the inspector general and looking at GAO audit reports. I think that is something we have to acknowledge and commend.

But my question is, what are you going to do with the additional $1.45 million requested when the Inspector General's Office is also proposing an increase for the same thing? What is the Service going to do with this additional money?

Ms. WATKINS. The Inspector General's Office makes recommendations that we are to follow through on various program integrity issues. We are unable to follow up on either the inspector general or GAO's recommendations because of the staffing situation.

We also have a need to provide technical assistance to both State and local personnel who are operating these programs. We need to make certain that we are providing people the appropriate and necessary means in which to operate a business. Mr. Chairman, I feel that we have a lot of work to do in that area, and we have not been able to do that. If we are going to maintain program integrity, it is critical that we help people in States and weed out the bad actors so that these programs are recognized as providing the benefits for those for whom they are critically needed.

This is a big business and I do not take that lightly. I think if we are operating almost a $40 billion operation, it has to be operated as a nutrition business.

PARTICIPATION IN FOOD STAMPS AND SCHOOL BREAKFAST

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman.

Madam Secretary, let me ask you. You have a proposal to expand food stamp benefits.

Well, first of all, the budget request assumes an additional 572,000 food stamp participants. Now, the number of participants has been declining, has it not?

Ms. WATKINS. The number has been declining, Senator Bumpers.

Senator BUMPERS. The breakfasts in the school lunchrooms has been increasing I understand.

Ms. WATKINS. That has been increasing.

Senator BUMPERS. Incidentally, what is the cause for that, do you know? Just more kids going to school?

Ms. WATKINS. The cause for the increase in the breakfast program?

Senator BUMPERS. Increase for breakfast.

Ms. WATKINS. Well, we are working aggressively with our State and local partners to increase those programs and providing access to those programs. So, that is why you would see an increase. We have seen an increase over the years in our breakfast program. As people understand the real benefits of the program, more and more school food authorities and educators are looking at that program as a viable opportunity for them to help children be ready to learn.

Senator BUMPERS. If somebody gets kicked off welfare and they go into a minimum wage job, their children are still eligible for those things, are they not?

Ms. WATKINS. They still are eligible for both the school nutrition programs and the WIC Program.

Senator BUMPERS. Now, Madam Secretary, the 572,000 increase in food stamp recipients, is that mostly illegals?

Ms. WATKINS. I am going to ask Yvette if she would answer your question, Senator Bumpers.

Ms. JACKSON. Illegal immigrants have never been eligible to participate in the Food Stamp Program. The President's proposal will not change that. Instead the President's proposal is to restore food stamp eligibility to certain categories of legal immigrants who lost eligibility as a result of——

Senator BUMPERS. Of legal immigrants?

Ms. JACKSON. Of legal immigrants.

Senator BUMPERS. The illegals have never been eligible for food stamps.

Ms. JACKSON. Illegals have never been eligible for food stamps. That is correct.

The category of legal immigrants that the President is proposing to restore benefits for includes families with children. We are anticipating that that would cover about 540,000 legal immigrants, also disabled and elderly immigrants who had their SSI and Medicaid restored as part of the Balanced Budget Act but not their food stamps. Also the proposal would extend the exemption for refugees from 5 to 7 years. That would affect an additional 105,000 legal immigrants.

So, the proposal is to restore benefits to certain categories of legal immigrants who lost their eligibility as a result of welfare reform.

ADMINISTRATIVE SAVINGS AND OFFSETS

Senator BUMPERS. Secretary Watkins, the administration proposal, their new initiatives. You are asking for $2.5 billion to implement those. Is that correct?

Ms. WATKINS. That is correct.

Senator BUMPERS. My question is, You list offsets to make up for that which are estimated at $1.2 to $1.4 billion. Staff tells me they think those are the same offsets that have been identified for funding of the agriculture research title. Is that correct?

Ms. WATKINS. Dennis?

Senator BUMPERS. My question is, If that is correct and the conferees to the research title use those savings for new research programs, do you have any alternative plans for how you are going to pick up that money? It looks to me like it is kind of a race for jurisdiction here, whoever meets first and uses those offsets. I think they are the same. Do you follow my question?

The administration is asking for $2.5 billion. You are saying that the savings required in other programs to achieve this is going to come from certain administrative savings totaling $1.2 to $1.4 billion. My question is, I think these are the same savings that have been targeted for offset as a part of the conference discussion in the agricultural research title. We cannot use those offsets in two places obviously.

Ms. WATKINS. I am going to ask Dennis Kaplan to address that.

Senator BUMPERS. He does not act like he wants to.

Ms. WATKINS. I know it. [Laughter.]

That is the reason why I thought I would tell him.

Senator BURNS. In fact, he wants to borrow your hardhat.

Mr. KAPLAN. They are the same offsets. It is the administration's position they ought to go to food stamps, and if the research bill conference comes out first, we are going to have to relook at the issue.

Senator BUMPERS. You are going to be looking for something else.

Mr. KAPLAN. Yes, sir.

Senator BUMPERS. Well, I thought that was the right answer.

FOOD STAMP PROGRAM AND WIC RESERVES

Madam Secretary, when was the last time we had a food stamp reserve that was triggered? You are asking for $1 billion reserve in the food stamp account, and my question is, When was the last time we triggered the reserve account? Mr. Kaplan, anybody?

Ms. WATKINS. Late 1970's.

Senator BUMPERS. Pardon?

Ms. WATKINS. More recent than late 1970's? Mr. Chairman, Senator Bumpers, let me get back to you on that.

Senator BUMPERS. That might be a place to find some of those offsets. I do not think you really need that reserve if you have not used it since the 1970's.

Ms. WATKINS. Let me get back with you. I am not sure that that is the correct answer, and I want to make sure I am giving you the right answer. I do not want to give you a wrong answer.

[The information follows:]

Fiscal year 1992 was the last time that the food stamp reserve was triggered. At that time, $0.9 billion of a $1.5 billion reserve was used to cover increased program participation.

Senator BUMPERS. OK.

While we are on reserves, I wanted to ask you about the WIC reserve. You are asking for what?

Ms. WATKINS. $20 million.

Senator BUMPERS. $75 to $100 million. How much are you asking for—just a moment.

What kind of carryover did we have in the WIC fund last year?

Ms. WATKINS. We had $150 million approximately last year in carryover/carryout.

Senator BUMPERS. And what do you anticipate this year?

Ms. WATKINS. $130 million.

Senator BUMPERS. $130 million?

Ms. WATKINS. Right.

Senator BUMPERS. Why do we always have this big carryover in the WIC Program?

Ms. WATKINS. Well, that was one of the things that I tried to explain in my oral presentation. One of the things that happens is that the States try very carefully not to overspend. At the same time it becomes very difficult for them, as they move through the year, not knowing how many actual participants they are going to have in that program. So, they try not to overspend, and as a result they end up sometimes at the end of the year with carryover money. These carryover funds can vary because of a wide variety of issues in a State. For example, they do not know what that food cost is going to be because of the manner in which the coupons and the checks are redeemed.

As someone said to me, it is not an exact science. It is a very, very cumbersome and a difficult process. So, they try not to overspend, and we want to make certain that we have adequate moneys in our carryover funding so that they serve the number that we have. They have moneys, but they are bound not to overspend. So, they are not going to overspend.

Senator BUMPERS. But you are asking for a $20 million reserve in the WIC.

Ms. WATKINS. That is right.

Senator BUMPERS. Senator Cochran and I are going to be desperate, when we sit down to mark this thing up, trying to find money because we are going to be way short, close to $1 billion.

Ms. WATKINS. It is very difficult for us to get the exact number in WIC State or local participants that we are going to have each month. If you cut it back, we would not be able to serve the 7.5 million that we estimate——

Senator BUMPERS. My guess is if you ran short in the WIC Program, we would have a second or a third supplemental in a New York minute because it is a very popular——

Ms. WATKINS. In a New York minute——

Senator BUMPERS. I do not think we are ever going to let WIC run out of money.

Ms. WATKINS. Well, the only problem, Senator Bumpers, is that sometimes we are criticized severely if we do not have the exact numbers and come back and ask for a supplemental. So, we take our bet on trying to have the money in advance, rather than have to come back to you and ask for a supplemental.

STUDIES AND EVALUATION TRANSFER

Senator BUMPERS. This next question is not the sexiest question in the world. My staff insists I ask it, so I will. [Laughter.]

In 1998 we transferred the studies and evaluation activities of the Food and Nutrition Service to the Economic Research Service. Now this year you are asking that it be transferred back. Why?

Ms. WATKINS. The administration asked that that money not be transferred initially, and it was. We are requesting that those funds be returned to FNS so that we can control the surveys, the research, and the studies that are done for those programs. They are program specific. ERS is an outstanding organization that is in the economic research service area. Their research expertise does not necessarily lie in the nutrition research area.

So, we think it is critically important that that area be returned back to FNS so that we also can request research and thereby make adequate program decisions. It is a little difficult for me to go to another mission area in another agency to request a variety of research that I need done if I am going to make solid management decisions. That is why the administration is requesting that those funds be returned to FNS.

Senator BUMPERS. I do not have any objection to that.

Ms. WATKINS. Thank you, Senator Bumpers.

Senator BUMPERS. I have a couple of questions that I will submit in writing, one probably on the WIC farmers' market, another one on TEFAP, another one on the WIC immunization program. That is something that I got started several years ago and I have been trying to monitor it as closely as I could to see how well it is working. When I go down and visit these conferences where CDC and the WIC administrators—they do not like each other very well or very much, but they have sort of made a peace. I think that program is working reasonably well, but I am still a little bit troubled about the role USDA has in that compared to CDC and so on.

ELECTRONIC BENEFIT TRANSFER CARDS AND FRAUD

But my final question to you this morning is on the EBT cards. For years some of us have thought that was going to be a panacea to fraud. Apparently you are still experiencing, in the 25 States that use EBT cards, close to a 10-percent fraud. Is that correct?

Ms. WATKINS. In that neighborhood, Senator Bumpers.

Senator BUMPERS. How does most of that occur? Does somebody just give their card to somebody else for money and they go in and buy the groceries?

Ms. WATKINS. Some of it. In some instances, that is the way it happens. Yvette may want to elaborate more on that.

Senator BUMPERS. Ms. Jackson?

Ms. JACKSON. EBT does not eliminate fraud. It gives us, for the very first time, an electronic tracking, a record, of every single transaction so that we can go back and identify suspicious or fraudulent activity that we never had the capacity to identify in the past. What we are able to do with EBT is to identify both the retailers who are committing fraud, as well as for the very first time the recipients who are also abusing their benefits. As a result, we are able to take swift action that we were only able to do in the past through actual onsite, undercover investigations. So, we think this is a tremendous tool for us.

We also have implemented an automated tracking system that provides us with profiles to help us identify suspicious activity with the help of a vendor. That computer system is available not only to the FNS staff, but it is also available to the Office of the Inspector General and available to States so that we can collectively work together in identifying and prosecuting food stamp fraud. Certainly this is above the capacity that we were able to do prior to EBT.

Senator BUMPERS. Ms. Jackson, do you save anything administratively? Do you save administrative expense with these cards?

First of all, how often do you send out a card to a recipient?

Ms. JACKSON. Most States are issuing a card one time. They do make replacements if the person should lose the card. One of the benefits of the card is that if a person should misplace or lose their card, it can be electronically deactivated immediately with no more than a phone call from the recipient. So, it is much more secure than the paper coupons.

We save Federal dollars because with EBT we are no longer dealing with the cost of printing, distribution, storing, and then the cost of ultimately destroying the coupons because they only get used one time. So, we have savings to the Federal Government in terms of the paper process.

We also reduce losses due to theft and loss of the coupons because, again, the card is more secure. Of course, as I said, it gives us a much, much better tool to identify and crack down on fraud.

Senator BUMPERS. Madam Secretary, you must be doing a good job. This subcommittee has jurisdiction over $57 billion and 70 percent of it is yours, and there are only three Senators here and not a single reporter. [Laughter.]

So, you must be doing OK.

Ms. WATKINS. Senator Bumpers, my goal is to stay out of the Washington Post. [Laughter.]

Senator BUMPERS. Well, if you were in my position, you would be trying to avoid subpoenas. [Laughter.]

I am the only person in Arkansas that has not been subpoenaed so far. [Laughter.]

Senator BURNS. We will see if we cannot take care of that this afternoon.

Senator BUMPERS. And I am knocking on wood.

Senator COCHRAN. Senator Burns.

Senator BURNS. Thank you very much, Mr. Chairman.

I want to continue on with the EBT card. I was around when we started that program, and I am very supportive of it.

I do not think you quite answered—went to length in Senator Bumpers' question. How is fraud committed with these cards?

Ms. JACKSON. Generally it is committed at the retailer site where there is collusion between the recipient who holds the card and the retailer. So, the retailer will swipe the card and input information that would indicate, for example, that they sold 100 dollars' worth of food, when, in fact, what they did was they gave $50 cash to the recipient and then came back, of course, and got reimbursed as if they had actually sold 100 dollars' worth of food. So, it is collusion between the person with the card and the retailer.

Senator BURNS. On that card is there a picture of the recipient, a personal picture just like a driver's license or something like that?

Ms. JACKSON. A photo is not required. It is allowed. Many States do not include the photo on the card because of the cost. However, the individual has to use the card in conjunction with a personal identification number so that they have to input that personal identification number in addition to presenting the card.

Senator BURNS. The only people that we had complaints from, Senator Bumpers, when we put the card in is it cost some people at the county courthouse because they did not have near as many people counting out stamps and storing the darned things. I just knew that it had to be a pretty fair program that needed to be looked into. So, I appreciate its continuing.

I think you are right. It probably does give you a better paper trail when fraud is committed when you have to identify the retailer or the merchant and the recipient.

Also, I want to just pledge my support in my county when I was commissioner in Yellowstone County, MT. My wife is a schoolteacher and it is unbelievable to me—of course, I was raised on a farm, so everything is unbelievable to me. [Laughter.]

The number of young people that go to school in the morning without breakfast. I will tell you in some schools in Yellowstone County, when we started feeding kids breakfast, all at once we have seen a different kind of student because I just do not think hungry kids learn. I am a bigger supporter of the breakfast than I am of lunch, to be right honest with you. I think it does more for the young person. But I cannot believe the amount of people that send their kids to school without breakfast.

Of course, I have always been very supportive of the WIC programs, and I believe in those a lot.

There are other areas I do not agree with you, but that does not make any difference. You stay out of that Washington Post and you will always be a hero to me. [Laughter.]

Thank you very much.

Is the card continuing to grow in acceptance in other States? Now, you have it in place in 25 States. I remember the pilot program started out in Baltimore and Cleveland and they had some troubles at first, but then they really got ironed out. So, you are doing a very good job.

Ms. JACKSON. We anticipate, Senator, that by the end of this calendar year over 50 percent of the food stamp caseload will be receiving their benefits electronically, and we do not anticipate any difficulty in States meeting the congressional mandate to have EBT nationwide by the year 2002.

Senator BURNS. Good enough.

I thank the chairman. I appreciate that very much.

Senator COCHRAN. Thank you, Senator Burns, for your contribution to the hearing and your helping the work of this committee. It is very important, and we appreciate it very much.

WIC FULL PARTICIPATION

Madam Secretary, there is an indication in the budget that we are trying to fund the WIC Program to achieve this level of full participation. I have heard that every year. We use it, and I try to convince Senators to support our appropriation figure based on our effort to achieve this longstanding goal of full participation.

Where do we get the 7.5 million we say is the full participation level? Is there any evidence that you know of that supports 7.5 million as the full participation level for the WIC Program?

Ms. WATKINS. Mr. Chairman, I am going to ask Ron Vogel to explain that for you.

Mr. VOGEL. Thank you. [Laughter.]

Senator, we believe, given the estimation methodologies that we use, that there are approximately 9 million people, women, infants, and children, in this country that are fully eligible for the WIC Program. That means they are both income eligible and demonstrate some form of nutritional risk. We believe, that of that number, it is reasonable to assume that about 7.5 million individuals on a monthly basis will avail themselves of WIC services. So, when we say that 7.5 million represents a fully funded program, we mean that is the number of people that we expect in any given month that would need the services of the program and seek those services.

Senator COCHRAN. That is good. I needed that because if I get asked that question, I did not know what I was going to say when I am managing the bill on the floor. So, I am fully armed now with an answer. Thank you.

WIC FOOD PACKAGE COSTS REDUCTIONS

Secretary Glickman in his prepared statement before the committee said that efforts continue to reduce the overall cost of WIC food packages, and he set that at 10 percent by 2002. That is his goal. Could you describe for us what the Food and Nutrition Service or your office is doing to achieve that goal? When did that effort

begin and what have we achieved up to this date to cut the overall cost of the package?

Ms. WATKINS. Mr. Chairman, one of the things that we are doing is working with States on their bidding practices. We are very proud of what States have done on the WIC food packages and reducing those costs. Obviously, as they reduce their food package cost, they are doing a variety of things at the State and the local level to reduce those costs. I am going to ask Ron to share some of the kinds of things that the agency has done over the past several years that will give you the indication of what those States have actually done in reducing those costs. Ron?

Mr. VOGEL. First of all, I would like to point out that that is a goal, in terms of reducing the food package costs by the year 2002 by 10 percent, that we have committed to and we will be working with our States to achieve that.

The kinds of things that we intend to do to try to meet that goal, Senator, is to continue to seek ways to reduce the cost of infant formula in the program. States have done a remarkable job to this point, but we believe there are still some additional things that can be done. To that extent, we intend to propose a rulemaking very shortly that we think will increase the savings in this area.

Likewise, we are going to be working with our State cooperators to improve vendor management. You are aware that, depending on the vendors that participate in this store, the food package costs can fluctuate significantly. So, we are working with our State cooperators to improve vendor management, and we will have two rulemakings that we are going to be proposing this year that will help States improve vendor management. We expect that that will also have an effect in reducing food package costs.

Of course, we always encourage States to look at ways to reduce the food package costs by emphasizing store brands and economical package sizing. States are very aggressive in this area, Senator, and given that the situation that confronts us with a tight budget situation in the years ahead, States will have to be more aggressive in looking at food package cost savings if they intend to expand participation.

Senator COCHRAN. Is competitive bidding one of the techniques?

Mr. VOGEL. Competitive bidding with respect to infant formula is required by law and all States are engaged in that practice. There are other States that on their own have engaged in competitive bidding for other foods, infant juices, infant cereals, and the State of Delaware actually competes their vendor positions on the program.

Senator COCHRAN. At the administration's request, we remember including that language in the appropriations bill, the legal authority to require the competitive bidding. I notice that you suggest that we ought to make that permanent law in our bill. There is a reauthorization bill coming down we understand, but we do not know when it is coming and what it is going to have in it.

Is that one of the things that you might consider putting in your bill that will be proposed by the administration to Congress?

Mr. VOGEL. There is already a requirement in existing law to competitively bid for infant formula. Our reauthorization proposal will suggest no other extension of that practice in maintaining WIC

food package costs, but we will have a rulemaking, as I indicated, so that we will regulatorily enhance the effectiveness of the competitive bidding for infant formula.

Senator COCHRAN. What is your expectation for presenting the reauthorization bill to Congress?

Ms. WATKINS. We would expect that you would have that before the day is over.

Senator COCHRAN. Wow.

Ms. WATKINS. We thought you were going to have it before I got here this morning. I was just going to give it to you, but we did not get the transmittal letter for the Secretary to sign before I left the office. So, we will do that as soon as we get back. You will have it before the day is over.

Senator COCHRAN. Could you tell us anything about what the impact is going to be if Congress approves your reauthorization request on the appropriations needs?

Ms. WATKINS. It is a cost neutral reauthorization package.

Senator COCHRAN. That sounds good. That means it is not going to cost any more than it would have if you had not asked for reauthorization. It is just going to cost the same as projected under current law.

Ms. WATKINS. That is exactly right. There are some differences in the out-year costs, but as balanced over the 5-year period, it is going to be cost neutral.

WIC ELECTRONIC TRANSFER PROGRAM

Senator COCHRAN. Tell me how the electronic benefit transfer program works in the WIC Program. I understand the Food Stamp Program. But when I was reading my notes in preparation for the hearing, I understand from your testimony that FNS is engaging in activities that complement the Food Stamp Program. I am not sure I understand what that means. "To advance electronic benefit transfer systems to improve program benefit delivery and client services for the WIC program." I did not know we had an EBT program for WIC.

Ms. WATKINS. We do have some pilots going on now in EBT for WIC that are very similar to the food stamp model. It will be very similar to that program.

Senator COCHRAN. Are there funds being used in this fiscal year's budget that we appropriate for this purpose, and have you included a request for next fiscal year for that program?

Ms. WATKINS. We have included funds for the 1999 budget in this budget year's request. There are some funds in there for States to implement the WIC EBT program, and we are working with those States that are doing the pilot currently.

Senator COCHRAN. I understand in your budget notes that you hope to increase the number of States to four that are going to be participating in that program. What States are they, do you know?

Ms. WATKINS. Do you want to give the name of the States, Ron?

Mr. VOGEL. The only State right now, Senator, that has an actual operative WIC EBT system is the State of Wyoming.

Senator COCHRAN. But there are not many WIC recipients out there either.

Mr. VOGEL. No, sir; there are not that many. But the technological challenges, therefore, are probably a lot greater for a State like Wyoming than they would be for a more populous State. We are pleased with what Wyoming has managed to accomplish here.

There are 10 other States, Maine, New Hampshire, Texas, New Mexico among those, that are close to putting a pilot version of WIC EBT into place. And that is really our goal, by the year 2002 is to have another three States join Wyoming in being able to deliver WIC benefits through an EBT system.

FOOD STAMP PROGRAM EMPLOYMENT AND TRAINING

Senator COCHRAN. There were some questions I was going to ask you that Senator Bumpers has already asked and there are other questions that I intend to submit and ask you to respond to for the record.

There is one question though that I do want to ask and that is about a request for $6.7 million for employment and training in the Food Stamp Program. I assume this means for recipients rather than administrators. What kind of employment and training program do you have going on that costs $6.7 million or that you hope to have going on?

Ms. WATKINS. Yvette is going to answer that for you.

Ms. JACKSON. I was confused because I was not aware that we were going after any additional money. It is just an inflation adjustor for fiscal year 1998. Basically in the Food Stamp Program, as part of the balanced budget agreement, additional funds were added to the Food Stamp Employment and Training Program to allow States to offer work slots to any able-bodied adult who is subject to the work requirement. That means that for anyone between the ages of 18 and 50 who is considered able-bodied, they can only receive food stamps for 3 months out of any 36-month period unless they are working 20 hours a week, involved in a workfare program, or in an employment and training program of 20 hours per week. So, we have a request from the balanced budget agreement that extends over a 5-year period to increase State employment and training funds to guarantee that anyone who is willing to work is given that opportunity in order to continue to be eligible for the food stamp programs.

Senator COCHRAN. Who gets the money? Do you contract this out or do the States contract it out? Do you manage the program? How does it work?

Ms. JACKSON. States use a combination. Many of them do contract out. Many of them are using other governmental and nonprofit organizations to act as work sites for workfare. We anticipate that most States will be creating workfare slots to offer work opportunities for their able-bodied adults.

Senator COCHRAN. You do not manage the program from here though. You let the States manage the program.

Ms. JACKSON. Yes; it is managed at the State level.

CNP REAUTHORIZATION

Senator COCHRAN. On the child nutrition programs, I understand that the reauthorization there will be cost neutral as well, improving operation and management, integrity of the national school

lunch and school breakfast programs, and the child and adult care food programs. Is that going to be included as a part of the overall package for reauthorization?

Ms. WATKINS. Yes, sir; it is.

NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE

Senator COCHRAN. What funding, if any, is included in the budget request for next year for the National Food Service Management Institute?

Ms. WATKINS. We have included $2 million. Let me just be sure that I have got that actual for you. We have asked for an additional $1 million for the Institute. They started out and they have had the same amount since its inception, and we asked for an additional $1 million this year, in addition to over $500,000 that we would provide to the Institute out of our team nutrition funding stream. That would be provided to the Institute.

In addition, we are looking at possibly using the Institute to do the training for food safety for our food service personnel in schools and child care facilities.

Senator COCHRAN. That sounds like a good idea to me, and I hope that we are able to get the funding approved to meet that request. This involves the handling and management of the food stuffs so as to lessen the likelihood of contamination and problems with respect to the school lunch programs and other feeding programs run by the schools.

Ms. WATKINS. That is exactly right, Mr. Chairman. One of the things we did a couple of years ago was to begin the process of developing food safety materials and food handling materials for school nutrition personnel. We have completed that handbook, but we did not have the resources in which to offer the training for the staff, and that is what the $2 million is for. Obviously, we want to look at areas where there are already instruments in place, people in place, facilities in place to actually do that training, and we would not do it from the Federal level. If we are going to do it, we think the best place to do it is through the Institute and working with States and local school nutrition staff.

SUBMITTED QUESTIONS

Senator COCHRAN. As I indicated, there are additional questions that we will submit for the record, and any elaboration on questions that we have asked you that you feel would be helpful to the committee, we encourage you to include as additional statements with that submission when you respond to our written questions.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD AND NUTRITION PROGRAM RESEARCH

Question. When signing the fiscal year 1998 Appropriations Act last November, the President noted his concern about the provision in the bill transferring funding for research on nutrition programs from the Food and Nutrition Service to the Economic Research Service. The President's fiscal year 1999 budget now proposes to restore this funding to the Food and Nutrition Service.

Why does the Administration believe that the Food and Nutrition Service can better oversee and administer these research funds?

Answer. The best place to house research responsibilities for food assistance programs is with the agency, the Food and Nutrition Service (FNS), that administers the programs. It is the proximity of research, program, and policy staff that ensures a research program that is practical and relevant to program operations and policy development. Housing the research function within FNS achieves the critical balance between independence and effective communication with the programs served, taking advantage of FNS' ongoing, operational relationship with State and local administrative agencies and other related Federal agencies.

In addition, the range of issues surrounding FNS programs is very broad. They demand techniques that go beyond typical economic analyses if we are to reliably address the concerns of Congress and States. We are often required to initiate new nationally representative data collection efforts as well as complex demonstration activities (such as those that established the viability of Electronic Benefit Transfer). While the Economic Research Service (ERS) is a capable research organization, the expertise to administer such activities has been developed over the years in FNS.

FNS has managed one of the strongest applied policy research programs in all of government with a proven track record of conducting research relevant to program needs. The time it would take to replicate this in ERS seems a poor use of government resources. Moreover, efforts to coordinate between ERS and FNS and its program cooperators seems to introduce an unnecessary complexity into USDA operational procedures.

Question. How has the Food and Nutrition Service been involved in the food assistance and nutrition research program being carried out by the Economic Research Service for fiscal year 1998?

Answer. The Food and Nutrition Service (FNS) entered into a working relationship with the Economic Research Service (ERS) shortly after the fiscal year 1998 appropriation was signed into law. Meetings to outline the terms of this relationship took place between the FNS Administrator, Associate Administrator, other senior FNS staff, and ERS leadership. There have been extensive briefings between FNS research and program staff and ERS research staff on FNS food assistance program operations and the Agency's policy information needs. We gave ERS a complete description of our research priorities for fiscal year 1998 and we have worked hard to respond to all of ERS' information needs. We have also given ERS extensive background materials on our previous research projects and the competitive contracting process, as well as appropriate staff points of contact within FNS.

Question. Is the fiscal year 1998 food assistance and nutrition research program reflective of the Food and Nutrition Service's priorities?

Answer. To help the Economic Research Service (ERS) start off in the right direction the Food and Nutrition Service (FNS) provided them with a detailed description of FNS' information needs. ERS is now in the final stages of preparing a plan of action. Indications are that they will initiate research on many, but not all, of our priority information needs.

It is too soon to tell whether the implementation of the research will remain practical and relevant to FNS program operations and policy development. When study funding and authority were located with FNS we were able to make mid-course adjustments quickly so that studies were able to reflect current FNS priorities while the effect on study budgets was minor. While the need to coordinate across agencies is a challenge, we expect to work closely with ERS to achieve the best results possible.

Question. What is the Economic Research Service doing specifically that the Food and Nutrition Service does not agree with or would do differently?

Answer. The Economic Research Service (ERS) put a lot of hard work into their response to our priorities and many aspects of it are good. The most significant area of disagreement concerns whether ERS is underinvesting in work of immediate relevance in favor of data development efforts that will not require funds until future years. Specifically:

1. Given the substantial policy interest in ensuring the success and measuring the consequences of welfare reform, the Food and Nutrition Service (FNS) would invest more in research aimed at helping States overcome potential barriers in creating work opportunities for persons subject to a three-month time limit on food stamp participation and at determining outcomes for the two groups most affected by new restrictions on eligibility for food stamps, legal immigrants and able-bodied adults without children. We are concerned that the approach taken by ERS as well as the funds budgeted may not be sufficient.

2. ERS' proposal was unable to pursue the full range of policy and program issues contemplated in our proposed study of the Summer Food Service Program. Recognizing that resource constraints often force difficult decisions, we have suggested that further discussion of the scope and scale of this study is warranted to ensure that it produces information of greatest relevance to FNS. We are urging ERS to focus on nutrient quality and the characteristics of program sponsors, sites and beneficiaries. No previous work has examined the nutrient quality of Summer Program meals; previous research efforts, albeit somewhat dated now, have dealt with the issue ERS intends to pursue (the characteristics of program sponsors and providers).

3. ERS proposed to allocate nearly twenty percent of their budget to data development. While FNS understands and supports ERS' interest in this area, we wonder if the resources proposed to expand survey samples in the future for the Continuing Survey of Food Intake of Individuals (where current plans call for the next round of data collection no earlier than fiscal year 2000) and the National Health and Nutrition Examination Survey might not be better used as described above as well as to support relevant analyses of recently released data from these surveys, which remain underutilized.

SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)

Question. The explanatory notes indicate that the Administration is seeking an increase of $145.5 million for fiscal year 1999 to "meet the long-standing bi-partisan commitment to funding in the WIC Program at a full participation level of 7.5 million."

Please summarize the methodology used to estimate the 7.5 million WIC "full participation" level.

Answer. The President's Budget proposes to fully fund the WIC Program and serve 7.5 million women, infants, and children throughout fiscal year 1999. The full funding participation level, providing adequate funding to serve all eligible persons who would choose to participate in WIC, has been assumed to be approximately 7.5 million persons for budget purposes for the past several years. This target was originally based on a budget estimate prepared in 1993 by the Congressional Budget Office. It is also consistent with the Food and Nutrition Service's (FNS) full participation estimate produced in 1996 using 1994 WIC eligibles data.

Previous estimates of full participation have assumed that, on average, approximately 80 percent of all persons fully-eligible for the program would participate. We now know that higher participation rates by the target population can be achieved. This is supported by the experience of the Food Stamp Program, where participation rates for families with children under 5 are over 90 percent, and the Aid to Families with Dependent Children (AFDC) program, where participation rates since 1990 have ranged from 82 percent to 86 percent.

Given that the estimated number of fully-eligible persons is 9 million, and that actual participation in WIC and other low-income assistance programs serving children exceeds the 80 percent previously assumed, a full funding participation target for fiscal year 1999 of 7.5 million remains reasonable and prudent.

The full participation estimate is based on the number of individuals who are income-eligible for WIC. First, the number of infants, and children income-eligible is taken directly from the most recent Current Population Survey (CPS). The number of pregnant women is estimated as 75 percent of the number of infants, taking into account the fact that women are only pregnant for 9 months out of a year. Postpartum and breastfeeding women are estimated as 37 percent and 17 percent, respectively, of income-eligible infants. These factors were empirically derived from analyses of 1990 Census data, and the 1988 National Maternal and Infant Health Survey (NMIHS). The result is the total number of women, infants, and children income-eligible for WIC. We estimate, based on 1996 data, that 11.1 million persons are income-eligible for the Program.

Second, the total number of women, infants and children income-eligible for WIC is used to estimate the number who are also at nutritional risk, and therefore fully eligible for WIC using factors derived from the National Health and Nutrition Survey II (NHANES II). Overall, we assume that approximately 4 out of 5 income-eligible persons are also at nutritional risk, which indicates that 9 million persons are fully eligible for the Program.

The third step is to estimate how many of those fully eligible would actually participate in the Program, assuming no funding constraints. As noted above, FNS previously arrived at an estimate of 7.5 million women, infants, and children, by combining the above methodology with the assumption that, on average, 80 percent of those fully eligible would choose to enroll in the Program. Since then, FNS has learned that a participation rate of 80 percent is likely to be low, based on the par-

ticipation rates for comparable types of individuals in the Food Stamp and AFDC Programs. Therefore, even though the estimated fully eligible population has declined somewhat in recent years, FNS has maintained constant its estimate of full participation at 7.5 million to account for increasing participation rates among those eligible. In the Food Stamp Program, the participation rate for families with children under 5 is over 90 percent. In the AFDC program, participation rates since 1990 have ranged from 82 percent to 86 percent.

A copy of USDA's most recent WIC eligibility update is provided for the record. [The information follows:]

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

ELIGIBILITY AND COVERAGE ESTIMATES 1996 UPDATE—U.S. AND OUTLYING AREAS

Overview

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a Federal-State nutrition and health assistance program for low-income childbearing women, infants and young children. To be eligible, an applicant must meet three basic criteria:

(1) *Categorical.*—Participants must be pregnant women, breastfeeding women up to 1 year after delivery, non-breastfeeding postpartum women up to 6 months after delivery, infants up to 12 months of age, or children up to their fifth birthday.

(2) *Income.*—The maximum income limit is 185 percent of the U.S. Poverty Guidelines (e.g., $29,693 for a family of four as of July 1, 1997). In addition, individuals are automatically considered income-eligible if they receive benefits under the Federal Medicaid, Aid to Families with Dependent Children (AFDC),[1] or the Food Stamp Program (FSP). Income limits for the AFDC and FSP are below the WIC income cutoff; however, in some cases, Medicaid serves persons over 185 percent of poverty.

(3) *Nutritional Risk.*—Participants must be certified to be at nutritional risk. Three major types of risk are recognized: medically based risk, such as anemia, underweight, maternal age, history of pregnancy complications or poor outcomes, etc.; diet-based risk—inadequate dietary patterns, as determined by 24-hour food recall or food-frequency analysis, and predisposing risk conditions, such as homelessness and migrancy.

1996 ESTIMATE OF WIC ELIGIBLE

[Numbers in thousands]

	Pregnant women	Postpartum and breastfeeding women	Infants	Children	Total
1995:					
Income eligible	1,300	931	1,748	7,313	11,292
Fully eligible	1,187	855	1,661	5,499	9,202
Participation (CY)	689	900	1,817	3,541	6,947
Coverage (CY) (percent)	58	105	109	64	75
1996:					
Income eligible	1,262	903	1,697	7,235	11,097
Fully eligible	1,148	822	1,612	5,426	9,009
Participation (CY)	712	963	1,835	3,769	7,279
Coverage (CY) (percent)	62	117	114	69	81

Estimates of persons eligible for the WIC program are used for several purposes. They provide an indication of the number of persons who would participate in WIC if funds were available. As such, the eligibles estimates are an important component in developing program budget estimates used in the President's budget request and

[1] The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104–193) replaced AFDC with the Temporary Assistance for Needy Families (TANF) program. TANF recipients will continue to be considered automatically income eligible for WIC as long as the income standards established by States for TANF are not less restrictive than those for AFDC.

the Congressional budget process. Finally, the eligibles estimates provide a basis for estimating program coverage that is, for determining what share of the eligible population the program is currently reaching. Based on the March 1997 Current Population Survey (CPS), FNS estimates that 9 million women, infants and children were fully eligible for the WIC Program in 1996, a 2 percent decrease from the number estimated eligible in 1995. A total of about 11.1 million women, infants and children fell below the WIC income eligibility limit in 1996, vs. an estimated 11.3 million in 1995.

Program Coverage

The decrease in the estimated number of WIC income-eligibles, combined with an increase in average monthly participation of over 300,000 for the calendar year, allowed overall program coverage to increase by six percentage points, from 75 percent in 1995 to 81 percent in 1996. This coverage estimate does not factor in increases in participation that have occurred since 1996.

Estimated coverage of pregnant women is approximately 62 percent for 1996. This represents the proportion of women at all stages of pregnancy who are participating in WIC. Because women are very unlikely to participate in WIC for a full 40 weeks of pregnancy, this rate should be expected to be significantly below 100 percent. For example, if all eligible pregnant women were to participate for six months of their pregnancy, the calculated participation rate would equal 65 percent.

Estimated coverage rates for infants and breastfeeding/postpartum women were over 100 percent in 1996. These extremely high coverage rates are likely attributable to some disparities between the methodology used to estimate income-eligibles and the certification practices in the WIC program, as well as the imprecision inherent in any survey-based estimate. Recent Medicaid expansion and income variability during pregnancy and the postpartum period may also be important factors. Newly available and ongoing research sponsored by USDA will provide additional information on these aspects of WIC participation dynamics. However, these data do strongly suggest that the program has likely achieved virtually full coverage of persons in these categories at the national level. Estimated coverage of children also rose substantially from 1995 to 1996, from 64 percent to 69 percent.

The estimate of 9 million WIC eligible persons in 1996 assumes that about 4 out of 5 income eligible persons are also at nutritional risk and thus fully eligible for the WIC Program. The estimates of pregnant, postpartum and breastfeeding women are based on the count of infants from the CPS and relationships found in the 1990 Decennial Census.

WIC Full Participation

The President's Budget proposes to fully fund the WIC Program and serve 7.5 million women, infants, and children throughout fiscal year 1999. The full funding participation level, providing adequate funding to serve all eligible persons who would choose to participate in WIC, has been assumed to be approximately 7.5 million persons for budget purposes for the past several years. This target was originally based on a budget estimate prepared in 1993 by the Congressional Budget Office. It is also consistent with the Food and Nutrition Service's (FNS) full participation estimate produced in 1996 using 1994 WIC eligibles data.

Previous estimates of full participation have assumed that, on average, approximately 80 percent of all persons fully-eligible for the program would participate. We now know that higher participation rates by the target population can be achieved. This is supported by the experience of the Food Stamp Program, where participation rates for families with children under 5 are over 90 percent, and the AFDC program, where participation rates since 1990 have ranged from 82 percent to 86 percent.

Given that the estimated number of fully-eligible persons exceeds 7.5 million, and actual participation in WIC and other low-income assistance programs serving children exceeds the 80 percent previously assumed, a full funding participation target for fiscal year 1999 of 7.5 million remains reasonable and prudent.

Question. Is this the same methodology that was used for the full participation estimates for each of the past 6 years (fiscal years 1993 through 1998)? If not, please describe the differences in the methodology and set of assumptions for the WIC full participation estimates used in each of these years and the reasons for those differences.

Answer. No, it has been revised. We have changed our assumptions about full participation in the absence of funding constraints.

In fiscal year 1993, the Food and Nutrition Service (FNS) estimated that 8.6 million persons were fully eligible for the WIC Program in 1991. This estimate was based on data from the 1992 Current Population Survey (CPS). While FNS did not

specifically estimate a full participation level that year, the participation target produced that year for the fiscal year 1995 budget was 7.5 million participants. This estimate was based in part on FNS' eligible analysis as well as a separate analysis produced by the Congressional Budget Office (CBO).

No WIC eligible or participation estimates were released in fiscal year 1994. In fiscal year 1995, FNS substantially revised its methodology for estimating the WIC eligible population. The major changes made were:

—To incorporate newly-released demographic data from the 1990 Census (previous estimates used 1980 Census information)

—To include an adjustment for the 1990 Census undercount.

In addition, FNS developed an explicit estimate of the number of persons who would participate if no funding constraints existed, i.e., if WIC were full-funded. This was based on an assumption that 80 percent of fully-eligible persons would participate.[1] Using this assumption, we estimated that 7.9 million persons would participate if funds were available, based on a fully-eligible estimate of 10.1 million persons.

In fiscal year 1996, using the same methodology as in fiscal year 1995, FNS estimated that 7.5 million persons would participate in a fully funded program, based on an estimated fully-eligible population of 9.4 million persons.

In fiscal year 1997, we estimated that the fully eligible population was 9.2 million, using the same methodology as the two previous fiscal years. However, we now know that participation rates higher than 80 percent can be achieved by the target population. This is supported by the experience of the Food Stamp Program, where participation rates for families with children under 5 are over 90 percent, and the Aid to Families with Dependent Children program, where participation rates since 1990 have ranged from 82 percent to 86 percent.

Our current estimate is that 9.0 million persons are fully eligible for WIC, based on 1996 data. Given that the estimated number of fully-eligible persons exceeds 7.5 million, and actual participation in WIC and other low-income assistance programs serving children exceeds the 80 percent previously assumed, a full funding participation target for fiscal year 1999 of 7.5 million remains reasonable and prudent. Thus, FNS has supported a participation target of 7.5 million in fiscal year 1999 and continues to do so.

Question. What would be the full participation levels for each of fiscal years 1998 and 1999 using the same methodology used for the fiscal year 1994 full participation estimate?

Answer. FNS typically has used the most recent WIC eligibles data to identify an appropriate participation target for the budget year. The agency does not project this eligibles data for future years. Thus, our 1999 budget target would be associated with 1996 eligibles data, and no separate estimate for 1998 exists. Our most recent available data indicate that 9 million women, infants, and children were fully eligible for WIC in 1996. Using the same methodology used for fiscal year 1994, including the assumption that 80 percent of fully eligible women, infants, and children would choose to participate yields a full participation estimate of 7.2 million for 1998 using 1996 income data. However, we now know that this estimate is low.

The President's Budget proposes to fully fund the WIC Program and serve 7.5 million women, infants, and children in fiscal year 1998 and fiscal year 1999. The full funding participation level, providing adequate funding to serve all eligible persons who would choose to participate in WIC, has been assumed to be approximately 7.5 million persons for budget purposes for the past several years. This target was originally based on a budget estimate prepared in 1993 by the Congressional Budget Office. It is also consistent with the Food and Nutrition Service's full participation estimate produced in 1996 using 1994 WIC eligibles data.

Previous estimates of full participation have assumed that, on average, approximately 80 percent of all persons fully-eligible for the program would participate. We now know that higher participation rates by the target population can be achieved. This is supported by the experience of the Food Stamp Program, where participation rates for families with children under 5 are over 90 percent, and the AFDC program, where participation rates since 1990 have ranged from 82 percent to 86 percent.

Given that the estimated number of fully-eligible persons exceeds 7.5 million, and actual participation in WIC and other low-income assistance programs serving children exceeds the 80 percent previously assumed, a full funding participation target for fiscal year 1999 of 7.5 million remains reasonable and prudent.

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[1] It was also assumed that a small portion of these participants would participate in the Commodity Supplemental Food Program (CSFP).

Question. Secretary Glickman indicated in his prepared testimony before this Committee that efforts continue to reduce the overall cost of WIC food package by 10 percent by 2002.

Please describe this effort. Are you seeking to reduce each part of the package—food costs and administrative expenses—by 10 percent? If no, why? When did this effort begin and what was the overall cost the WIC food package at the time (please give separate breakout of food and administrative cost portions of package). In other words, what are the base WIC package food and administrative cost levels from which the 10 percent reduction you hope to achieve by 2002 will be measured?

Answer. The proposal to reduce the cost of the WIC food package by 10 percent was introduced in the Food and Nutrition Service (FNS) submission to Congress regarding the Government Performance Review Act (GPRA) in fiscal year 1997. Although this is a new initiative, it is important to note that the fiscal year 1997 food package cost is just 0.5 percent higher than it was in fiscal year 1990 mainly due to the cost containment achievements of infant formula rebate contracts. During the same period inflation of the cost of the Thrifty Food Plan for a family of four, which is based on actual average retail food prices, was 21 percent.

FNS is in the process of preparing a WIC policy memorandum to State agencies that will reiterate the GPRA initiative to reduce the WIC food package by 10 percent by 2002. This correspondence will remind State agencies of the various methods they can employ to reduce WIC food costs without negatively impacting the nutritional integrity of the WIC food packages. For example, in addition to continuing WIC infant formula rebate contracts, State agencies could also enter into rebate contracts with manufacturers of other WIC foods such as cereals and juices. FNS has two rules in Departmental clearance now that will provide further guidance for States agencies. One rule addresses maximization of WIC infant formula rebate savings through use of contract bid criteria which should yield the greatest savings. The other rule addresses improvements in WIC vendor management which emphasizes selection of low-risk vendors and vendor training and monitoring methods useful in reducing fraud and loss prevention. In addition, the Department has facilitated cost-containment discussion sessions at several program management/integrity meetings and conferences to encourage State agencies to explore and pursue various methods of food cost containment. Most recently FNS co-sponsored with the National Association of WIC Directors the Electronic Benefits Transfer/Program Integrity Meeting in December 1997. This meeting featured a spokesperson from the General Accounting Office (GAO) who addressed GAO's recent study of how the WIC Program could lower its costs.

As explained in FNS instruction 804–1, State agencies also have the authority to make administrative adjustments in the WIC food packages for the purpose of cost containment that would affect the brands, types and forms, but not the prescribed quantities, of WIC foods. Quantities of WIC foods prescribed may only be adjusted on a case by case basis for nutritional reasons. For example, State agencies could limit WIC food selections on the basis of the lowest cost brands or store brands that generally cost less than national brands; lowest cost packaging of WIC foods; and, the lowest cost forms or alternatives within WIC food categories.

Question. Secretary Glickman also indicated in his testimony before this Committee that the Department is working with states to expand other promising cost control activities and is undertaking a series of management reforms to improve WIC program integrity.

Would you summarize the cost control activities and management reforms which have been implemented or are planned.

Answer. There are a number of measures that the Food and Nutrition Service (FNS) encourages States to employ to reduce their operating costs, and states continue to pursue others to the extent possible given their unique circumstances. States have used, both individually and in conjunction with other States, competitive bidding to attract rebate contracts from manufacturer of infant formula and, more recently, other WIC approved foods. Restrictions on the number of food retailers permitted to participate in the program has also helped hold costs in check for states. In addition, limiting authorized food selections has contributed sizably to containing food package costs.

FNS will continue to actively promote among States the adoption and expansion of any and all appropriate cost containment measures. One recent example of our effort to promote and propagate the adoption of various measures was the inclusion of several cost containment sessions at the FNS/National Association of WIC Directors (NAWD) co-sponsored National Program Integrity conference in December 1997. Specifically, one such session featured a spokesperson from the General Accounting Office (GAO) who addressed GAO's recent study of how the WIC Program could lower its costs.

One management reform recommended in GAO's study was ensuring state agencies are requiring participants to provide evidence that they reside in the states where they receive WIC benefits and provide identification when their eligibility is certified and when they receive food or food vouchers. To this end, the Department has issued a draft policy memorandum underscoring these state obligations and emphasizing their significance for ensuring the program's integrity. FNS has also issued draft policy which will make nutritional risk eligibility assessments more consistent from state to state.

In addition to the aforementioned policy and/or procedural reforms, the WIC Program has initiated the following program integrity assurance efforts over the last year.

Program Integrity Conference.—In December 1997, FNS co-sponsored with NAWD a national conference to focus States attention on the program's potential vulnerability to participant and/or employee fraud and abuse. State and local agency WIC staff were trained on ways to detect and prevent such abuses.

Program Integrity Profile.—FNS recently compiled data from a survey sent to states in 1997, requesting information on their integrity assurance policies and procedures, for the purpose of producing a National summary or profile of the many safeguards States employ to ensure program integrity. Thirty-one State agencies responded to the survey. FNS is currently seeking responses from the remaining State agencies so that a National program integrity profile can be produced.

Income Eligibility Assessment Study.—FNS has contracted for a WIC Participant Characteristic study to be performed, a portion of which will examine participant income levels to validate participant income eligibility.

Integrity Reporting System.—After working with states on revising their vendor data collection systems, the WIC Program expects to produce a more detailed and informative National vendor integrity monitoring profile in 1999. The annual profile report should better reflects the many vendor management and monitoring efforts of state agencies.

Infant Formula Rebate Rule.—This rule revises current regulations by requiring States to utilize the lowest net wholesale cost bid criteria, unless retail prices do not vary by more than 5 percent, as mandated in fiscal year 1998 appropriations language. In addition, this rule will ensure that infant formula rebate contracts are competitively bid.

Question. The WIC program is up for reauthorization this year. The prepared testimony indicates that the Administration will propose a cost-neutral reauthorization bill.

When will this legislative proposal be submitted to the Congress for consideration?

Answer. The legislative proposal was submitted on March 10, 1998.

Question. Would you please outline for the Committee the reforms/changes that the Administration will propose be made in the WIC program.

Answer. The Administration's proposal would:

—Eliminate authority allowing State agencies to spend forward food funds. These funds would be returned to the Department on the established schedule and then reallocated to those State agencies which have indicated that they would be able to use them by the end of the current fiscal year. These changes would make unused funds available for allocation to State agencies that can use them and would help reduce the level of program funds that are carried over into subsequent fiscal years.

—Allow State agencies to spend forward an additional 4 percent of unspent Nutrition Services and Administration (NSA) funds are for developmental costs of Electronic Benefit Transfer (EBT) with prior approval from the Food and Nutrition Service.

—Extend through fiscal year 2002 the authority to use unspent NSA funds, up to $10 million, to support infrastructure—including management information systems—breastfeeding promotion and support projects, and special grants to State agencies for projects with regional or national significance.

—Require State agencies to offer infant formula rebate contracts to the bidder offering the lowest net price unless the State agency demonstrates to the satisfaction of the Secretary that the weighted average retail price for different brands of formula in the State does not vary by more than five percent. This provision would codify a limitation found in the WIC appropriation in recent years.

—Require all applicants to present documentation of household income or of participation in one of the adjunctive programs—Medicaid, Food Stamps, or Temporary Assistance for Needy Families—at the time of certification. This change would strengthen and clarify the Department's authority to require State agencies to review income documentation when making initial income eligibility de-

terminations and increase overall program integrity and accountability. This provision would also require the Secretary to promulgate regulations governing when and how income verification would be required. State agencies currently have the option to verify income eligibility information. This proposal would not eliminate optional verification in addition to the verification requirement by the Secretary under this proposal.

—Require that individuals be physically present in order to be certified for program benefits. Most State agencies already require applicants to be present at certification. However, a few States certify applicants, especially children, solely on the basis of referral data presented by the parent/primary caregiver without the child's presence at the time that the application is made. This proposal would require that all applicants appear in person to be certified for WIC participation. While referral data can provide basic information by which nutritional risk can be determined, the competent professional authority should be able to observe the applicant for critical health or developmental problems, or situations of abuse not necessarily detectable exclusively through referral data from a clinic or other health care provider at the time of application. Physical presence can also facilitate the immediate delivery of important referral services—such as age-appropriate immunization—by the WIC local agency. Finally, physical presence guards against fraudulent certifications of nonexistent ("ghost") applicants, a problem identified by auditors in past years.

—Require permanent disqualification of WIC vendors who have been convicted of trafficking in WIC food instruments. This proposal would require State agencies to permanently disqualify, except in hardship situations, WIC vendors who have been convicted of trafficking in WIC food instruments, or of the sale of firearms, ammunition, explosives, or controlled substances—as defined in 21 U.S.C. 802—in exchange for WIC food instruments. Such disqualification would become effective upon receipt of the notice of disqualification. The vendor would not be entitled to compensation for any revenues lost, even if the disqualification is subsequently reversed through administrative or judicial review. Whenever the State agency identifies a hardship situation, the State agency would be required to assess a civil money penalty in lieu of disqualification. This proposal would ensure greater integrity in WIC vendor management.

—Allow WIC-developed nutrition education and breastfeeding promotion materials to be distributed at WIC expense to Commodity Supplemental Food Program (CSFP) State agencies. This proposal would allow nutrition education materials, including breastfeeding promotion materials, developed with WIC Federal funds to be provided in bulk quantity to State agencies administering the CSFP at no cost to the CSFP. This sharing would reduce duplication of effort, assure consistency of nutrition messages to similar populations, and represent a more cost-effective use of limited resources for the two programs.

Question. The WIC Directors Association recommends that USDA, in consultation with States and the Association, establish a national plan, including funding mechanisms, for WIC Management Information Systems development, WIC Electronic Benefit Transfer (EBT) pilot development, and for full implementation of these systems.

What is your view on the need for this plan?

Answer. The Department is planning a meeting with the National Association of WIC Directors (NAWD) and State representatives in the near future to further discuss Management Information Systems (MIS) and Electronic Benefit Transfer (EBT) system development issues, cost efficiencies, and funding support strategies. The Department is always eager and prepared to work with States and the NAWD on any plans affecting program performance.

Since 1990, the Food and Nutrition Service (FNS) has hosted four National meetings devoted to technology, the most recent being a meeting in December 1997 cohosted with NAWD. In 1993, the Department prepared a technology action plan which outlined three major goals as a road map to development of MIS including, system foundation, systems innovation, and system integrity. The Department has demonstrated its commitment to the area of technology for many years and has assigned MIS development a high priority when allocating regional discretionary funds and infrastructure grants. Since 1995, States have spent an average of approximately 45 percent of their infrastructure grants or a total of $12,155,962 on automated information systems. As a result of these initiatives and emphasis, all States and most Indian Tribal Organizations are automated and many are in the process of upgrading their systems. However, while we believe progress in this area has been substantial, there is need for more consistency in MIS system development across States.

In 1994 WIC issued an EBT vision statement jointly with the Food Stamp Program, which begins with the pledge that WIC and the Food Stamp Programs will work together to create user-friendly benefit delivery at food retail stores using EBT systems which are cost effective and efficient. WIC State agencies interested in pursuing EBT systems development have had to rely on competitive grants to help support development of pilot EBT projects. Since 1994, the WIC Program has had only one State, Wyoming, pilot an EBT system, and this was in one county of the State. Information gathered via this project has been helpful to some six other WIC States which plan to pilot EBT systems within the next 2 years. The WIC Program will be monitoring these States during this period and developing its overall plan for EBT, given the unique characteristics and requirements of the Program. To date, $6.7 million in Federal funding has been provided by FNS to 11 State agencies for EBT systems design, development, pilot implementation, and evaluation.

Question. Would you please summarize your current plans for the delivery of WIC benefits using EBT, and what funds are being used in fiscal year 1998 and included in your fiscal year 1999 budget for this purpose and where they are found.

Answer. The Food and Nutrition Service's (FNS) plans for the delivery of WIC benefits using Electronic Benefit Transfer (EBT), reflects WIC States plans for system development and implementation. In August 1997, FNS submitted four-year goals to the Vice President's Reinvention Impact Center Initiative which included an increase in the number of States issuing WIC electronic benefits from 1 in 1997, to 7 in 2000. Currently, there are at least seven States which are planning to pilot EBT systems before the year 2000.

In fiscal year 1998, FNS has earmarked about $3,200,000 of multi-purpose funds for EBT systems design and development. The Department fiscal year 1999 legislative proposal included a $10,000,000 line item for infrastructure funding, from which some support to States EBT development efforts would be drawn. Additionally, the Department has proposed legislation to permit States to spend up to 5 percent of their NSA grant for EBT systems design and development costs.

Question. Please summarize what success we are experiencing in the WIC program with (1) the promotion of breast feeding; (2) the delivery of nutritional services to WIC clients; and (3) increasing immunization services and coverage rates in conjunction with the Centers for Disease Control.

Answer. The following describes the successes we are experiencing in the WIC Program in these three areas:

Breastfeeding Promotion

WIC is making steady progress towards reaching the Surgeon General's goal to increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period, and to maintain at least 50 percent the proportion who continue breastfeeding until their babies are five to six months old. Nationally, WIC State agencies reported spending approximately $50 million last year on breastfeeding. These efforts are showing a positive trend in WIC breastfeeding rates.

The Department plans to begin gathering national data on actual incidence and duration of breastfeeding in the WIC Program from WIC State agencies in 1998. Past traditional sources of information have been the WIC monthly Financial Management and Participation Report and proprietary data from the Ross Laboratories Mothers Survey, the only source and duration information available. Based on the WIC monthly Financial Management and Participation Report, in 1996 an average of 292,273 breastfeeding women participated in the WIC Program each month, or 36 percent of the postpartum women served by WIC. Data from the 1995 Ross Survey indicated that of infants participating in WIC whose mothers responded to the survey, 46 percent were breastfed in the hospital, and nearly 13 percent were breastfed at 5 to 6 months.

The Ross data as well as other information suggest that WIC breastfeeding rates are growing, and are growing at a faster rate than non-participants. For example, the Ross data showed that between 1989 and 1995, the percentage of WIC mothers breastfeeding in the hospital increased by more than 36 percent, while the percentage of non-WIC mothers breastfeeding in the hospital increased 12.9 percent. Duration of breastfeeding among WIC participants is also increasing: the percentage of WIC infants breastfeeding at 6 months of age increased by 51.2 percent between 1989 and 1995. During the same period, the percent of non-WIC infants breastfeeding at 6 months increased 22.7 percent. We believe the substantial efforts directed at improving breastfeeding rates in WIC by Federal, State and local personnel are responsible for this encouraging trend.

State and local WIC Programs have implemented several different types of breastfeeding promotion initiatives that influence feeding choices aimed at the dif-

ferent audiences (e.g. women, their doctors, other health professionals, and family members). The major Federal initiatives are:

A Breastfeeding Promotion Consortium.—A consortium representing over 25 government, advocacy, and health professional organization that meets regularly to exchange ideas on how the Federal government and private health interests can work together to promote breastfeeding.

A National Breastfeeding Campaign.—A project being conducted by USDA in cooperation with Best Start Social Marketing, Inc. to increase the initiation and duration of breastfeeding among WIC participants based on social marketing research. Forty WIC State agencies are currently participating.

Physician Training.—Food and Nutrition Service (FNS) has cooperated with the department of Health and Human Services to provide training for physicians to increase their effectiveness in promoting breastfeeding among their patients.

A Physician's Breastfeeding Promotion Kit.—FNS is cooperating with Best Start and the Department of Health and Human Services to develop a kit with patient education and outreach materials to assist physicians.

Delivery of Nutritional Services

The WIC Program has repeatedly demonstrated its effectiveness in improving the nutritional status of low-income women, infants and children. Improved pregnancy outcomes, such as increased full-term gestations, higher birth weights and greater head circumferences in newborns, have been directly linked to the decrease in infant mortality in the United States. A recent study by Dr. Jean-Pierre Habicht of Cornell University, released in early March, indicates that household participation in the WIC Program has significant positive effects on the nutrient intake of preschool-aged children. Of the 15 nutrients examined in this study, WIC participation increased the intake of 10 of them, most notably iron and zinc.

Immunization Services

—Because WIC is the largest single point of access to primary health care services for low-income preschool children, there are many immunization studies, evaluations, and demonstrations in WIC clinics throughout the Nation. They range from the cost effectiveness of immunization assessment in WIC to validating the accuracy of manual versus automated immunization assessment tools. All show that collaboration and resource sharing between WIC and Immunization Programs improve the service delivery capacity and quality of both programs.

—Studies about the WIC and immunization linkage have been conducted by CDC in Chicago, Boston, and Chattanooga in 1995/96 (see attached abstracts). Each of these studies showed increases in immunization coverage rates among WIC participants. Increases ranged from 17 to 26 percentage points over baseline within 12 months of program implementation. These findings were reported by Walter Orenstein, MD, Director of CDC's National Immunization Program before the Subcommittee on Public Health and Safety of the Senate Committee on Labor and Human Resources.

—CDC, in conjunction with WIC State agencies, conducted demonstration projects in Chicago, New York, and San Antonio to determine the most effective methods of increasing access to immunization through the WIC Program. Data from these projects show that intensified collaboration and resource sharing between State/local WIC and Immunization Programs improve the service delivery capacity and quality of both programs.

—In Oregon, the Department of public Health has teamed with AmeriCorps VISTA's to provide assistance to the WIC and immunization programs. This assistance has enabled both programs to provide the best possible solutions to the immunization barriers in their area. The percentage of fully immunized children has risen dramatically in Oregon due to the involvement of these volunteers in immunization promotion activities in WIC.

—Outreach workers in Milwaukee make immunization reminder calls to WIC participants and the child is followed until the completion of the primary immunization series. In addition to outreach, six WIC sites have a special program that places the family on monthly food voucher pick-up if the WIC infant's immunizations are incomplete. Coordination with other outreach programs in Milwaukee decreases duplication of efforts and increases access to other resources. The project has reduced the number of children without immunization records up to 17 percent.

—In April 1996, seven Michigan WIC clinics pilot tested a WIC automated immunization assessment system. These sites found that the availability of an automated assessment system has drastically increased the number of WIC infants

and children receiving an immunization assessment and referral for needed vaccinations.

Question. The fiscal year 1999 budget proposes that permanent authority be granted to State agencies through the Appropriations Act to procure infant formula using competitive bidding systems based on the lowest net price. At the Administration's request, this language has been carried in the Appropriations Act for the past two years and is now the practice of State agencies. Why are you proposing to make this permanent law through the Appropriations Act rather than through the WIC reauthorization bill or by regulation?

Answer. As the Committee on Appropriations requested in report language, the Department is publishing a proposed regulation in April of 1998 with a final rule to be published September 1998, that will make permanent the requirement for State agencies to procure infant formula using competitive bidding systems based on lowest net price. We are also seeking permanent statutory authority in the reauthorization bill.

Question. The Appropriations bill is also carrying language requested by the Administration last year to grant the Secretary of Agriculture the discretion to allocate WIC funds recovered from the previous fiscal year outside the regulatory funding formula. The fiscal year 1999 budget requests that the Appropriations Act language be revised to allow the Secretary the discretion to provide a portion of WIC food funds to states to meet inflation, and a portion to states receiving less than their fair share of funds, unless the Secretary has published a revised funding formula regulation prior to the allocation of fiscal year 1999 funds.

Why isn't authority allowing the Secretary the discretion to allocate WIC funds outside the current regulatory formula being sought through the WIC reauthorization rather than the appropriations bill?

Answer. The Department is currently clearing a proposed regulation revising both the food and nutrition services and administration funding formulas. While we fully anticipate publishing a final rule prior to the allocation of fiscal year 1999 funds, we wanted a mechanism in place in the event the final rule is not published in time to allow the Secretary discretion in allocating the funds.

The appropriations bill has been used in the past for providing such discretion. We did not include this in our reauthorization bill because we do not anticipate needing this authority on a continuing basis once the funding formulas are revised.

Question. When does the Secretary plan to publish a new funding formula regulation for the WIC program? Is there reason to believe that this new regulation will be in force in time for use in the fiscal year 1999 funds allocation?

Answer. The Secretary anticipates publishing a proposed funding formula regulation in the Spring of 1998 and the final rule prior to the allocation of fiscal year 1999 funds.

Question. Can you tell us what revisions in the funding formula will be proposed?

Answer. The proposed WIC food funding formula will help to ensure food funds are allocated to States that can utilize the funds to maintain current participation as well as to direct additional funds, if available, to States that are serving a lesser proportion of their WIC eligible population as compared to other States. The proposed nutrition services and administration funding formula simplifies the funding formula by deleting obsolete components and will update existing components to more equitably distribute funding among WIC State agencies.

Question. Did the Secretary use the flexibility granted to him by the Appropriations Act to allocate fiscal year 1998 WIC funds to States? If not, why? If yes, how were the funds allocated, and provide a comparison of the amount each State received versus what the state would have received under the provisions of the current regulations.

Answer. The Secretary has not used the flexibility granted to him by the Appropriations Act. The Act provides the Secretary the authority to allocate funds recovered from fiscal year 1997 first to States to maintain stability funding levels, as defined by regulation, and then to give first priority for the allocation of any remaining funds to States whose funding is less than their fair share of funds, as defined by regulations, in such a manner as he deems appropriate. The allocation would be based on the State agency's ability to effectively utilize and manage the funds. It is estimated that the total available fiscal year 1998 funds will be adequate to bring States to stability funding and only a very small amount to fund States that have received less than their fair share of funds. Since there will be very little money available for those States receiving less than their fair share of funds, we do not anticipate that it will be necessary to utilize the provision.

Question. What is the difference between States' spend-forward and carryout?

Answer. State spend forward authority is authorized by law and allows States to retain a specified percent of unspent food and Nutrition Services and Administra-

tion (NSA) funds and utilize them in the subsequent year. These funds remain at the State level and can not be recovered by the Food and Nutrition Service. WIC carryout is the term used to refer to unspent recoverable food and NSA funds. These unspent funds are recovered from WIC State agencies and reallocated through the funding formula to those States eligible to receive additional funds.

Question. The participation estimates in the fiscal year 1999 budget assume that States will reduce their level of spend-forward in fiscal year 1998 from $50 million to $30 million. What evidence is there that this reduction in the projected spend-forward estimate will occur?

Answer. The fiscal year 1998 appropriations language directed the Department to recover fiscal year 1997 food spendforward funds for reallocation to States in fiscal year 1998 for maintenance of participation. Because these funds would be recovered and reallocated in fiscal year 1998, we expect States to spend a greater proportion of their total fiscal year 1998 funds to support participation in fiscal year 1998, thus reducing spendforward into fiscal year 1999 by at least $20 million.

Question. Please provide for the record for each of fiscal years 1989 through 1999 the actual/proposed WIC carryover and spend-forward balances from the previous fiscal year.

Answer. The information is provided for the record.

[The information follows:]

UNITED STATES DEPARTMENT OF AGRICULTURE, FOOD AND NUTRITION SERVICE
SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN

Fiscal year	Proposed total unspent recoverable and spendforward funds [1]	Actual unspent recoverable funds	Actual Spendforward funds	Actual total unspent recoverable and spendforward funds
1988–89	.....	$9,252,000	$18,893,644	$28,145,644
1989–90	.....	25,608,000	24,997,867	50,605,867
1990–91	.....	28,072,000	26,646,077	54,718,077
1991–92	.....	73,382,000	27,429,625	100,811,625
1992–93	.....	66,232,294	34,662,544	100,894,838
1993–94	.....	97,256,535	35,658,673	132,915,208
1994–95	.....	136,766,131	39,498,515	176,264,646
1995–96	$150,000,000	137,478,745	47,203,091	184,681,836
1996–97	245,000,000	121,623,106	63,411,766	185,034,872
1997–98 [2]	150,000,000	.....	.....	.....
1998–99	130,000,000	.....	.....	.....

[1] Total unspent recoverable and spendforward estimates based on the President's Budget Requests. These amounts are not available for fiscal years prior to 1995.

[2] Based on information provided by WIC State agencies as of February 1998, the actual amount of unspent recoverable and spendforward funds going from 1997 into 1998 will be $149,686,793.

Question. The fiscal year 1999 budget requests a $20 million WIC contingency fund to avoid participation reductions from unexpected food price increases. Last year, when a $100 million contingency fund was proposed, the Committee was told that the Administration had "not established a fixed technical approach" for determining the circumstances under which contingency funds would be spent. Can you now tell us under what circumstances contingency funds would be spent if the proposed reserve is approved?

Answer. The Department would spend the requested contingency funds to cover any unanticipated food price increases some State agencies may experience which would jeopardize their ability to maintain their caseload levels.

Question. Please provide detail on how the $10 million for WIC infrastructure, special projects, and breast feeding promotion/support is being used. Provide a list of specific projects funded and the amount provided for each for each of fiscal years 1996, 1997, and 1998.

Answer. The breakout of expenditures for the multi-purpose grants in fiscal years 1996, 1997, and 1998 is provided for the record.

[The information follows:]

FISCAL YEAR 1996 MULTI-PURPOSE GRANTS

The following table summarizes the breakout of expenditures for multi-purpose grants in fiscal year 1996:

Infrastructure grants to State agencies	$7,828,467
Special project grants to State agencies	1,811,533
Breastfeeding promotion and support and infrastructure	360,000
Total	10,000,000

To date, the Department has allocated a total of $7,828,467 to WIC State agencies for State-specific infrastructure grants to help support the overall goal of reaching more participants and providing quality program service. Each of our 7 regional offices received $1 million for allocation to WIC State agencies in January 1996 and an additional $828,467 was awarded in September 1996. A total of 45 WIC State agencies received infrastructure grants that were awarded on a competitive basis. The following table summarizes the breakout of the categories of how the funds are being expended.

Categories of infrastructure funds expenditures	*Total funds allocated*
Automated management information and integrated data systems	$2,505,270
Electronic benefit transfer (EBT) projects	1,629,237
Immunization data systems	129,885
Breastfeeding promotion and support	125,600
Management technologies and improvement of access to services	1,043,351
Facility renovation and non-ADP purchase	2,395,124
Total	7,828,467

The Food and Nutrition Service (FNS) awarded $1,766,324 to five State agencies to support special state projects in fiscal year 1996. These special state projects are of national or regional significance and are relevant to current WIC policy issues, designed to produce a demonstrable impact and be transferable to other WIC programs. The projects also suggest innovative or creative approaches to improving the delivery of WIC services. The following table summarizes fiscal year 1996 special project grants.

State agency/project	*Amount allocated* [1]
Arkansas: Methods for defining local clinic costs	$501,806
California: Evaluation of the effectiveness of nutrition education methodology	450,844
Minnesota: Develop/implement a store-based nutrition education strategy for high-risk participants	254,129
Missouri: Develop/implement nutrition education strategy for Farmer's Market Nutrition Program local agencies	256,706
Nebraska: Evaluation of integrated approach to grants management at the service delivery level	302,839
Total	1,766,324

[1] Funds in the amount of $45,209, the balance of the $1,811,533 special project grant funds, were utilized for technical support to State agencies for developing grant requests.

The final $360,000 of the $10 million total was used to support a variety of efforts to promote and support breastfeeding and infrastructure in the WIC Program. Several publications were developed and produced and other promotional efforts have been conducted, as well as coordination with and support of the Healthy Mothers/Healthy Babies Coalition's breastfeeding efforts.

FISCAL YEAR 1997 MULTI-PURPOSE GRANTS

The following table summarizes the breakout of expenditures for multi-purpose grants in fiscal year 1997:

Infrastructure grants to State agencies	$7,000,000
Special project grant to State agencies	2,000,000
Breastfeeding promotion and support and infrastructure projects	1,000,000
Total	10,000,000

To date, the Department has allocated a total of $7 million to WIC State agencies for state-specific infrastructure grants to help support the overall goal of providing quality program service. Each of our 7 regional offices received $1 million for allocation to WIC State agencies and grants were awarded to 33 State agencies on a competitive basis. The following table summarizes the breakout of the categories of how the funds will be expended.

Categories of funds expenditures	*Total funds allocated*
Automated management information and integrated data systems	$4,711,921
Electronic benefit transfer (EBT) projects	772,951
Service integration, coordination and co-location	166,700
Breastfeeding promotion and support	152,888
Management technologies and improvement of access to services	312,612
Facility renovation and non-ADP purchase	882,928
Total	7,000,000

FNS set aside $2.0 million to support special state projects in fiscal year 1997. FNS funded six special state projects of national or regional significance that are relevant to current WIC policy issues, designed to produce a demonstrable impact, be transferable to other WIC programs and suggest innovative or creative approaches to improving the delivery of WIC services.

State agency/project	*Amount*
Illinois: Feeding with Love: The Impact of Nutrition Education on the Bottle Feeding Habits of WIC Preschoolers	$182,111
Mississippi: Breastfeeding promotion and support	399,745
Montana: WIC/IDEA: Integrated data for evaluation and assessment	600,000
New York: Effects of WIC participation on children's growth and readiness to learn	215,198
North Carolina: A model for evaluating and monitoring the effectiveness of the WIC Program for children	508,808
Virginia: Distance training on community-based nutrition education for WIC professionals: Implementation and evaluation	94,133
Total	1,999,995

The final $1.0 million of the $10 million total is being used to support breastfeeding promotion and support activities and infrastructure projects of national significance, including Electronic Benefit Transfer projects. The utilization of these funds is being monitored to insure that the agency's goals are effectively addressed.

FISCAL YEAR 1998 MULTI-PURPOSE GRANTS

The following table summarizes the breakout of expenditures for multi-purpose grants in fiscal year 1998:

Infrastructure grants to State agencies	$3,675,000
Special project grant to State agencies	2,000,000
Breastfeeding promotion and support and infrastructure projects	1,125,000
EBT grants to State agencies	[1] 3,200,000
Total	10,000,000

[1] Estimated.

To date, the Department has approved for allocation a total of $3.675 million to WIC State agencies for state-specific infrastructure grants to help support the overall goal of providing quality program service. Each of our 7 regional offices received $525,000 for allocation to WIC State agencies and grants were awarded to 26 State agencies on a competitive basis. The following table summarizes the breakout of the categories of how the funds will be expended.

Categories of funds expenditures	*Total funds allocated*
Automated management information and integrated data systems	$1,887,503
Electronic benefit transfer (EBT) projects	475,735
Breastfeeding promotion and support	352,833

Categories of funds expenditures	*Total funds allocated*
Management technologies and improvement of access to services	467,158
Facility renovation and non-ADP purchase	491,771
Total	3,675,000

FNS has set aside $2.0 million to support special State projects in fiscal year 1998. As in fiscal year 1997, FNS will fund special State projects of National or Regional significance that are relevant to current WIC policy issues, designed to produce a demonstrable impact and be transferable to other WIC programs. The projects should also suggest innovative or creative approaches to improving the delivery of WIC services.

The final $4.325 million of the $10 million total will be used to support breastfeeding promotion and support activities and infrastructure projects of significance, including Electronic Benefit Transfer (EBT) projects. At this time, we anticipate approximately $3.2 million will be used to fund State EBT projects.

Question. Please provide monthly WIC participation levels, and food and administrative costs for fiscal year 1997 and for fiscal year 1998 to date.

Answer. Monthly WIC participation levels, and Food and Nutrition Services and Administration (NSA) costs for fiscal year 1997 and for fiscal year 1998 to date are provided for the record.

[The information follows:]

Fiscal year/month	Participation	Food cost per person	NSA cost per person
1997:			
October	7,485,231	$32.12	$11.65
November	7,419,915	31.54	9.02
December	7,287,742	33.06	13.43
January	7,500,710	32.23	9.61
February	7,442,551	31.15	11.01
March	7,448,023	31.69	12.28
April	7,449,767	31.14	11.94
May	7,385,190	30.77	9.46
June	7,367,474	30.45	8.24
July	7,378,422	30.68	13.10
August	7,346,892	31.39	13.16
September [1]	7,370,476	33.49	13.17
1998:			
October [1]	7,425,011	31.82	10.87
November [1]	7,292,317	32.22	8.77
December [1]	7,261,451	32.18	13.14

[1] Indicates these amounts are not yet final; obtained from preliminary State reports for months in which financial activity is not closed-out (verified and reconciled).

Question. Do you have any thoughts on how the WIC program could be improved to increase the nutrition of at-risk mothers and children?

Answer. The last review of the WIC food packages was completed in 1992. The Department's Center for Nutrition Policy and Promotion is conducting a current comprehensive review of the WIC food packages to determine if all of the nutritional aspects of the packages are still appropriate for the WIC population. This review will recommend refinements, if needed, that would best serve WIC Program objectives. The review will assure that the food packages are consistent with the Dietary Guidelines for Americans jointly published by USDA and DHHS in 1995, subsequent to the last WIC food package review. This review is expected to be completed by early summer. The Department is also issuing a policy memorandum to allow WIC State agencies greater flexibility in designing foods packages to that better accommodate food preferences.

The Department has also recognized that nutrition education for preschoolers has not been as prominent as that provided to women for themselves and their infants. Therefore, the Department has recently produced a nutrition educator's kit for children entitled Tickle Your Appetite. The kit is designed to communicate key nutrition messages to WIC preschool participants in WIC clinics, at home, and in communities. The lively video segments, catch songs, engaging lessons, and attractive handouts offer a variety of ways to effectively communicate with children and their

caregivers about nutrition. The Department is also conducting a National Breastfeeding Campaign with Best Start Social Marketing, Inc. to increase the initiation and duration of breastfeeding among WIC participants. In addition, a new publication has just been distributed entitled After You Deliver which contains sections on good nutrition, role/sources of folic acid in the diets of women of child-bearing age; and the benefits of breastfeeding to both mother and infant.

The Department will continue to develop and promote initiatives to educate WIC participants about nutrition and how it relates to their overall good health. Since WIC is supplemental, WIC will continue its efforts to refer participants to other nutrition sources such as the Food Stamp Program, National School Lunch and Breakfast Programs, Summer Food Service Program for Children, Child and Adult Care Food Program, and the Farmers' Market Nutrition Program.

Question. Has there been any evidence that there has been a decline in the amount of breakfast cereal consumed by WIC participants? Does this have any impact on the program's ability to increase the nutrition of at-risk mothers and children?

Answer. The Department does not collect data on cereal consumption by WIC participants. However, we are aware that there are more than 80 WIC-eligible cereals. Numerous WIC agencies also have submitted letters to USDA stating that the current number of cereals available to WIC participants provide them an adequate selection to meet their individual food preferences and nutritional needs. Therefore, there is no reason to believe that WIC participants are not eating the cereals they receive in their WIC food packages that deliver iron as one of the target nutrients.

Question. Is there any evidence that indicates that women decline to participate in the WIC program or that their consumption of nutritious breakfast foods decreases if the food package does not include branded products or preferred brands?

Answer. The Department does not have any data that addresses this question. However, the current selection of WIC cereals and juices, that includes both national brands and store brands, offers sufficient variety to provide broad appeal to participants. If the selection of WIC foods were severely restricted to only store brands, without including some National brand types, this limitation may impact participant usage. Like any other nutritious food, WIC foods can only benefit participants if they consume them. The ability to include several leading national brands as well as store brands helps to ensure that the majority of participant food preferences will be met.

Question. Are states trying to expand enrollments and broaden the definition of nutrition vulnerability while restricting food choices for WIC participants? If so, do you think this is a good idea?

Answer. WIC State agencies work hard to serve as many eligible applicants as possible within the funding levels that are allocated to them each year. By law, States are required under cost containment strategies to reduce food costs. At the same time, they must be mindful that WIC food packages maintain their appeal to participants in order to assure that they are consumed. While cost containment may result in placing some limitation on the brands of WIC foods that participants may obtain with their food instruments, the actual range of foods that comprise the prescribed WIC food package must continue to be available.

For example, of the 80 cereals that meet Federal regulations, a State might allow 10 of the less expensive yet still popular cereals from which WIC participants might choose, based on personal preference. All participants must have access to all food in the package—for example, for a pregnant women: cereal, juice, eggs, peanut butter, or beans, peas or lentils, milk, or cheese in lieu of some milk.

In addition, rather than broadening the definition of nutrition risk, the Food and Nutrition Service (FNS) (working closely with the National Association of WIC Directors) has just issued a draft WIC policy memorandum which when final, will make the criteria used to determine an applicant's nutrition risk status consistent from State to State, and will eliminate from use any nutrition risk criteria that are not supported by scientific documentation.

FNS will continue to initiate and support program improvements that empower WIC State agencies to target WIC program benefits to those with the greatest need, while making the most efficient use of available funds to serve as many eligible women, infants and children as possible without compromising the integrity or negatively impacting the credibility of the WIC Program overall.

Question. Is there evidence that young children who eat nutritious, healthy breakfasts continue these habits through their teenage years?

Answer. In order to determine that young children who eat nutritious, healthy breakfasts continue these habits through their teenage years data would have to be collected on the same group of children from early childhood through their teenage

years. The Food and Nutrition Service (FNS) is not aware of any such longitudinal study that has been conducted to date which focused particularly on breakfast.

However, a 1994 article published in the American Journal of Public Health does address general food choice behaviors in children. The article titled Longitudinal Tracking of Adolescent Smoking, Physical Activity, and Food Choice Behaviors was reviewed in Nutrition Education for School-Aged Children: A Review of Research released by FNS in 1994. According to FNS report the article concluded that "the children that are making poor food choices in early elementary grades are likely to be the children that are making poor food choices in junior and senior high."

Data that compares the prevalence of eating breakfast for younger students to that of older students is also available. The School Nutrition Dietary Assessment Study (SNDA), released in October 1993, found that younger students are more likely to eat breakfast than older students. After controlling for other characteristics, SNDA found that 94 percent of 6- to 10-year-old students eat breakfast, compared with 87 percent of 11- to 14-year-olds students, and 77 percent of 15- to 18-year-old students.

It is important to note that the SNDA data is cross-sectional and not longitudinal. The SNDA data did not track children's eating habits over time, it compared the eating habits' of children in different age groups at one point in time.

FNS is currently supporting a study of the National Center for Education Statistics to examine the relationship between children's nutritional status and their cognitive performance and school progress. This study will also examine the possible links of participation in school nutrition programs to learning in the early and middle elementary school years. This study is longitudinal and will track the same group of children's participation in the School Breakfast Program from when they are in kindergarten to when they are in fifth grade.

Question. When determining which infant formula manufacturer offers the lowest net price to the WIC program, FNS limits states to considering only those rebates offered on the traditional milk-based and soy-based formulas. This policy could discourage the use of innovative formulas that would provide infants with optimal nutritional value, and could impede the development and introduction of new formulas that can be used to meet specific dietary needs.

Isn't it in the best long-term interest of WIC infants and the program to encourage and properly account for any and all rebates paid on formulas used in the program?

Answer. It has always been a priority in the WIC Program that infants receive the infant formula that best meets their nutritional needs. It is the Department's belief that the nutritional needs of the vast majority of infants can be met by the infant formula product line offered by each infant formula manufacturer. As a result of expanded infant formula product lines, the Department is updating the current rebate regulations to address these new products to ensure rebates are maximized to the extent possible. The revised regulation will promote competitively-bid infant formula rebate contracts which will ensure contracts are awarded to the bidder with the lowest net price. This regulation will also ensure that infants continue to receive the infant formula that best meets their nutritional needs.

WIC FARMERS MARKET NUTRITION PROGRAM

Question. Why does the fiscal year 1999 budget propose to fund the WIC Farmers Market Nutrition Program through the Commodity Assistance Program rather than the WIC program? Why not simply request a change in the WIC account language to allow these funds to be allocated at the beginning of the fiscal year?

Answer. As you know, recent Agriculture Appropriations Acts have made FMNP funding available only if not needed to maintain WIC caseloads. The Department believes the FMNP is a valuable program and that its funding should not be contingent on maintenance of WIC participation. As such, the FMNP was placed in the commodity account in an effort to ensure that funding for the program is continued uninterrupted, and to clearly disassociate its funding from that of the WIC Program.

Question. Funding for the WIC Farmers Market Nutrition Program was increased from $6.75 million to $12 million for fiscal year 1998. I understand that this additional funding allowed five states to join the program. How was the funding increase allocated to expand the number of markets in States participating program versus bringing additional States into the program? How many requests were not met?

Answer. In accordance with the authorizing law, all current State agencies were first provided with a base grant amount equal to their previous year's funding level which totaled $7,494,721. After base amounts were satisfied, consistent with the law, remaining funds of $4.5 million were divided in a ratio of 75 percent for current States for expansion and 25 percent for new States that would like to begin a pro-

gram. These funds represent the level of opportunity for program growth and expansion through which more persons and more markets are able to participate in the program above last year's levels.

The amount of funds appropriated for the program was sufficient to satisfy the full funding requests of the five new States that were seeking to initiate the program. In addition, funding was sufficient to immediately fully satisfy the requests of all State agencies that were seeking expansion funding, except New York. New York requested almost $1 million, a substantially higher amount than requests of other State agencies. New York has been allocated $748,563 and will receive the balance of its funding request once we have completed the close-out process and recovered unspent funds from fiscal year 1997.

Question. Please provide detail for the record on how the additional funds were allocated, by state, and the requests from states which were not funded.

Answer. All State agencies received their full expansion requests except New York which received $748,563 of its requested amount of $930,668. A table showing Farmers' Market Nutrition Program Grants is provided for the record.

[The information follows:]

FMNP FISCAL YEAR 1998 GRANT AMOUNTS

State	Expansion request	Fiscal year 1998 base grant allocated	Expansion allocated	Total grant allocated
Alaska		$106,050		$106,050
Arkansas		140,000		140,000
California	$254,202	168,131	$254,202	422,333
Chickasaw, Ok		40,000		40,000
Connecticut	116,623	293,256	116,623	409,879
District of Columbia	53,600	163,267	53,600	216,867
Florida		129,759		129,759
Georgia		65,858		65,858
Illinois	70,066	116,600	70,066	186,666
Indiana	107,968	32,897	107,968	140,865
Iowa	130,125	412,981	130,125	543,106
Kentucky	21,618	86,382	21,618	108,000
Maine		103,686		103,686
Maryland	106,836	196,497	106,836	303,333
Massachusetts	141,198	529,040	141,198	670,238
Michigan	188,407	303,783	188,407	492,190
Minnesota	244,631	205,367	244,631	449,998
Missouri	129,568	31,173	129,568	160,741
Mississippi		55,767		55,767
MS Choctaw		10,121	715	10,836
New Hampshire		95,213		95,213
New Jersey	63,940	153,149	63,940	217,089
New Mexico	67,985	83,462	67,985	151,447
New York	930,668	1,617,332	748,563	2,365,895
North Carolina	295,244	124,756	295,244	420,000
Ohio	92,565	107,062	92,565	199,627
Oregon	84,886	55,114	84,886	140,000
Pennsylvania	357,194	758,192	357,194	1,115,386
Rhode Island	42,228	90,900	42,228	133,128
South Carolina		111,762		111,762
Texas	600,611	1,049,389	600,611	1,650,000
Vermont		74,676		74,676
Washington		151,472		151,472
West Virginia	1,985	68,015	1,985	70,000
Wisconsin	87,087	261,046	87,087	348,133
Total	4,189,235	7,746,105	4,007,845	12,000,000

Question. The fiscal year 1999 budget requests $15 million for the WIC Farmers' Market Nutrition Program, a $3 million increase from the fiscal year 1998 level. How will these additional funds be allocated?

Answer. In accordance with the authorizing law, we must first provide all current State agencies with a base grant amount that is equal to their previous year's funding level. After base amounts are satisfied, the law provides for any remaining funds to be divided in a ratio of 75 percent for current States for expansion and 25 percent for new States that would like to begin a program.

Question. How many WIC participants, by state, are currently receiving farmers market benefits through this program?

Answer. The information is submitted for the record.

[The information follows:]

Fiscal year 1997 WIC participants receiving farmers' market benefits

Alaska	(1)
Arkansas	(1)
California	10,991
Chickasaw, OK	2,119
Connecticut	38,481
District of Columbia	8,915
Florida	(1)
Georgia	(1)
Illinois	16,908
Indiana	12,842
Iowa	35,264
Kentucky	11,301
Maine	13,048
Maryland	21,850
Massachusetts	86,725
Michigan	20,884
Minnesota	23,690
Missouri	75,090
Mississippi	(1)
Choctaw, MS	681
New Hampshire	15,623
New Jersey	9,236
New Mexico	5,949
New York	232,930
North Carolina	13,832
Ohio	13,133
Oregon	19,393
Pennsylvania	95,834
Rhode Island	9,946
South Carolina	14,262
Texas	210,987
Vermont	4,351
Washington	26,058
West Virginia	4,985
Wisconsin	55,557
Total	1,110,865

[1] New State for fiscal year 1998.

Question. How many farmers markets, by state, have been established through this program?

Answer. We do not know how many farmers' markets have been established as a direct result of this program. We do know how many farmers' markets are participating by State, in the program and that information is provided for the record.

[The information follows:]

Fiscal year 1997 participating farmers' markets

Alaska	(1)
Arkansas	(1)
California	51
Chickasaw, OK	4
Connecticut	45
District of Columbia	2
Florida	(1)

Georgia	([1])
Illinois	6
Indiana	13
Iowa	69
Kentucky	22
Maine	53
Maryland	44
Massachusetts	97
Michigan	78
Minnesota	15
Missouri	3
Mississippi	([1])
Choctaw, MS	1
New Hampshire	29
New Jersey	38
New Mexico	8
New York	180
North Carolina	19
Ohio	34
Oregon	16
Pennsylvania	300
Rhode Island	7
South Carolina	22
Texas	40
Vermont	27
Washington	18
West Virginia	10
Wisconsin	15
Total	1,266

[1] New State for fiscal year 1998.

Question. What changes, if any, are you proposing be made in the WIC Farmers' Market Nutrition Program as part of the WIC program reauthorization?

Answer. We are proposing two changes as part of the reauthorization. They are:

1. Elimination of criteria for ranking new State Plans. This proposal would eliminate the legislatively-specified criteria for ranking new State Plans. Current law requires the Secretary to establish objective criteria for the approval and ranking of the Farmers' Market Nutrition Program (FMNP) State plans. The law also requires that certain factors, some of which are unclear and others that have become outdated, be considered in the ranking process. This proposal would continue to require the Secretary to establish objective criteria for ranking new State Plans, but would eliminate the specific factors currently stipulated for this process, thus enabling the Department to use more appropriate measures of a State's potential success in managing a program.

2. Revise the 30 percent match requirement to apply only to the administrative portion of FMNP costs, rather than to the total cost of the program. This proposal would revise the matching requirement for participating FMNP State agencies (currently 30 percent for geographic States and 10 percent for Indian Tribal Organizations (ITO's) with demonstrable financial hardship) so that it is applied only to the administrative portion of FMNP program costs, rather than to the total cost of the program. This revision would result in a reduced match amount for States and ITO's, and would be applied on a similar basis with the match requirement for other programs, such as the Food Stamp Program, that are administered by the Department through the Food and Nutrition Service. It will also enable more States to participate in the FMNP that have heretofore been unable to do so because they could not meet the larger match requirement.

FOOD RECOVERY AND GLEANING

Question. Would you please explain the program you propose—what it will achieve, who will be eligible for the funding and for what purposes, whether it requires legislative authority, how the funds for the program will be allocated, and how you will ensure these grants will enhance efforts rather than replace existing funding for states, local or nonprofit groups for existing efforts.

Answer. The basic idea of the program is provide a small amount of Federal seed money to non-profit groups, as well as State, local, and Tribal governments, to allow such entities to build the local infrastructures needed to dramatically expand the amount of excess yet wholesome food that is recovered and gleaned and distributed

to Americans in need. This assistance would allow entities to get new food recovery programs off the ground, as well as to expand the successful food recovery efforts that many organizations are already operating. We intend to require non-Federal matching funds for any project to which USDA provides Federal funds. We anticipate this Federal money will leverage a great deal of matching funds from the private, non-profit, and state and local governmental sectors. $20 million in Federal spending has the ability to generate the eventual donation of hundreds of millions of dollars worth of food. We are not seeking to create a large-scale Federal bureaucracy, but rather to empower community-based efforts and encourage community volunteerism.

In June of 1997, USDA released a study indicating that 96 billion pounds—or 27 percent—of the 356 billion pounds of food produced in this country each year is lost to human consumption at the retail and food service levels. In response to the study, USDA joined with key non-profit organizations in co-sponsoring the first-ever National Summit on Food Recovery and Gleaning—at which we jointly set a National goal of increasing the amount of food recovered by 33 percent by the year 2000. This would provide an additional 500 million pounds of food a year to feeding organizations. At a time when food banks across the Nation are reporting increasing need but decreasing donations, such a boost is vitally needed.

While community organizations are willing to bring significant resources of their own to aid food recovery—and while volunteers will provide much of the labor for such efforts—additional Federal assistance is needed to help these entities pay for vital items such as: vehicles and fuel to transport recovered and gleaned food; salaries for volunteer coordinators and training programs for volunteers; heating and refrigeration equipment to ensure food safety; printing for handbooks and instructional materials; equipment to harvest, sort, load, and process food; computer programs to match up donors to recipients; offices from which to operate; containers to hold the food, etc.

We anticipate that aid would be given out in the forms of grants, cooperative, agreements, and technical assistance. We do not believe that separate legislation is needed to give USDA authority to do so, however it would be necessary for the fiscal year 1999 Agriculture Appropriations Bill language to specifically state that USDA has the authority to "provide food recovery and gleaning-related grants, cooperative agreements, technical assistance, and other assistance to national and local non-profit groups, as well as State, local, and Tribal government agencies."

We are in the process of obtaining input from non-profit groups and from states about the details of how the program should be structured . We would also greatly welcome input from the Committee and other Members of Congress on this matter.

CENTER FOR NUTRITION POLICY AND PROMOTION

Question. The Administration transferred responsibilities of the Human Nutrition Information Service from the Agricultural Research Service to create the Center for Nutrition Policy and Promotion within the Food and Nutrition Service in 1994. The prepared testimony submitted to this Committee indicates that the Center is the "focal point" within USDA to promote the health of all Americans.

Please provide examples of how the Center, since its creation, has promoted good nutrition linking scientific research to the dietary needs of participants in each of USDA's food assistance programs.

Answer. The U.S. Department of Agriculture (USDA) established the Center for Nutrition Policy and Promotion to improve the nutritional health of all Americans, including participants in USDA's food assistance programs, by linking scientific research to the consumer.

The Center links scientific research with food assistance program participants and other consumers in several ways. One basic way it accomplishes this is by coordinating USDA's efforts to integrate information from scientific research with the nutrition education messages and implementation policies of the Center and other government agencies. Center staff study key scientific reports and other scientific literature, conduct consumer research in-house or by contract, and use the findings to develop consumer-oriented guidance materials. Some specific examples are described below.

The Center served as the lead within USDA to coordinate with HHS the review of the Report of the Dietary Guidelines Advisory Committee and the preparation of the 1995 Dietary Guidelines for Americans. Title III of the National Nutrition Monitoring and Related Research Act of 1990 (Public Law 101–445) requires that USDA and HHS update the dietary guidelines every five years. The Dietary Guidelines provide the best, most current advice from health and nutrition experts, based on the latest scientific research. They serve as the basis for Federal nutrition policy,

and are used in developing food and nutrition standards for nearly all food assistance programs, including the National School Lunch and Breakfast Programs; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Food Stamp Program, and the Child and Adult Care Food Program (CACFP).

The 1995 Dietary Guidelines were the first to include the Food Guide Pyramid graphic. The Food Guide Pyramid, released by USDA in 1992, is a tool that consumers can use to implement Dietary Guidelines recommendations in their own diets. The Pyramid graphically illustrates USDA's research-based food guidance system that translates nutrient recommendations into recommendations on food intakes, and provides a framework for selecting the kinds and amounts of foods to provide a nutritionally adequate diet. The Center is updating the research that supports the food guide to incorporate changes in food composition, food consumption, nutrition recommendations, and food technologies that have occurred since the original research was conducted. In addition, the Center has initiated development of a food guide pyramid adapted specifically for children from two to six years of age. As part of this effort, the Center has analyzed children's current diets and compared their food and nutrient intakes to Food Guide Pyramid recommendations. CNPP has also sponsored qualitative research with children, parents, and caregivers to obtain suggestions for prototype products and materials that would be useful for this audience. This adaptation of the Food Guide Pyramid for young children is anticipated to be widely used by participants in USDA's CACFP and WIC Programs.

The Food Guide Pyramid has already been used extensively by Federal agencies, including USDA, in nutrition education programs and materials. Many food assistance programs have developed and/or utilize materials that incorporate nutrition messages based on the Dietary Guidelines and the Food Guide Pyramid. Programs include the National School Lunch Program (through Team Nutrition and additional efforts), WIC, and the CACFP.

Other examples of Center projects that promote the health of participants in USDA's food assistance programs include the Healthy Eating Index (HEI), an aggregate measure of overall diet quality released by the Center in 1995. The HEI provides a picture of the foods people are eating, the amount of variety in the diet, and their compliance with specific dietary recommendations. The HEI report showed that the diets of most Americans need improvement; the average score was 64 of a possible 100 points. Follow-up analysis has shown that low-income individuals are more likely to have poor HEI scores, as are individuals from the teen years to middle adulthood. From this initial research, the Center plans to expand the use of the HEI by creating a "consumer-friendly" version of the HEI that will allow consumers to evaluate their own diets and identify behaviors that will improve their dietary status. Access to a summary measure of healthful eating will help consumers, particularly those participating in food assistance programs, to adopt dietary practices that will meet recommendations of the Dietary Guidelines for Americans and the Food Guide Pyramid. With minor modifications, the consumer-friendly HEI could also be used by States and localities to quickly monitor and assess the dietary status of their populations.

The Center is also responsible for the development of USDA food plans, including the Thrifty Food Plan (TFP) which serves as the nutritional basis for food stamp benefit levels. Currently the Center is updating the 1983 TFP to reflect current dietary guidance, including the 1995 Dietary Guidelines for Americans and the Food Guide Pyramid. Phase I of this update involves generating a market basket showing amounts of foods in different food groups that food stamp households can use to prepare a week's worth of nutritious, low-cost menus. Phase II, which has been initiated under contract with the Pennsylvania State University, involves testing sample menus based on the TFP market basket for overall acceptability with food stamp households. Results of this evaluation will provide valuable information that can be used in developing nutrition education materials for food stamp program participants and other low-income consumers.

Finally, the Center also conducts research and analysis related to the Personal Responsibility and Work Opportunity Act of 1996 (Public Law 104–193). Projects include:

STUDY OF THE USE OF FOOD STAMPS TO PURCHASE VITAMINS AND MINERALS

The Center has a lead role in a study of the use of Food Stamps to purchase vitamins and minerals. The Personal Responsibility and Work Opportunity Act of 1996 (Public Law 104–193) directs the U.S. Department of Agriculture to study the potential consequences of allowing the use of food stamps to purchase vitamins and minerals in consultation with the National Academy of Sciences, and the Center for Disease Control and Prevention. Along with the Food and Nutrition Service, the Center

is participating in this study and taking the lead in analyzing two major data sets: the Consumer Expenditure Survey of the Bureau of Labor Statistics and the USDA Continuing Survey of Food Intakes by Individuals to better understand the extent of purchases and the effect of these purchases on food expenditures and nutritional status. A third survey, NHANES III by the Centers for Disease Control is also being analyzed.

ESTIMATED IMPACTS OF WELFARE REFORM ON HOUSEHOLD FOOD EXPENDITURES, FOOD CONSUMPTION, AND NUTRITIONAL STATUS

Two Center studies conducted within the past year built on the economic and nutrition literature on the relationships among household food expenditures, food consumption, and nutritional status in different types of households to better understand the impact of potential changes in household income, food stamp receipt, and labor force participation. Representative households affected by welfare reform provisions were identified, their sources of income, food expenditures, and nutritional status as characterized by the Healthy Eating Index explored, and estimated changes were assessed. Results were disseminated in the form of two presentations and two papers at the American Agricultural Economics Association, and the American Statistical Association Annual Meetings. A third paper entitled "Maintaining Food and Nutrition Security: The Role of the Food Stamp Program and WIC" was submitted for publication in the Center's peer reviewed journal, the Family Economics and Nutrition Review.

WELFARE REFORM AND CHILD SUPPORT

Two additional studies conducted by the Center explored current policy relating to child support in the wake of Welfare Reform. The Child Support Enforcement Amendments of 1984, as well as the Family Support Act of 1988, emphasized the importance of enforcing child support measures given the large percentage of noncustodial parents who do not pay child support. Welfare reform continued and strengthened this theme. The studies compared Center estimates of the costs of raising children to state awards of child support and to actual child support payments in order to better understand the relationship between adequate awards and the poverty rate among single parent households with children as well as their participation in welfare programs. Results will be disseminated in two papers: "Child Care and Welfare Reform," and "Do Child Support Awards Cover the Cost of Raising Children?" to be published in the Spring/Summer 1998 issue of the Family Economics and Nutrition Review.

Question. Please provide examples of how the Center, since its creation, has promoted the health of all Americans through good nutrition linking scientific research to the dietary needs of the consumer.

Answer. The U.S. Department of Agriculture (USDA) established the Center for Nutrition Policy and Promotion (CNPP) in 1994 to provide a mechanism for improving the nutritional health of all Americans by linking nutrition research to the dietary needs of the consumer. Center staff develop integrated nutrition education, promotion and research programs for all consumers including, but not limited to, customers of food and nutrition assistance programs. Some specific examples of how the Center seeks to fulfill its mission are described below.

The Center is called upon by media, nutrition educators, and policy makers to provide leadership in developing, interpreting, and promoting Federal dietary and nutrition guidance. This guidance is currently embodied in the Dietary Guidelines for Americans and the Food Guide Pyramid. The Dietary Guidelines for Americans serve as the basis for Federal nutrition policy. They provide nutrition guidance for the general public, based on the preponderance of current scientific and medical knowledge. Title III of the National Nutrition Monitoring and Related Research Act of 1990 (Public Law 101–445) requires that USDA and the Department of Health and Human Services (HHS) update the dietary guidelines every five years. The Center served as the lead within USDA to coordinate with HHS the review of the Report of the Dietary Guidelines Advisory Committee and the preparation of the 1995 *Dietary Guidelines for Americans.*

In preparation for Dietary Guidelines 2000, the Center worked with the Agricultural Research Service and HHS during 1997 to prepare the charter to establish a Dietary Guidelines Advisory Committee. To assist the Committee in its deliberations, the Center is also coordinating production of a "basebook" of information analyzing current dietary patterns in light of the most recent dietary guidance.

The Food Guide Pyramid, released by USDA in 1992, is a tool that consumers can use to implement Dietary Guidelines recommendations in their own diets. The Pyramid graphically illustrates USDA's research-based food guidance system that trans-

lates nutrient recommendations into recommendations on food intakes, and provides a framework for selecting the kinds and amounts of foods to provide a nutritionally adequate diet. Because the process of providing science-based dietary guidance must be dynamic in order to stay current, the Center is updating the research that supports the food guide to incorporate changes in food composition, food consumption, nutrition recommendations, and food technologies that have occurred since the original research was conducted. In addition, in 1997 the Center developed a decision-making framework for revising the Food Guide Pyramid based on changes in dietary standards, using the newly released Dietary Reference Intakes for calcium and related nutrients.

Building upon recommendations from a 1996 working session focusing on the Dietary Guidelines and children, the Center has initiated development of a food guide pyramid and Pyramid-based nutrition messages specifically for children from two to six years of age. As part of this effort, the Center has conducted a comprehensive analysis to identify the target audience, and examined children's current food and nutrient intakes in light of existing Pyramid recommendations. CNPP has also held a series of discussions with leading nutrition educators on key behavioral and developmental factors in feeding young children, and sponsored qualitative research with children, parents, and caregivers to obtain suggestions for prototype products and materials that would be useful for this audience.

The Center vigorously promotes use of the Dietary Guidelines and the Food Guide Pyramid in all nutrition education programs within USDA and in the Federal and private sectors. The Dietary Guidelines Alliance represents one such effort. CNPP acts as a USDA liaison to this coalition of food industry, health, and government organizations that strives to assist consumers in putting the Dietary Guidelines into practice. In 1996, the Center participated in a presentation on the Alliance's consumer research findings related to reaching consumers with meaningful health messages. In 1997, the Center also initiated a popular factsheet series, "Nutrition Insights," to highlight dietary guidance issues with health professionals who work with the media and consumers. In addition, the Center has conducted a seminar series since 1995 to provide a forum for policy makers and professionals to discuss current nutrition research and policy issues.

The Center also responds directly to requests from the public. Specifically, during fiscal year 1997, the CNPP received 264 telephone calls from reporters, editors, and fact checkers; approximately 50 calls from television and radio producers; 15 from news services; 32 from book authors and publishers; some 60 advertising agencies and food companies; 70 professional nutrition and dietetic associations; 50 calls from universities/colleges; approximately 100 Federal and State agencies; 48 congressional offices; 8 international calls (research and government); and over 100 calls from the general public. The Center also received over 5,000 calls on its Publications Hot Line for publications. In addition, the Center's Internet website receives approximately 20,000 hits per week or the equivalent of over 1 million downloads per year.

Also, for the past three years since the Center for Nutrition Policy and Promotion was formed, the Center has sponsored a seminar series known as "Nutrition Issues for the 21st Century." The theme for last year's series was "Improving the American Diet Through Successful Nutrition Intervention." During the year the Center held six seminars where some of the Nation's leading experts in nutrition, diet, nutrition education and related fields spoke to a diverse audience of nutrition professionals, food industry representatives, Capitol Hill committee staff, advocacy organizations, and Federal policy makers.

The Center publishes and contributes to the peer reviewed quarterly journal, Family Economics and Nutrition Review, which is currently in its 55th year of publication. Publication of the Journal further contributes to the Center's mission to link research to the consumer by mainly reaching information multipliers in the fields of Family Economics, Extension, and Nutrition.

The Center participates in other Government efforts to improve the nutritional status of the population. For example, the Center contributed to the re-formulation of the Healthy People 2000 Objectives. It is also an active contributor to the Healthy People 2010 Objectives effort.

CNPP also provides leadership in research and analysis of food, nutrition, and economic data critical to national policy decisions. Projects include:

HEALTHY EATING INDEX PROJECT

In 1995, CNPP released the Healthy Eating Index (HEI), an aggregate measure of overall diet quality. This and follow-up activities are responsive to the mandates of Public Law 101–445, The National Nutrition Monitoring and Related Research

Act (7 U.S.C. 5301 et seq.), which directs the HHS and USDA to "improve the methodologies and technologies, including those suitable for use by States and localities, available for the assessment of nutritional and dietary status and trends;" and to "develop uniform standards and indicators for the assessment and monitoring of nutritional and dietary status, for relating food consumption patterns to nutritional and health status, and for use in the evaluation of Federal food and nutrition intervention programs;" (7 U.S.C. 5313, Sec. 103(b)6–7). The HEI used data from USDA's 1989–90 Continuing Survey of Food Intakes by Individuals (CSFII) to provide a picture of the foods people are eating, the degree of variety in the diet, and their compliance with specific dietary recommendations. In a press release, the HEI was hailed by the American Dietetic Association as "the most accurate measurement to date of how Americans eat." The HEI report showed that the diets of most Americans need improvement; the average score was 64 of a possible 100 points. Follow-up analysis has shown that low-income individuals are more likely to have poor HEI scores, as are individuals from the teen years to middle adulthood. Because the HEI is based on data from CSFII, updates are possible only when that data set becomes available. USDA's Agricultural Research Service collected CSFII data for 1994, 1995 and 1996. Center staff are in the process of producing updates to the HEI for those three years.

PROJECT TO DETERMINE EXPENDITURES ON CHILDREN BY FAMILIES

Since 1960, the U.S. Department of Agriculture has provided estimates of food and other major expenditures (housing, clothing, etc.) on children from birth through age 17 by husband-wife and single-parent households. The expense estimates are provided by age of child, family income, and region of residence. The most recent estimates are based on the 1990–1992 Consumer Expenditures Survey updated to 1997 costs using the Consumer Price Index for various budgetary components. The 1997 update of the average percentage of household expenditures attributable to children in husband-wife households reflects a 2–3 percent increase. For the overall United States, child-rearing expense estimates ranged between $8,060 and $9,170 per year for a child in a two-child, married-couple family in the middle income group. The report, Expenditures on Children By Families, is updated annually. Results are used in developing State child support guidelines and foster care payments to help ensure that children receive an adequate standard of living. A survey by the American Public Welfare Association found that approximately half the States in the U.S. used the results in setting foster care payments.

PROJECT TO MAINTAIN AND UPDATE THE NATIONAL FOOD SUPPLY DATABASE MANAGEMENT SYSTEM AND TO PUBLISH UPDATED NUTRIENT CONTENT OF THE U.S. FOOD SUPPLY

The Center publishes periodically a report on food supply nutrient per capita estimates, and is responsive to food supply activities specified in the Ten Year Comprehensive Plan for the National Nutrition Monitoring and Related Research Program of the National Nutrition Monitoring and Related Research Act (7 U.S.C. 5301 et seq.). The newest Update of the Nutrient Content of the U.S. Food Supply was published in October 1997. Future work will involve updates of the food supply fortification files to be more reflective of current fortification of such commodities as cereal products, fruit juices and drinks, and milk-based meal replacements. In addition, plans are to improve per capita estimates of edible offals, and low-fat or fat reduced commodities.

Question. Please explain how the Center links scientific research, including research conducted by federal agencies (e.g., Department of Health and Human Services' agencies such as NIH and CDC, the FDA, and USDA's research agencies, including the Human Nutrition Centers of the Agricultural Research Service) to the dietary needs of the consumer and uses that information to promote the health of all Americans. Please explain how this information is transmitted directly to Americans.

Answer. The Center works with USDA's Agricultural Research Service (ARS) and the Department of Health and Human Services (HHS) to produce Nutrition and Your Health: Dietary Guidelines for Americans. Title III of the National Nutrition Monitoring and Related Research Act of 1990 (7 U.S.C. 5341) requires the Secretaries of Agriculture and HHS to jointly publish every five years a report entitled, Dietary Guidelines for Americans. The Dietary Guidelines represent the Federal Government's policy on nutrition. They provide nutritional and dietary information and guidelines for the general public, based on the preponderance of current scientific and medical knowledge, including research originating from ARS and HHS. In 1997, the Center worked with ARS to develop and finalize a Memorandum of Understand-

ing with HHS to provide a framework for cooperation between USDA and HHS for preparing the fifth edition of Nutrition and Your Health: Dietary Guidelines for Americans to be released in the year 2000. The Center vigorously promotes use of the Dietary Guidelines in all nutrition education programs within the Department and in the Federal and private sectors. The Center has made copies of the bulletin Nutrition and Your Health: Dietary Guidelines for Americans available to consumers via the Consumer Information Center in Pueblo, Colorado and over the Internet. The Center initiated a popular fact sheet series, Nutrition Insights, targeted to nutrition and media professionals. The series is designed to respond in a timely manner to consumer confusion over "junk science" or other current issues, based on Federal dietary guidance. Center staff also build Federal dietary guidance principles into speeches, articles, and numerous interviews with the popular press on Dietary Guidelines concepts.

The fourth edition of Nutrition and Your Health: Dietary Guidelines for Americans, released in 1995, included the Food Guide Pyramid graphic for the first time. The Food Guide Pyramid was developed by USDA and released in 1992 as a tool that consumers can use to implement Dietary Guidelines recommendations in their own diets. The Food Guide Pyramid has been extensively used by Federal Agencies in nutrition education programs and materials. The Food Guide Pyramid brochure is available to consumers via the Government Printing Office and over the Internet. A recent survey of consumers by the American Dietetic Association found that about 70 percent of respondents are familiar with the Food Guide Pyramid graphic. The Center is continually updating the science base that supports the Food Guide Pyramid, to incorporate significant changes in food composition, food consumption, and food technology, as well as changes in nutrition recommendations such as the new Dietary Reference Intakes being issued by the National Academy of Sciences' Food and Nutrition Board.

The Center serves as Acting Chair of and provides staff for the Dietary Guidance Working Group (DGWG) of the Human Nutrition Coordinating Committee. The Center's leadership fulfills USDA's responsibility to ensure that the Federal Government "speaks with one voice" when issuing dietary guidance, as mandated by Title III of the National Nutrition Monitoring and Related Research Act of 1990. The DGWG reviews all USDA and HHS publications and materials that contain dietary guidance for the general population to ensure consistency with the Dietary Guidelines for Americans. In fiscal year 1997, fifteen draft publications produced by USDA and DHHS Agencies were reviewed.

The Center is a liaison member of the Dietary Guidelines Alliance. The Alliance is a coalition of food industry, health organizations, and government agencies to help consumers implement the Dietary Guidelines. The Alliance is an example of how the Center has been able to extend its limited resources to promote the Dietary Guidelines. The Alliance represents a unique public-private partnership to improve the dietary behavior of Americans. The messages and materials developed through the partnership will be used by health professionals, industry, and government in education, counseling, and communications initiatives.

Question. The fiscal year 1999 budget requests an additional $252,000 to support the Publication of the Dietary Guidelines for Americans, which the law requires USDA and the Department of Health and Human Services (HHS) to publish every five years. How does USDA and HHS share this cost? And, which USDA agency was responsible for the cost of publishing Dietary Guidelines for Americans in each of the past years it was published (prior to the creation of the Center)?

Answer. The cost of publishing the Dietary Guidelines for Americans can be broken down into two categories. The first category is the cost of reviewing research and completing supporting documents for the Dietary Guidelines Advisory Committee (DGAC) and publishing the Committee's report. The DGAC is a panel of eleven nationally-recognized experts in nutrition and health. Authority for the Committee is provided by 42 U.S.C. 217A, Section 222, of the Public Service Act, as amended. Committee members serve without pay, but do receive reimbursement for travel and per diem. This cost has been shared between USDA and HHS, with each Department alternating in taking the lead responsibility for these expenses. For example, in 1995 HHS was primarily responsible for these costs, and for the 2000 DGAC, USDA will bear the primary responsibility for these costs.

The second category is the cost of publishing and distributing the consumer bulletin, Nutrition and Your Health: Dietary Guidelines for Americans. This cost has always been primarily borne by USDA, with HHS contributing funds by riding the print order for the bulletin. In 1980, 1985, and 1990, USDA's Human Nutrition Information Service paid for this cost. In 1995, the Center for Nutrition Policy and Promotion paid for this cost, as it will do again in 2000.

In 1995, the costs for design and printing of the bulletin were approximately $115,000. The Center is requesting $252,000 in additional funds for fiscal year 1999 to support development and publication of the Dietary Guidelines bulletin because additional consumer research is essential before the next edition of the Dietary Guidelines is released. There has been little research conducted to assess consumer understanding and perceived usefulness of the Dietary Guidelines bulletin since the mid-1980's. The 1995 DGAC specifically requested in its report that the Departments gather information about consumer understanding of the Dietary Guidelines messages prior to convening the next DGAC. The Center has requested funds to conduct a comprehensive study to focus on: (1) a thorough review of the available research data and information on consumer understanding and use of the bulletin and Dietary Guidelines concepts; (2) telephone interviews with nutrition educators to assess uses of the Dietary Guidelines concepts and the 1995 bulletin; and (3) market research with consumers. Results of this research will be made available to the next DGAC and will also be used by the Center in its nutrition guidance efforts.

Question. Please explain the U.S. Action Plan on Food Security which I understand is being developed by the Center for Nutrition Policy and Promotion.

Answer. The domestic section of the U.S. Action Plan is being jointly developed by Under Secretary for Food, Nutrition, and Consumer Services, and the Assistant Secretary for Health of the Department of Health and Human Services (HHS). A technical working group is co-chaired by a USDA representative from the Center for Nutrition Policy and Promotion and a HHS representative and includes representation from the Department of Veterans Affairs, Bureau of Indian Affairs, Census Bureau, Bureau of Labor Statistics, Administration on Aging, Environmental Protection Agency and other agencies. The domestic section of the Plan builds on the Center's September 1996 report, Nutrition Action Themes for the United States, and the World Food Summit's Declaration and Plan of Action adopted in Rome in November 1996. The papers in the Plan are for discussion purposes and draw views from the Federal government, States, and private entities. The Action Plan presents no new government commitments and is to be completed by Spring, 1998.

Question. I understand that the Center for Nutrition Policy and Promotion has been assigned the responsibility of redesigning the Food Stamp Program Thrifty Food Plan. Please explain this effort and, if it requires any funding, whether these costs are being borne by the Center or the Food Stamp Program and why.

Answer. The Center is responsible for the development of the USDA food plans, including the Thrifty Food Plan (TFP) which serves as the nutritional basis for food stamp benefit levels. The TFP specifies quantities of different types of food that households may use to provide nutritious meals and snacks at relatively low cost. Currently, the 1983 TFP Market Basket is used as the basis of the food stamp allotment and its cost is updated each year for inflation. The Center is updating the 1983 TFP to reflect current food in the market place and current dietary guidance including dietary recommendations for total fat, saturated fat, and cholesterol. An interagency working group consists of representatives of the Center, the Food and Nutrition Service (FNS), and the Economic Research Service (ERS) was convened and met periodically to provide overall guidance.

Phase I of the revision uses a mathematical programming model and incorporates current dietary guidance along with information on current consumption patterns to generate, a market basket providing the foods with which a low cost nutritious menu can be prepared.

Phase II utilizes these market basket foods to develop two weeks of household menus. To this end, CNPP nutritionists and economists are working with researchers from Penn State University to test whether it is feasible to produce menus and recipes that meet the nutritional and costs constraints of a revised TFP and, at the same time, are acceptable to the intended audience. In particular, the researchers have developed several recipes, tested them in a food laboratory for sensory acceptability and incorporated them into one-week menus. The menus and recipes for one week are currently being tested for overall acceptability with 4 food stamp households. It is anticipated that additional menus should be completed in the next few months at which time they will also be field tested.

The TFP revision is scheduled for completion in fiscal year 1998. Most costs are borne by the Center which (as its predecessors) has been charged with this responsibility. Contract costs of $169,481 to support the Penn State University work and a $50,000 transfer of funds to ERS to develop a price data base needed for the update of the TFP were borne by FNS, even though the Center directed these subprojects.

Question. Please provide a separate object class breakdown for each of fiscal years 1997, 1998 and 1999 for the Food and Nutrition Service food program administration account, and, separately, for the Center for Nutrition Policy and Promotion.

Answer. The information is provided for the record.
[The information follows:]

FOOD AND NUTRITION SERVICE—CLASSIFICATION BY OBJECTS

[1997 and estimated 1998 and 1999]

		1997	1998	1999
	Personnel compensation:			
11	Total personnel compensation	76,341	76,939	79,278
12	Personnel benefits	14,805	14,923	15,371
13	Benefits for former personnel	57	58	59
	Total pers. comp. and benefits	91,203	91,920	94,708
	Other objects:			
21	Travel	2,422	2,577	2,814
22	Transportation of things	135	144	157
23.1	Rent payments to GSA	.....	.....	.....
23.2	Rental payments to others	307	326	357
23.3	Communications, utilities, and misc. charges	1,828	1,945	2,123
24	Printing and reproduction	258	274	300
25.1	Advisory and assistance services	2	2	2
25.2	Other services	4,056	4,313	4,711
25.3	Purchase of goods and services from Government accounts	1,044	1,111	1,212
25.4	Operation and maintenance of facilities	295	314	342
25.5	Research and development contracts	.....	.....	.....
25.7	Operation and maintenance of equip	574	611	667
26	Supplies and materials	1,361	1,448	1,582
31	Equipment	2,409	2,563	2,797
41	Grants, subsidies and contributions	.....	.....	.....
42	Insurance claims and indemnities	57	62	67
43	Interest and dividends	8	9	9
	Total other objects	14,756	15,699	17,140
	Total direct obligations	105,959	107,619	111,848

CENTER FOR AND NUTRITION POLICY AND PROMOTION—CLASSIFICATION BY OBJECTS

[1997 and estimated 1998 and 1999]

		1997	1998	1999
	Personnel compensation:			
11	Total personnel compensation	1,648	1,648	1,685
12	Personnel benefits	379	379	385
13	Benefits for former personnel	.....	.....	.....
	Total pers. comp. and benefits	2,027	2,027	2,070
	Other objects:			
21	Travel	20	20	20
22	Transportation of things	2	2	2
23.1	Rent payments to GSA	.....	.....	.....
23.2	Rental payments to others	.....	.....	.....
23.3	Communications, utilities, and misc. charges	8	8	8
24	Printing and reproduction	91	91	91
25.1	Advisory and assistance services	.....	.....	.....
25.2	Other services	36	36	317

CENTER FOR AND NUTRITION POLICY AND PROMOTION—CLASSIFICATION BY OBJECTS—Continued

[1997 and estimated 1998 and 1999]

		1997	1998	1999
25.3	Purchase of goods and services from Government accounts	.....	.....	.....
25.4	Operation and maintenance of facilities	.....	.....	.....
25.5	Research and development contracts	.....	.....	.....
25.7	Operation and maintenance of equipment	.....	.....	.....
26	Supplies and materials	11	11	11
31	Equipment	23	23	23
41	Grants, subsidies and contributions	.....	.....	.....
42	Insurance claims and indemnities	.....	.....	.....
43	Interest and dividends	.....	.....	.....
	Total other objects	191	191	472
	Total direct obligations	2,218	2,218	2,542

FOOD STAMP PROGRAM

Question. Would you please give us a summary report on the progress we've made to date with the electronic benefits transfer (EBT) delivery of Food Stamps—what we've achieved; what problems, if any, we've encountered; and when you expect the rest of the states to implement EBT Food Stamp delivery systems.

Answer. Currently, there are 30 States with operating Electronic Benefit Transfer (EBT) systems and 16 of these systems are Statewide. Approximately 43 percent of all Food Stamp Program benefits are now delivered through EBT systems. If all State plans are met, we expect there to be 41 States (including the District of Columbia) with operating EBT systems by the end of fiscal year 1998. We also expect to meet the legislative mandate to have all States operating EBT systems by October 1, 2002.

As States move forward and implement their EBT systems, they have benefited from those States that have gone before them, and implementation has become more routine. Nevertheless, a substantial effort is still required of any State to actually get these systems up and running. Issues each State must continue to address include achieving cost neutrality while providing satisfactory service to their recipients, and entering into agreements with the food retailers in their State that are mutually satisfactory to both the State and the retailers.

Question. The fiscal year 1999 request for the Food Stamp Program includes $6.7 million for employment and training. What success have we had with Food Stamp Program employment and training activities?

Answer. The $6.7 million increase is to cover basic inflation that State's Food Stamp Employment and Training (E&T) Programs will experience in fiscal year 1999.

Federal E&T funding was fixed at $75 million a year through fiscal year 1996. Funding in fiscal year 1997 increased to $79 million and then in fiscal year 1998 to $212 million to meet the challenges of the Balanced Budget Act. States have generally chosen to serve as many recipients as possible through the relatively low cost job search component. Annually, this has resulted in over 1 million recipients being asked to take responsibility in seeking employment in order to participate in the Food Stamp Program.

Question. In each of the past three fiscal years, and in fiscal year 1998 to date, how many Food Stamp recipients have been trained and employed? What has been the cost per participant of these activities?

Answer. A table is provided for the record that depicts the number of mandatory and volunteer participants placed into Food Stamp Employment and Training (E&T) Program activities. The cost per participant figure represents total Federal 100 percent E&T grant expenditures, plus total Federal and State administrative expenditures over and above the 100 percent grant, divided by the number of participants. The fiscal year 1998 numbers are taken from preliminary first quarter data (October, November, December 1997).

[The information follows:]

Fiscal year	Participants	Cost per participant
1995	1,474,796	$143
1996	1,377,148	163
1997	1,221,219	164
1998	252,825	154

While most of the above E&T participation includes job search, the Food and Nutrition Service does not collect information on the outcome of the job search activity.

Question. The prepared testimony indicates that the Administration will submit a proposal to reclassify claims against food stamp recipients for erroneous benefit issuances as State debt rather than Federal debt. You indicate that this proposal will be cost-neutral in the immediate future but, if States respond to proposed incentives, collections may be substantially increased in the long run. What response would be necessary from the States and what level of collections could be achieved in the out-years?

Answer. We are working on the details of a proposal to enhance state incentives to collect food stamp claims. The proposed incentives allow certain States to retain an increased share of collected claims. Some States would be rewarded for improved claims collections. Other States with exceptionally high claims collection rates would also be rewarded. It is reasonable to expect that States will respond to the opportunity to retain a higher share of collections by increasing their claims collections efforts.

However, at this point the incentive plan is structured so that incentives are paid only if total collections increase from the base year. Thus, there is no risk to the Federal government if claims collection increases fail to materialize. On the other hand, if States do increase their claims collection efforts and successfully collect a higher share of their overissuance, both the States and the Federal government share in the increased collections.

This proposal is still under development within the Administration so some of its features may change as additional discussion takes place.

CHILD NUTRITION PROGRAMS

Question. Secretary Watkins, you indicate that you will be submitting cost-neutral legislation to reauthorize the Child Nutrition programs, which will include proposals to improve the operation, management and integrity of the National School Lunch and School Breakfast Programs, and the Child and Adult Care Food Programs. Please summarize your major proposals to improve the operation, management and integrity of these programs.

Answer. The Department's reauthorization legislation submitted to the Congress on March 10, 1998 contains a number of proposals which would improve the management and integrity of these programs. First, State agencies would be given the authority to retain up to one-half of the funds recovered in State conducted audits or reviews to be used for program improvements under the Child Nutrition Programs. This proposal is being made in conjunction with one under which the current authority for funding of State audits under the Child and Adult Care Food Program (CACFP) would be removed. The CACFP is the only Child Nutrition Program in which separate funding for audits is available and it has been the Department's experience that numerous States have not been able to use this funding effectively and as much as 30 percent has not been used at all. We believe that these two proposals combined will result in improved program oversight and increased management effectiveness at the State level.

The Department is also proposing to remove beginning in fiscal year 2001 the requirement in current law that the Department directly administer local level Child Nutrition Programs. States would be required to assume administration of these programs if they wished to have them available within their States. The Department believes that local level program operators and program beneficiaries would be better served by State agencies that are closer to and more knowledgeable about the organizations and individuals participating in these programs.

With regard to State Administrative Expense (SAE) funding, the proposals would eliminate the ten percent transfer limitation which unnecessarily ties the hands of State agencies and, if removed, would allow States to determine where such funds can be best utilized.

With regard to the National School Lunch and School Breakfast Programs, the Department is proposing to require that all schools participating in the National School Lunch and School Breakfast Programs obtain twice yearly health and safety

inspections covering their food service operations. This is intended to help ensure that meals provided to school children are prepared and served in the most suitable environment, consistent with State or local standards.

In the CACFP, the Department is proposing that categorical eligibility for free meals for Even Start participants be reinstated to avoid duplicative eligibility determinations; timeframes for State approval of institution applications be relaxed somewhat to allow for better State-level evaluations of applications; timeframes for participation by institutions "moving towards tax exempt status" be revised to enhance State oversight of participation by such institutions; and the Department be authorized to reserve a small amount of funds each year to help ensure proper implementation of the family day care home tiering requirements and to provide for overall improved program quality and integrity.

Question. What funding is included in the fiscal year 1999 request for the National Food Service Management Institute (NSFMI)?

Answer. The budget includes two million dollars for the NSFMI in 1999.

Question. The National Food Service Management Institute (NFSMI) has played an important role in the school meals initiative. Please describe the cooperative agreements with NSFMI funded with the $500,000 provided for this purpose for fiscal year 1998.

Answer. The cooperative agreements funded with the $500,000 provided in fiscal year 1998 are continuations of two ongoing projects: the Hands On Team and the Customer Service Help Desk. The Hands on Team is a two year pilot project which supports the implementation of the nutrition goals of the School Meals Initiative for Healthy Children by providing a cadre of consultants who will assist school food authorities with technical assistance in all areas of food service, including menu planning, nutrient analysis, standardized recipes, food preparation, food storage, food purchasing, equipment, action plans, merchandising ideas and nutrition education. Site visits began in the Fall of 1997 and preliminary evaluations show overwhelming interest from school food authorities. Funding of this pilot project included 100 site visits, and as of October 31, 1997 requests for assistance had exceeded this number. Since a number of these requests for assistance had to be declined, 1998 funds will be used to fund site visits to some of those schools beyond the 100 initially included in the pilot project who had requested assistance.

The Customer Service Help Desk project, which provides technical assistance and materials via a toll free telephone number and Internet site, is entering its fourth year. Currently the Help Desk averages 250 questions per month.

Question. Of the $10 million requested for the school meals initiative for fiscal year 1999, how much is for cooperative agreements with the NSFMI and what work is planned for fiscal year 1999?

Answer. While the specific amount which will be available in fiscal year 1999 has not been determined, we anticipate an additional $500,000 in funds for cooperative agreements with the National Food Service Management Institute (NFSMI). Several projects have been identified for possible funding. It is anticipated that the Customer Service Help Desk would continue through 1999, although the level of funding may be reassessed based on service levels. The NFSMI, in cooperation with the Food and Nutrition Service (FNS), is expanding their current publications role to include the distribution on a cost recovery basis, of a number of FNS publications. One of the publications which will be turned over to the NFSMI for distribution is Serving It Safe, an extremely popular food safety guide. There is a need for this publication to be updated regularly in order for the food safety guidance to remain current, and the NFSMI has agreed to assume this task. Distance based training in the area of cooperative purchasing, with concurrent Internet chat rooms are also being considered. In addition, the NFSMI is currently working on some financial management materials for school food service, which could be adopted by State agencies. These would be instructional materials which would provide standardization of documentation and consistency in reporting and record keeping at the local level.

The NFSMI and FNS work together with the NFSMI's National Advisory Committee to determine major projects and priority needs. The National Advisory Committee is comprised of representatives from State agencies, local programs, professional organizations, universities, food industries and Federal agencies. The yearly meeting of the committee is scheduled for March 27–29, 1998.

Question. Please provide a detailed accounting on how the funds made available for the school meals initiative have been used in each of fiscal years 1996, 1997 and 1998, and what is proposed for fiscal year 1999. Identify and include the use of any unobligated balances from funds provided in previous fiscal years.

Answer. The following information is submitted for the record. Table 1 identifies spending categories by year in which the funds were appropriated. The fiscal year

1998 allocations represent the current spending plan and the fiscal year 1999 allocations are projected. Table 2 provides a breakdown of funds obligated in the year in which appropriated and funds carried over into the next fiscal year.

[The information follows:]

TABLE 1.—SCHOOL MEAL INITIATIVE: SPENDING BY CATEGORY

	Fiscal year—			
	1996	1997	1998 (estimate)	1999 (estimate)
I. Food service training and technical assistance:				
Technical assistance materials	$1,914,756	$1,105,027	$1,682,192	$3,200,000
Print and electronic food service resource systems	97,755	385,200	400,000	400,000
NFSMI cooperative agreement for food service	250,000	800,000	500,000	500,000
II. Children's education resources: In-school education materials and community education materials	3,640,958	1,163,500	868,913	[1] 1,300,000
III. Food service training grants to States	1,965,703	4,000,000	4,000,000	4,000,000
	[2] 1,629,278	[2] 2,120,722	.....	.....
IV. USDA/FCS direct training and education	12,663	360,200	27,050	50,000
V. Children's communications and technology	91,600	5,000	.....	.....
VI. Team nutrition partnership support: Resources for team nutrition schools and partnership network support	168,080	54,475	15,525	50,000
VII. Evaluation and administration	685,451	5,876	506,320	500,000
Total	10,456,244	10,000,000	8,000,000	[3] 10,000,000

[1] Includes resources for the Child and Adult Care Food Program (CACFP) and Summer Food Service Program (SFSP).

[2] $3,750,000 was reprogrammed to section 6(a)(3) of the National School Lunch Act to provide grants to States to fund activities that would have otherwise been supported by the NET Program. Both fiscal year 1996 Carryover funds and fiscal year 1997 Current year funds were used.

[3] Includes $2 million to fund School Food Service Systems Improvement Initiative to improve business practices in school food service.

TABLE 2

Fiscal year appropriated	Funds obligated in year appropriated	Funds carried over and obligated in the next fiscal year
1996	$4,794,060	$5,662,184
1997	7,955,722	2,044,278
1998	8,000,000	.....
1999	10,000,000	.....

Question. The budget proposes a decrease of $4 million reflecting expiration of the Kentucky/Iowa demonstration projects. Why? What impact will this have on those now being served through each of these projects?

Answer. The Department's budget submission for the Child Nutrition Programs was a "current services" proposal. However, the Department's reauthorization bill for the Child Nutrition Programs, which was submitted to the Congress after the budget request, proposes that the Kentucky/Iowa demonstration projects be made a permanent part of the Child and Adult Care Food Program (CACFP) in those two States. If this proposal is approved, the benefits currently available to children in Kentucky and Iowa under the demonstration project would continue to be available under the CACFP.

Question. For each of fiscal years 1997 and 1998, please provide detail on the food service training grants awarded to states, identifying the state, the amount of the grant award, a brief description of the project. For each of these years, please list the projects which have been awarded food service training grants.

Answer. The information is submitted for the record.

[The information follows:]

1997 TEAM NUTRITION (TN) TRAINING GRANT SUMMARIES

Arizona, $162,780

Arizona Department of Education in collaboration with a training coordinator will develop a three-day train-the-trainer module that will include principles of adult learning, development and implementation of school-based comprehensive health and nutrition programs, overview and practical application of recommended nutrition education curriculum and instructional strategies for classroom and food service staff to support the classroom to cafeteria link of nutrition education and healthy food choices. They will also establish a cadre of trainers/mentors to provide a minimum of two additional TN Training workshops and technical assistance to school districts developing comprehensive school health programs to promote lifelong healthy eating habits in children and adolescents. They also plan to provide Local Level TN Training Grants to a minimum of 15 school districts with the majority of their schools enrolled as Team Nutrition Schools for the development of model comprehensive school health programs to promote lifelong healthy eating habits in children and adolescents.

California, $270,400

The California Department of Education will utilize funding for three separate projects: Local TN Training Grants; a CD–ROM Development for Nutrient Standard Menu Planning (NSMP) Training; and a Portable Computer Lab for NSMP Training. The Local TN Training Grants will be designed to provide comprehensive, action-oriented delivery of training programs at the district and school level to provide training for teachers on the use of Team Nutrition curriculum; develop garden-enhanced nutrition education projects; and provide professional development opportunities for school nutrition staff. Development of a NSMP Course on CD–ROM will facilitate hands-on computer experience and will improve the status of the school meals by training school nutrition directors and menu planners to comply with the School Meals Initiative for Healthy Children and meet the goals identified by the USDA. California will also establish a cost-effective portable computer lab to enable the Department of Education, Nutrition Education and Training (NET) Program to significantly increase its ability to offer NSMP Training in support of the School Meals Initiative for Healthy Children.

Illinois, $168,520

The Illinois Team Nutrition Training Grant involves three distinct activities aimed at assisting Illinois schools in adopting a school wide approach to promoting healthy eating. The first activity, the comprehensive healthy education project, will be a collaborative effort between Illinois NET and the Illinois Department of Public Health. School staff will be provided with essential information on how to develop and implement a school health program that promotes healthy eating through two training workshops. NET will also provide competitive local grants to 10 school districts in order to enable them to plan and implement health programs that will serve as models for all schools. The second activity will provide Illinois elementary and junior high schools with access to fun, interactive, educational exhibits through the use of mobile education units. The third activity, development of a NET web site, will increase the access of educators and food service staff to NET resources, information and services. The web site will also contain up-to-date information on Team Nutrition activities and grant opportunities in Illinois.

Iowa, $299,000

Iowa's proposal seeks to expand the availability of training opportunities as well as the number of trainers. The project will accomplish these goals by applying the energy, resources and broad connections of a Statewide coalition of public sector agencies and the resources of the State NET Program to develop and provide the food service training/coalition building capacity of an existing, sustainable framework, i.e., Area Education Agencies (AEA's). Three strategies will be used in this grant. First, the NET Coordinator and Iowa Nutrition Education Network staff will develop and implement a competitive grant program for AEA's. Six AEA's will be chosen to assist at least five school districts in their area to implement TEAM Nutrition. A second strategy will be to provide direct training to food service staff in the 30 school districts that implement TEAM Nutrition as part of this grant. They will contract with the National Food Service Institute to conduct the master trainer workshop. The Iowa School Food Service Association has agreed to organize a cadre of 30 members who will also complete this training and conduct ten hands-on training sessions around the State. The third strategy will be to seek private funding to develop a Statewide media campaign that will build on and feature the TEAM Nutrition concepts being developed at the local, Regional and National levels.

Kansas, $192,260

Kansas is implementing activities to enhance and expand Team Nutrition and the Kansas Comprehensive Training System (KCTS) for School Nutrition Professional Development. These activities will include: (1) developing a standardized, comprehensive, job-category-based framework for Kansas' formal training program; (2) forming a State organization of Team Nutrition Supporters to provide a comprehensive directory of resources and an annual Team Nutrition Event packet; (3) implementing and supporting 10 model programs to demonstrate healthy school meals based upon the "Keys to Excellence: Standards of Practice for Nutrition Integrity"; and (4) providing incentives to 200 additional Kansas schools to implement nutrition education which supports the cafeteria-classroom link.

Maine, $94,562

The Maine Department of Education will coordinate with the Maine Technical College System to enhance the delivery of a sustainable training program for school nutrition personnel Statewide and offer expanded training opportunities. The program will offer three levels of training. The first level of basic instruction will be expanded to include an orientation to school food service course. The second level of skill development will use technical college faculty, school nutrition directors, State agency staff, local chefs and other appropriate individuals to train school nutrition staff on implementation of the Dietary Guidelines. Level three, continuing education, will be expanded to recognize the expanded skill training courses in the tri-annual certificate renewal process. Maine will also provide Local TN Training Grants to eight school systems to develop a team approach to implementing the Team Nutrition Schools principles in their educational programs. Also, Maine will continue their partnership with the Maine Nutrition Network and expand their efforts targeted to low income schools by providing parallel resources to any Team Nutrition Schools.

Maryland, $300,000

The Maryland Team Nutrition Training Project will develop a Statewide cadre of trained resource professionals to assist schools to conduct effective nutrition education activities. At least 50 Cooperative Extension and school food and nutrition service professionals will be trained to assist Team Nutrition schools in five geographic regions of the State. Other project objectives include: increasing the number of Team Nutrition schools in Maryland to 40 percent of all public schools; conducting comprehensive training in nutrition education, food safety and the School Meals Initiative; developing a sustainable relationship with the Maryland Cooperative Extension Service in order to increase available technical assistance to schools and awarding a minimum of eight competitive training mini-grants to both local educational agencies and community organizations.

Michigan, $299,952

The Michigan Department of Education in collaboration with Michigan State University Extension (MSUE) and the Michigan Team Nutrition Steering Committee has integrated a two component strategy of peer mentor/coaching to assist and support school food service directors train their staff (on-site) with the Healthy Cuisine for Kids (HCK) curriculum; and comprehensive multi-dimensional support for Michigan Team Nutrition Schools. This grant project is designed to increase the number of Team Nutrition schools, and further assist enrolled Team Nutrition schools build strong partnerships with communities, as they continue to actualize Team Nutrition. They plan on accomplishing this by training peer mentor/coaches in HCK, training 420 food service teams in a one day train-the-trainer workshop, offering on-site technical support, using newsletters to train and sustain Team Nutrition Partners, offering five school districts Demonstration Training Mini-Grants, enhancing Team Nutrition through Partnering and Support with MSUE, and developing and using a World Wide Web for Team Nutrition sustainability.

Minnesota, $292,220

The purpose of this grant is to address a wide range of local training needs in order to implement the Healthy School Meals Initiative. The project consists of three parts. First, the development and provision of effective, local-use training resources, which includes the development of a videotape training resource packet, and conducting 20 statewide workshops for school food service managers, supervisors and directors on the requirements and successful implementation of Food Based Menus and NuMenus. Second, development of improved resource materials and services using new technologies, including a website to provide access to digital versions of the materials developed. Third, through a competitive grant process, pro-

vide four to six local Team Nutrition Training grants to school districts to develop and implement model district-wide training plans and nutrition education programs.

New Hampshire, $107,143

The New Hampshire Department of Education plans to provide between 2 and 20 grants to local school districts for innovative district-wide training programs which meet Team Nutrition Training Grants criteria. They also plan to establish a partnership with the New Hampshire Dietetic Association and provide a training session for dietitians regarding the School Meals Initiative and encourage their involvement in assisting schools with nutrition committees, developing nutrition policies and Team Nutrition projects. Other projects include expanding services which began through a partnership with the Vermont Department of Education by providing a management seminar for New Hampshire and Vermont food service directors and managers. The partnership with the New Hampshire School Food Service Association will be strengthened by having them provide the management seminar and provide the materials and training for "Meeting the Challenge" to school food service staff. In addition, New Hampshire plans on contracting with the National Food Service Management Institute for three additional components of a NET needs assessment to expand the information available to the NET Coordinator when planning future training efforts.

New Jersey, $189,640

The New Jersey proposal is a joint venture involving two major partners: the Nutrition Education and Training Program and the Bureau of Child Nutrition. A number of secondary partners including the Academy of Professional Development, the Dairy Council, the American Cancer Society, the New Jersey Parent Teacher Association and the New Jersey School Food Service Association are also involved. The proposal has three goals: strengthen the State's training capacity, establish classroom-cafeteria link, and improve project management techniques. The building training capacity objectives are: expanding the New Jersey Professional Development and Training Cadre; conducting statewide training for school food service personnel; establishing and maintaining three regional computer assistance menu analysis sites and USDA Internet site access; developing and disseminating a quarterly newsletter; conducting statewide and regional school food service institutes; and developing and disseminating user-friendly handbook for Food Based Menu Planning Options. The classroom-cafeteria link will involve expanding the Power 3 Club Manual and developing quarterly newsletters and linking parents to Power 3 Club by regional Super Saturdays and TN Calendars and academic activities.

North Dakota, $77,144

The training project designed by the North Dakota Department of Public Instruction will utilize several approaches which will allow the agency to continue and enhance the sustainable training infrastructure initiated with funding received under the 1995 Team Nutrition Training Grant. The training activities proposed in the grant proposals are: (1) conduct focused technical assistance/training meetings for school nutrition personnel; (2) conduct enhanced training for cadre members; (3) conduct culinary skills workshops for school nutrition personnel; and (4) develop and broadcast a third satellite training seminar. In addition, provide funds to assist in providing nutrition information to students.

Oregon, $129,020

Oregon's TN Training Grant proposes to conduct train-the-trainer workshops to strengthen the NETPRO Oregon training cadre in order to provide a series of three comprehensive, interrelated School Meals Initiative (SMI) training and technical assistance events for Oregon's school food authorities. The first event is Healthy School Meals Workshop which is an eight hour train-the-trainer workshop for food service directors/managers and key food service staff to improve knowledge and skills in the areas of resources, nutrition, culinary skills, and menu planning. The second event is Mission: Nutrition! which is a day long nutrition extravaganza involving the entire school community. The goal is to create a nutrition awareness culture throughout the school community which supports the production of quality meals meeting USDA nutrition requirements and promotes nutrition education for students. The third event is a school food authorities SMI review which focuses on each school food authorities progress towards meeting SMI regulations.

Rhode Island, $299,886

The Rhode Island grant project will expand on the current Team Nutrition Training Program by launching the TNT Institute. The Institute will be a resource for school districts to use for food service training and the development of nutrition edu-

cation activities in the classroom. It will be able to address the training needs of school food authorities. The Institute will also be responsible for increasing the involvement and empowerment of parents and community members to play an active role in improving the diet of children through schools.

South Carolina, $300,000

The South Carolina grant will expand and refine the training infrastructure to support systematic and consistent training and technical assistance by establishing 12 training centers to provide training for directors, operators and managers for continuous improvement of meal quality and service to students and coordination of technical assistance. The project is also designed to establish community-based allowances to advocate for community and media support for Healthy School Meals through training school food service directors in social marketing and social learning techniques. It will also establish a demonstration program in four middle schools for building collaborate program and partnerships that support healthy school meals to serve as models to be replicated by other middle schools. Also, they will deliver Target Your Market training to assist directors and managers in marketing school nutrition programs.

South Dakota, $299,886

The South Dakota Department of Educational and Cultural Affairs proposes a three-pronged program to meet the intended purpose of the Team Nutrition Training Grant for Healthy School Meals. The Program design includes: (1) a "Summer Institute" experiential training program offering academic credit for school-based teams to receive comprehensive training in team-based nutrition education with a continued follow-along technical assistance component to assist teams to carry out school-based programs; (2) a supplemental grants program for the selected team schools in South Dakota to develop and implement their team-based solutions for nutrition education; and (3) comprehensive enhancement of nutrition education activities for Food Service Certification Programs.

Utah, $275,520

This project—Going for the Gold in School Nutrition—aims at creating long-range training plans for the State and for each individual school district. Training will be geared towards kitchen managers, and it will focus on implementing the School Meals Initiative, particularly NuMenus. Some of the topics to be covered include standardization of recipes, nutrient analysis, menu planning, and food preparation techniques. The project is divided into four levels. The first level is the Olympic Organizing Committee, which will set up a five year integrated delivery plan to reach all levels of the school nutrition programs. The Bronze Medal Level, the second level, will develop a district wide training program for school food service personnel. The third level, Silver Medal Level, will support training at the local level, while the fourth level, Gold Medal Level, will create a one week high-level manager training program at a local college.

Vermont, $94,471

The goal of this proposal is to increase support for the School Meals Initiative by drawing educators and school leaders into the project while continuing to enhance the capacity of managers to operate high quality school meal programs. Six major activities are planned, including a series of seminars for managers of school food authorities comprised of single schools serving grades K through 12; a management conference to provide concrete management skills for food service managers and directors; a 5-A-Day-Project designed to provide schools with training and materials to conduct classroom hands-on activities with fruits and vegetables; awarding Local TN Training Grants to schools to implement action plans to strengthen comprehensive health programs in their schools; create a Team Nutrition Schools Network to increase awareness of the School Meals Initiative; and hold a School Leaders Conference to attract school administrators and school board members to learn about their roles in operating a high quality nutrition program.

West Virginia, $155,803

The West Virginia Department of Education project aims at providing training to enable site managers and head cooks to implement changes in their schools' nutrition programs to reflect healthy meal standards. Five 10-hour regional workshops covering all 55 school districts will be conducted throughout the state. The proposal also aims at expanding the state's training infrastructure by identifying Health Meals Mentors and developing their abilities to transfer knowledge and skills to other cooks. Twenty class participants will be selected as mentors/trainers. The De-

partment will also maintain a network of local trainers to support the development and delivery of project training and monitoring activities.

1998 TEAM NUTRITION TRAINING GRANTS

On January 5, 1998, all State agencies that administer the National School Lunch Program and/or Nutrition Education and Training (NET) Program were invited to compete for a Team Nutrition Training Grant. Applications to apply for a grant are due to the Food and Nutrition Service April 1, 1998, and grant awards will be announced on July 10, 1998.

Question. For each of fiscal years 1997 and 1998, please provide detail on how the Nutrition Education Training funds are being spent, including the amount awarded to each state under the program, and a list of the projects/activities being funded by each respective state, including the cost of each project/activity.

Answer. In fiscal year 1997 each State Nutrition, Education and Training (NET) program was awarded $66,951 out of the Team Nutrition appropriation since no funds were appropriated for NET in 1997. In fiscal year 1998 State NET programs received apportioned NET funding based on the State student enrollment. Funding levels for all 50 States and the U.S. territories is submitted for the record.

The Food and Nutrition Service (FNS) does not gather information on specific projects/activities funded by NET on a yearly basis. At the State level, the NET program is not a centralized bureaucratic program. A high proportion of the grant funds, and most of the programmatic activity is conducted by a variety of educational institutions, consultants, local authorities and professional associations. Less than 40 percent of NET funds are used for program administration and coordination. The remainder of NET funds is generally used for service delivery including mini-grants to local schools, program activities and program products. Program activities include teacher training, provision of classroom resource materials, evaluations and needs assessments. Program products include curriculums, print and other media materials, training materials, promotional materials, and education program materials.

[The information follows:]

State	*1998 funds*
Alabama	$50,000
Alaska	50,000
American Samoa	50,000
Arizona	50,000
Arkansas	50,000
California	313,804
CNMI	50,000
Colorado	46,271
Connecticut	50,000
Delaware	50,000
District of Columbia	50,000
Florida	28,405
Georgia	73,569
Guam	50,000
Hawaii	50,000
Idaho	50,000
Illinois	118,097
Indiana	55,399
Iowa	50,000
Kansas	50,000
Kentucky	50,000
Louisiana	50,000
Maine	50,000
Maryland	50,000
Massachusetts	55,879
Michigan	94,909
Minnesota	50,000
Mississippi	50,000
Missouri	51,465
Montana	50,000
Nebraska	50,000
Nevada	50,000
New Hampshire	50,000
New Jersey	73,166
New Mexico	50,000

State	*1998 funds*
New York	169,544
North Carolina	67,035
North Dakota	50,000
Ohio	111,986
Oregon	50,000
Pennsylvania	110,239
Puerto Rico	50,000
Rhode Island	50,000
South Carolina	44,678
South Dakota	50,000
Tennessee	50,404
Texas	209,628
Utah	50,000
Virgin Islands	50,000
Virginia	60,527
Washington	53,539
West Virginia	50,000
Wisconsin	52,415
Wyoming	50,000

Note: $50,000 is the minimum grant amount for States set in the authorizing statute.

COMMODITY SUPPLEMENTAL FOOD PROGRAM

Question. As we achieve full participation in the WIC program, there should be a corresponding decline in WIC-type participation in the Commodity Supplemental Food Program (CSFP). You indicated that the number of WIC participants in the program decreased in fiscal years 1995 and 1996. What was the decrease in CSFP WIC-type participation in fiscal year 1997 and what decreases are projected in each of fiscal years 1998 and 1999?

Answer. The decrease in participation in WIC-type participation in the Commodity Supplemental Food Program in fiscal year 1997 was approximately 8 percent. The Department is not projecting a decrease in participation for fiscal year 1998 or 1999. The Department is expecting a small increase of 6 percent in participation in fiscal year 1998 and, as in the WIC program, no increase in fiscal year 1999.

Question. What growth have we witnessed in elderly participation in the Commodity Supplemental Food Program in each of the past two fiscal years? What participation levels are projected for each of fiscal years 1998 and 1999? Please provide for each of these years (1996–1998) the number of elderly participating in the program who also were eligible for Food Stamp Program assistance.

Answer. In fiscal year 1996 there was an increase in participation in elderly participation in the Commodity Supplemental Food Program (CSFP) of approximately 10 percent. In fiscal year 1997 the increase was approximately 11 percent. The Department is projecting an increase of 11 percent in fiscal year 1998 and a decrease of 2 percent in fiscal year 1999. The income eligibility standard for the elderly for the Food Stamp Program is 100 percent of net income, which is considered to be less stringent than 130 percent of gross income. The standard for the CSFP is 130 percent of income as defined for local benefit programs. Therefore, most elderly persons participating in the CSFP are likely to be eligible for the Food Stamp Program. However, we do not have any data reflecting the percentage of CSFP participants who also participate in the Food Stamp Program. In 1995, 199 thousand elderly persons participated in the CSFP, in 1996 and 1997, 219 and 243 thousand, respectively, participated.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The agency's strategic goals are those goals that the agency plans to achieve incrementally by the year 2002. The annual performance goals are those goals and activities for fiscal year 1999 that the agency believes will lead to the achievement of the year 2002 goals. The plan also specifies the fiscal, capital and human resources required to achieve these goals and ongoing program obligations. As a result, the fiscal year 1999 budget request is linked directly to agency's goals for that fiscal year.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The Food and Nutrition Service (FNS) Annual Performance Plan (APP) identifies the strategic and annual performance goals and management initiatives the agency plans to achieve in fiscal year 1999. The fiscal, capital and human resources required to achieve these goals and initiatives are provided in the APP at the strategic goal level. Using a matrix format, FNS linked these resources directly to the major program activities in the Program and Financing Schedules. This crosswalk provides a clear picture of how the FNS budget and program activities relate to and support achievement of the strategic performance goals and initiatives.

In terms of difficulties encountered, the effort to resource load the specific annual performance goals is a difficult one. Insofar as the FNS budget structure is not presently aligned with the Strategic Plan/APP, the resource loading of annual performance goals will, of necessity, have to be done in an "off-line" manner.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The Food and Nutrition Service (FNS) Annual Performance Plan measures are indirectly linked to the budget. Currently, the fiscal year 1999 FNS budget is linked to the strategic plan goals and objectives. The annual plans goals and measures are derived directly from the strategic plan. Thus, while the performance plan linkage to the budget is not perfect, it does cover a major portion of program activity accounts.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The Food and Nutrition Service (FNS) Annual Performance Plan structure differs slightly from the account and activity structure in the budget justifications in that it reflects strategic and annual goals that may span more than one program account. However, the basic structure is similar. We are prepared to discuss these slight differences with Committee staff.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. At this time, the Food and Nutrition Service (FNS) is exploring ways of achieving an ever closer alignment between performance planning and the budget account structure. Insofar as fiscal year 1999 was the first year of performance planning, FNS has yet to gain full understanding of all of the implications of annual and strategic planning relative to the budget account structure and to the eventual achievement of our objectives and goals. We believe that the congruence between the two will occur as the agency gains more experience with strategic and annual planning.

Question. How were performance measures chosen?

Answer. The Food and Nutrition Service (FNS) developed or chose performance measures based on two criteria. First, the measures had to be direct, that is, to the extent possible, the agency chose measures that assessed program outcomes directly and, to the extent possible, avoided proxy measures. Second, the measures had to be feasible, i.e., data were already available or could be collected at a reasonable cost. Following the Government Performance and Results Act guidelines, FNS chose or developed measures that were both outcome-based and quantitative for all its strategic objectives.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The agency plans to use outside data sources for the verification of the Food and Nutrition Service (FNS) performance data. For example, these sources include state monitoring reports. Consequently, there will likely be no cost to the agency to obtain this data. The agency plans to use several approaches in obtaining the needed original performance data. First, FNS plans to use data already collected by other federal agencies, when appropriate. With this approach, FNS obtains the data it requires with minimal cost.

Second, the agency originally planned to use its existing research funds to collect data that cannot be obtained through other agencies. This approach would have allowed the agency to collect needed performance data using existing funds. However, the shifting of food assistance program study funding to the Economic Research Service (ERS) for fiscal year 1998 has caused us to adjust our plans. We are working with ERS to meet some of our annual performance plan needs, and look forward to restoration of funding to FNS in fiscal year 1999 (as requested in the fiscal year 1999 FNS budget) to continue information development for the Annual Performance Plan as had been envisioned.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. The Food and Nutrition Service (FNS) will have reasonably reliable data for most of the performance measures contained in the fiscal year 1999 Annual Performance Plan. The agency does, however, need to develop data sources for some measures, particularly for the Child and Adult Care Feeding Program and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The agency originally planned to develop some of these data sources through its research and evaluation activities. However, the shifting of food assistance program study funding to the Economic Research Service (ERS) for fiscal year 1998 has caused us to adjust our plans. We are working with ERS to meet some of our annual performance plan needs, and look forward to restoration of funding to FNS in fiscal year 1999 (as requested in the fiscal year 1999 FNS budget) to continue information development for the Annual Performance Plan as had been envisioned.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. In writing the agency's Annual Performance Plan, the Food and Nutrition Service (FNS) went through a careful, extensive, comprehensive process involving the entire agency, to develop appropriate performance goals. The agency believes that the goals in the final plan accurately reflect the priorities of the agency for fiscal year 1999 and that achievement of these goals will assist the FNS in accomplishing its strategic goals. Therefore, FNS believes that all of the goals in the plan are important and that individual goals cannot be singled out as more important than others.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The majority of the annual performance goals in the agency's fiscal year 1999 Annual Performance Plan are stated as outcomes. The Food and Nutrition Service (FNS) chose measures that will directly measure these goals and, as a result, the measures are also outcome-oriented. For the limited number of annual performance goals that are process-or output-oriented, the agency chose or developed appropriate output measures. For example, for its Food Distribution Program, FNS plans to conduct a customer satisfaction survey in fiscal year 2000. In fiscal year 1999, our goal is to develop and test the survey instrument and procedures (an output goal). The performance measure for this goal is an output measure.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, the Food and Nutrition Service (FNS) believes that program managers understand the difference between output and outcome goals. In writing the Annual Performance Plan, FNS involved all of the agency's program managers in developing the annual goals. Program managers were assisted in this process by staff with expertise and experience using different types of performance measurement, including output and outcome measures. As a result of this process, FNS believes that all managers involved, understand the difference between workload and effectiveness goals.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The Food and Nutrition Service (FNS) plans to survey its external customers regarding their satisfaction with the agency's performance in a variety of areas including service provision, responsiveness to inquiries, timeliness of food deliveries, and program streamlining and simplification. Internally, FNS will query satisfaction with the budgeting process and availability of program and financial data.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The measurable strategic and annual performance goals provided in the fiscal year 1999 Annual Performance Plan represent some portion of the priorities the Food and Nutrition Service (FNS) plans to achieve in the various FNS program areas. The fiscal year 1999 budget information, fiscal, capital and human resources, reflected in the plan justification identifies the resources needed (1) to achieve both the annual performance goals and (2) to achieve all other program activities that are not applicable to any specific annual performance goal.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Because the individual resource loading of any particular annual performance goal would be accomplished apart from the budget account structure, the

Food and Nutrition Service would have to assess the impact (of any budget level change) to a particular annual performance goal off-line from the budget structure.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. The Food and Nutrition Service (FNS) plans to obtain performance data from several sources. First, the agency intends to use data already collected by other federal agencies, where appropriate. Obtaining this data will not be affected by FNS' technological capability. Second, FNS originally planned to use its existing research funds to obtain data that could only be obtained through large data collection efforts. Obtaining performance data using this method also would not have been affected by FNS' technological capability. Because these funds were eliminated for FNS and transferred to the Economic Research Service (ERS) for fiscal year 1998, FNS is working with ERS to address some of the FNS Annual Performance Plan information needs. The fiscal year 1999 FNS budget proposed restoring of these research funds. Third, FNS planned to use the agency's existing administrative data where appropriate. For most performance data, FNS' current technological capability is adequate to obtain this data.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Have you faced such difficulty?

Answer. Yes. The Food and Nutrition Service (FNS) does recognize this as a problem. It is true that the present budget structure does not directly align with the annual performance goals and results. In developing its Government Performance and Results Act plans, FNS aligned the budget with the strategic plan goals. FNS then derived the annual plan goals directly from the strategic goals. Although the annual goals were derived from the strategic goals, they are not the same. Since the results are based on annual performance goals, the linkage between the budget and the results is similar.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. The Food and Nutrition Service is currently exploring ways of how to achieve an ever clearer linkage between the budget account structure and performance results although they are similar. We believe that as the agency gains more experience in strategic and performance planning, ways will be found to improve the alignment between performance results and the budget account structure.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. As indicated in response to a previous question, the Food and Nutrition Service (FNS) is exploring ways to achieve an improved linkage between the budget account structure and performance results. Should our efforts to do so prove less than satisfactory, then FNS may wish to consider some changes to our overall strategic planning/annual planning/budget process, including possible modifications to the budget structure.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. At this time, the Food and Nutrition Service has no definitive plan in modifying the present budget structure and therefore is not in a position to predict how any modification would strengthen accountability in program performance.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Following instructions received on preparing Annual Performance Plans, the Food and Nutrition Service did not identify any external factors that could influence goal achievement. These factors are, however, included in the agency's strategic plan.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. While the agency has not included the influence of external factors in its annual performance plan, we have taken them into account elsewhere (i.e., the strategic plan) and have identified some steps to deal with them should they arise.

Question. What impact might external factors have on your resource estimates?

Answer. Changes in the economy, unemployment, number of persons in poverty, and changes in food cost are all external factors that significantly could change pro-

gram finance needs. However, the Food and Nutrition Service does not anticipate that external factors will have significant effects on our resource estimates.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. In developing the both the strategic plan and the Performance Plan, the Food and Nutrition Service (FNS) has identified areas where FNS' achievement of its goals is dependent upon the activities and cooperation of other programs. For example, one of FNS' annual goals is to increase the availability of nutrition and nutrition-related information for low-income households. The Food Stamp Program encourages States to provide nutrition messages and information to low-income households. FNS cooperates with the USDA Extension Service and others in the development, production and distribution of these nutrition education materials. This needed cooperation, as well as other areas where cooperation is needed, is identified in the Performance Plan.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The majority of our performance measures are sufficiently mature to assess the level of achievement in our fiscal year 1999 Annual Performance Plan. In the majority of cases we have identified baseline and target measures that will allow the agency to assess annual goal achievement as well as progress toward meeting its strategic goals and objectives.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The Food and Nutrition Service (FNS) believes that it has sufficient experience to make reasonable accurate resource estimates. It will be, however, constrained in making the estimates largely because of the unavailability of timely and reliable data on some of the measures identified for the strategic and annual performance plans. A significant portion of the latter will be due to the elimination of funding for the agency's research and evaluation activities for fiscal year 1998. FNS planned to use some of these resources to collect data directly related to the measurement of achievement of annual and strategic objectives.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The Food and Nutrition Service (FNS) believes that its strategic plan is a flexible, evolving document. As such, FNS is prepared to revise its plan in the future if the need arises. However, having just completed writing the fiscal year 1999 performance plan, and not yet implementing it, it is too early for FNS to tell what form any future revisions might take.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FOOD STAMPS

PARTICIPATION LEVELS

Question. The budget request includes an increase of 572,000 Food Stamp participants. However, economic indicators suggest Food Stamp roles should continue to decline.

Please explain why Food Stamp participation should increase during a period of economic improvement?

Answer. The primary indicator of Food Stamp Program participation is unemployment level or the actual number of people who are unemployed at any time. The unemployment level varies with unemployment rate and with the number of people in the work force. During periods of stable unemployment rates, unemployment level will still rise as population rises. The Office of Management and Budget currently forecasts that the unemployment rate and the total number of unemployed persons will increase in fiscal year 1999—thereby increasing the number of eligibles and consequent participation in the Food Stamp Program.

PROPOSED PROGRAM EXPANSION LEGISLATION

Question. The Administration is proposing legislation to expand eligibility of Food Stamp benefits to certain populations. It is suggested the legislative proposal would cost an additional $2.5 billion over five years. The savings required in other pro-

grams to achieve this expansion is identified as coming from certain administrative savings (estimated at $1.2 to $1.4 billion).

Are these savings not the very same savings now targeted for offsets as part of the conference discussion on the Agricultural Research Title legislation?

Answer. Yes. The President's proposal and the Agricultural Research Title legislation both seek to recapture a possible windfall to States as a result of switching from a primary to benefiting method of State administrative cost allocation between the Temporary Assistance to Needy Families, Food Stamp and Medicaid Programs.

Question. If the conferees to the Research Title use these savings for new research programs, does the Administration have plans for alternative savings for Food Stamps.

Answer. It is a priority of the Administration to restore eligibility to many of the legal immigrants made ineligible for food stamps due to welfare reform. The cost of the Administration's proposal is included in the President's balanced budget for fiscal year 1999. The budget funds these initiatives by continued cuts in government programs, by closing unwarranted tax loopholes, and from the passage of tobacco legislation. The Administration understands that as Congress reviews the submitted budget, a certain level of give and take will be necessary. We look forward to working with Congress on this subject.

Question. If the savings estimates are correct (not to exceed $1.4 billion) what other offsets have been identified to achieve the full $2.5 billion cost?

Answer. The Administration has submitted a balanced budget for fiscal year 1999—the first time in 30 years that such a budget has been proposed. Within tight constraints, the budget proposes major initiatives that will continue the President's investments in high priority areas—from helping working families with child care expenses to allowing Americans age 55 to 65 to buy Medicare. These initiatives include restoring eligibility to many of the legal immigrants made ineligible for food stamps by welfare reform. The budget funds these initiatives by continued cuts in government programs, by closing unwarranted tax loopholes, and from the passage of tobacco legislation.

PROGRAM RESERVE

Question. The budget proposes a $1 billion reserve for the Food Stamp account.

When was the last time a Food Stamp reserve was triggered and what was the cause?

Answer. Fiscal year 1992 was the last time any of the reserve funds were used. The President's fiscal year 1992 Budget Request estimated the average program participation would be 22.4 million persons per month. However, during the course of the fiscal year, participation in the program was greater than anticipated and averaged 25.4 million persons per month for the fiscal year. In fiscal year 1992 $900 million of $1.5 billion was actually needed and used in fiscal year 1992 to cover increased program participation. Thus, the President's 1993 Budget included a formal request for $1.5 billion appropriated subject to such a specific request for fiscal year 1992.

Question. What projections for fiscal year 1999 suggest a reserve is needed now?

Answer. The reserve would be used to cover the costs of any unforeseen economic or other circumstances that cause an increase in required program payments. The reserve is important given the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). Over one-third of all food stamp households received Aid to Families with Dependent Children (AFDC), which PRWORA replaced with Temporary Assistance for Needy Families (TANF), receive over one half of all food stamp benefits. As these households encounter time limits on their TANF eligibility, and with the effects of welfare reform still largely unknown, it becomes increasingly difficult to anticipate the future course of food stamp costs.

Question. If the purpose of the reserve is to meet changing conditions resulting from Welfare Reform, what "changes" have been identified since passage of that legislation?

Answer. A benefit reserve is important given the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 ("welfare reform"). Welfare reform has given States broad new authority under the TANF block grant. The choices States continue to make about the level and form of benefits provided can affect Food Stamp Program costs dramatically. Over one-third of all food stamp households receive AFDC—which welfare reform replaced with Temporary Assistance for Needy Families (TANF)—and they also receive over half of all food stamp benefits. In addition, as these households encounter time limits on their TANF eligibility, it becomes increasingly difficult to anticipate the effect on food stamp costs. To the extent that they replace lost welfare benefits with increased earnings, food stamp benefits may

fall. But to the extent that they remain sufficiently poor to retain food stamps while losing TANF, food stamp costs may increase.

SAVINGS FROM ENFORCEMENT

Question. For several years, the Food Stamp program has been moving toward EBT cards to protect program integrity and to promote program efficiency. Also, efforts such as "Operation Talon" have been reported as being successful in stopping Food Stamp fraud. It is also stated that during fiscal year 1997, 1200 suspect stores were investigated of which approximately 550 were found to have committed violations.

What program savings have been achieved due to these efforts?

Answer. Operation Talon is a law enforcement initiative in which information of law enforcement agencies is matched with food stamp caseload data to detect and apprehend individuals who are fleeing felons or parole/probation violators. The Food and Nutrition Service (FNS) has supported this initiative by encouraging State cooperation with the USDA Office of Inspector General (OIG) and local law enforcement agencies. Further, we are continuing to work with OIG and are providing program guidance to the State agencies regarding follow-up to the identification of fleeing felons as it affects program eligibility, claim establishment, fair hearings and appropriate disqualification action. While the results of Operation Talon collected by OIG show the initiative is successful, FNS does not have specific program data about savings resulting from Operation Talon.

State agencies are required by law to operate Electronic Benefit Transfer (EBT) systems in a cost-neutral manner. That is, in a way that the Federal cost of issuing benefits in the State using an EBT system does not exceed the Federal cost of delivering coupon benefits under the previous coupon issuance system. Based on measurements of cost neutrality among State agencies currently operating EBT systems, the Department expects that program costs will decrease with the implementation of EBT Nationwide.

There is no dollar cost to the Program when retailers commit violations. Food stamp benefits have already been issued to the recipients who then choose to violate the program by dealing with a retailer who will violate program regulations. However, retailers removed from the program as a result of an investigation are no longer able to provide an avenue to divert funds from the intended purpose of the program. Removing violating retailers from the program also impacts on other retailers who may be considering violating and improves program image.

Question. What savings are projected for the coming fiscal year?

Answer. The major thrust of Operation Talon is to use Food Stamp Program data to allow law enforcement agencies to identify, locate, and arrest fugitives from justice. The results of Operation Talon collected by OIG show this initiative is successful. State agencies are not required to report specific program data about savings resulting from Operation Talon. Therefore, while information available to the Department indicates that program savings do occur. FNS has not projected reductions in program for the coming fiscal year.

State agencies are required by law to operate EBT systems in a cost-neutral manner. That is, in a way that the Federal cost of issuing benefits in the State using an EBT system does not exceed the Federal cost of delivering coupon benefits under the previous coupon issuance system. Based on measurements of cost neutrality among State agencies currently operating EBT systems, the Department expects that program costs will decrease with the implementation of EBT nationwide. Food stamp printing, shipping and processing costs are projected to decrease by $19 million in fiscal year 1999. Most of the decreases are attributed to EBT implementation.

Question. Have these efforts and their resulting efficiencies provided any reductions in program costs as reflected in appropriations requests? If not, why?

Answer. No, because the savings either can not be projected or do not occur. The exception is food stamp printing, shipping and processing costs which are projected to decrease by $19 million in fiscal year 1999, as reflected in our appropriation request. Most of the decreases are attributed to EBT implementation.

Question. What information led to the 1200 stores being deemed "suspect" and does the high rate of violations among those stores indicate a much larger problem nation-wide?

Answer. In fiscal year 1997, the Food and Nutrition Service (FNS) conducted 4,627 investigations of retailers authorized to accept food stamp benefits, 2,084 of which were found to have committed program violations. Retailer investigations conducted by FNS are based on specific information that indicates potential fraud and are not selected as part of a random sample. Various statistical information, auto-

mated analyses, complaints from the public and leads developed by investigators from sources outside of the agency are used to target suspect retailers for investigation. Therefore, to take a high rate of violation among a group of specifically selected retailers and project it nationwide would be inappropriate. Retailers that redeem the majority of food stamp benefits have not proven to be a problem.

OTHER EFFECTS OF WELFARE REFORM

Question. In certain states and local jurisdictions, "cash-out" benefits have been provided in lieu of Food Stamp coupons or EBT cards. This effort has been largely underway as experiments in Welfare Reform as ways to make welfare recipients more responsible for their actions.

What effect have these changes had on USDA programs?

Answer. Cash-out projects have been very limited and, therefore, we have not seen a significant effect on the administration of USDA programs. We see EBT as the preferred means of providing food stamp assistance. However, wage supplementation programs, a form of cash-out in which the cash value of the food stamp allotment is provided to a private employer to subsidize the food stamp recipient's wages, may be more difficult to administer than other forms of cash-out. This distinct form of cash-out is not a matter of simply providing a household with cash instead of coupons, but rather an opportunity to move recipients into actual employment. In a wage supplementation program, the State agency must work with the employer to track the cash paid to the employer, and the amount of wages paid to the food stamp recipient in order to ensure that the wage subsidy is used properly.

Question. Have "cash-out" benefits had an effect on levels of nutrition or health generally within the population of traditional Food Stamp beneficiaries?

Answer. In the early 1990's the Food and Nutrition Service conducted scientifically rigorous evaluations of the effects of cashing out food stamps on the food expenditures and/or the nutrients available to households in four demonstration sites.

The findings of these studies suggest that cash-out reduces household food expenditures. The "slippage effect", the amount by which retail food spending will decrease when the same level of assistance is provided as cash rather than as food stamp coupons, is between 15 to 30 percent of every dollar of benefits. At the benefit levels in the President's 1999 Budget Request this is a $3 to $6 billion reduction in food expenditures with no reduction in program costs.

During the demonstrations there was some evidence that cash-out reduced the availability of some nutrients. For many nutrients the average nutrient availability remained above the Recommended Dietary Allowances for both cash and coupon recipients. The demonstrations were not designed to assess the long-term nutritional consequences of cash-out. The substantial reduction in food expenditures coupled with the evidence that cash-out reduced some nutrient availability during the demonstration suggest that cash-out may increase nutritional risk over time, at least for some households. Electronic Benefit Transfer offers a superior alternative, for it maintains the linkage to food while reducing stigma for participants.

CHILD NUTRITION PROGRAMS

NET

Question. Prior to Welfare Reform the Nutrition, Education and Training Program (NET) was included in mandatory spending at $10 million annually. Since the conversion of these programs to discretionary spending, the funding levels have fallen.

What is the current status of the NET program?

Answer. Historically the Nutrition Education and Training Program (NET) has delivered quality and cost-effective nutrition education, training and technical assistance as a component of the Child Nutrition Programs. The NET infrastructure offers an effective and cost efficient vehicle for reaching the 94,000 schools across the Nation. State and local school food authorities use the established NET infrastructure to deliver nutrition education to students, educators, and parents as well as food service training in schools and child care centers. NET's infrastructure and quality standards also assist local schools in providing nutritious meals and improving the health and nutrition behavior of our Nation's children. Recently, State and local NET cooperators have been responsible for much of the local success of the Team Nutrition effort that Food and Nutrition Service launched to support its Schools Meals Initiative.

The NET infrastructure consists of:

1. Established program structures that allow for maximum State flexibility in meeting the diverse needs of their target audiences;
2. Five year NET Strategic Plan which established a National framework;

3. State action plans based on assessed local needs;
4. Program monitoring and evaluation component;
5. Local resource centers which efficiently disseminate instructional materials; and
6. Cadre of nutrition education and food service training professionals.

The reduction in NET funding levels over the past two years has hampered NET's efforts to fully support the infrastructure that it created and provide the level of quality services that had previously been offered. However, State NET Coordinators have continued their successful long-term working relationships with local school districts, parent-teacher organizations, public health agencies, county extension, local head start agencies, community colleges and the private sector. The extent of NET's local, State, and Federal support was demonstrated in 1997 by the more than 400 letters received by USDA from teachers, food service personnel, nurses, principals, and public health officials at the local, State, and Federal levels in support of continued funding for NET at the $10 million level.

Question. What problems, if any, have resulted from the lower funding levels?

Answer. The reduced level of funding of $3.75 million that occurred in fiscal year 1997 and fiscal year 1998 has had a negative impact on State agencies' ability to maintain the valuable infrastructure which delivers technical assistance, education and training services required to support the implementation of the School Meals Initiative. Some States have suffered loss of qualified and experienced trainers and resources that provided teacher training and support nutrition education instruction for children in local schools. Unless funding is restored to the $10 million level this trend will continue with fewer State and local NET cooperators available to support School Meals Initiative and the local successes of the Team Nutrition effort.

Question. Is the Administration doing anything to try and restore NET as a mandatory item?

Answer. The Administration is confident that Nutrition, Education and Training (NET) can continue its excellent record of service as a discretionary program if it receives the requested level of funding. Therefore, the Administration is not seeking to restore NET as a mandatory item.

FOOD SAFETY TECHNICAL ASSISTANCE

Question. The budget request includes $2 million to provide technical assistance to state and local school cooperators to promote and enhance safe food handling.

Are these activities being coordinated as part of the Administration's Food Safety Initiative?

Answer. Yes. The current request for funds will be used for training and technical assistance to the School Food Authorities to assist them in expanding and reinforcing the safe food handling practices of school food service production staff. The form this training takes will be coordinated with projects under development by the Food Safety Training and Education Alliance (FSTEA), of which the Food and Nutrition Service is a member. FSTEA is a group made up of members from Federal, State and local governments, from trade associations and from professional organizations. FSTEA is currently identifying existing training and education materials, including multi-lingual materials, and combining them with the USDA/Food and Drug Administration Foodborne Illness Education Information Center.

Question. If not, what efforts are being taken to avoid any duplication of effort?

Answer. Duplication is being avoided because the Food and Nutrition Service (FNS) food safety technical assistance is being coordinated as part of the Administration's Food Safety Initiative. FNS previously developed and distributed Serving It Safe, a comprehensive training package covering food service sanitation and safety, to 23,000 School Food Authorities. This publication was based on the Food Code developed by the Food and Drug Administration. The current request for funds will be used for training and technical assistance to the School Food Authorities to assist them in expanding and reinforcing the safe food handling practices of school food service production staff.

WIC

WIC CARRYOVER

Question. Much of the debate of the WIC program in recent years has been the size of the carryover of funds from one fiscal year to the next. Better management of the program is important to reduce the size of the carryover as a means of achieving better program efficiency and making better use of limited Committee resources.

What is the expected WIC carryover for the current fiscal year?

Answer. It is estimated there will be $100 million in recoverable funds and $30 million in spend forward funds at the end of fiscal year 1998.

Question. What is the projected WIC carryover for the coming fiscal year?

Answer. It is estimated there will be $100 million in recoverable funds and $30 million in spend forward funds at the end of fiscal year 1999.

Question. What steps are being taken to better manage the size of the carryover?

Answer. The Food and Nutrition Service (FNS) has submitted a participation and expenditure monitoring plan to the Office of Management and Budget and to its Regional offices. The plan incorporates the continuation of monitoring/guidance which is a routine part of FNS' oversight activities including close review of monthly participant and expenditure data. Any State reflecting a significant increase or decrease in participation will have its situation reviewed and appropriate action will be taken, if necessary.

The agency has drafted proposed regulations revising both the food and nutrition services and administration funding formulas to better allocate WIC Program funds in a more stable funding environment. The revised food funding formulas should help ensure food funds are allocated to States that can utilize the funds to maintain current participation as well as to direct additional funds, if available, to States that are serving a lesser proportion of their WIC eligible population as compared to other States. The proposed rule is in the clearance process.

FNS is also proposing legislation to limit the spendforward authority for food funds. The elimination of food funds spendforward would make additional funds available for allocation to State agencies. In turn, this should reduce the amount of unspent funds.

Question. Since eight states and the District of Columbia provide their own funds to supplement federal WIC appropriations, do those states have large carryover amounts?

Answer. The information providing carryover amounts for WIC State agencies which received State funding in fiscal years 1996 and 1997 is provided for the record.

[The information follows:]

State agency	Fiscal year—			
	1996 State Appropriation	1996 carryover [1]	1997 State Appropriation	1997 carryover [1]
Alaska	$26,000	$660,383	$26,600	$363,510
Wash., DC	.....	513,222	452,000	519,067
Indiana	190,000	2,687,946	.....	3,955,339
Maryland	.....	2,391,383	40,000	1,137,881
Massachusetts	16,200,000	1,354,529	13,783,217	2,742,793
Minnesota	2,950,000	.....	2,950,000	303,337
Nebraska	24,985	35,177	16,760	2,205,642
New Mexico	1,431,600	68,493	1,379,600	963,795
New York	21,000,000	2,530,092	21,000,000	2,623,557
North Carolina	1,200,000	3,306,536	1,350,000	2,990,252
Pennsylvania	4,884,000	5,800,374	2,000,000	6,478,993
Texas	.....	17,015,684	1,540,094	17,098,204
Washington	3,438,911	8,767,714	2,161,089	6,117,054

[1] Includes unspent recoverable and spendforward funds.

Question. If more states provided funds of their own, would that reduce the fear of states running out of federal funds and, thereby, reduce the annual program carryover?

Answer. Generally, States provided with significant amounts of State appropriated funds for the WIC Program, such as New York and Massachusetts, had little or no Federal funds available for recovery. They do, however, spend forward Federal funds. For other States there appears to be no correlation between the provision of State funds and the level of Federal carryover.

WIC RESERVE

Question. Similar to the Food Stamp request, the budget proposes a reserve for WIC. However, the WIC program continues to hold carryover funds from one fiscal year to the next. It is understood that the nature of the WIC program requires there will always be a "structural" carryover between $75 and $100 million.

Why would an additional reserve be necessary when carryover continue to exceed $75 to $100 million?

Answer. The Department has requested the contingency reserve to cover any unanticipated food expenditures some State agencies may experience which would jeopardize their ability to maintain their caseload levels. As the Department expects food cost inflation to generally remain modest, it is believed that a $20 million reserve is sufficient to resolve any special situations that might occur in fiscal year 1998.

The $75 to $100 million carryover amounts are unspent funds that are identified at closeout and recovered and reallocated through the funding formula the year after appropriated. These funds are part of the overall budget process and are used to support participation estimates. The contingency fund, however, would be additional funds made available to support current WIC caseload when appropriated food funds are insufficient to support participants already receiving WIC benefits due to unexpected events such as sudden increases in food costs or natural disasters.

WIC IMMUNIZATION

Question. Promoting childhood immunization is a purpose of the WIC program. A provision of the Labor-HHS appropriations act requires that 15 percent of CDC grants to states (approximately $21 million) for immunization activities should be directed through the WIC program. The budget justification materials indicate that only $950,000 was transferred to the WIC program in fiscal year 1997 and no funds are to be transferred in fiscal year 1998 or fiscal year 1999.

What is the status of WIC immunization activities?

Answer. The Food and Nutrition Service (FNS), the Centers for Disease Control and Prevention (CDC), the Department of Health and Human Services (DHHS), the National Association of WIC Directors (NAWD), the Association of State and Territorial Health Officials (ASTHO) and the American Academy of Pediatrics (AAP) have an ongoing cooperative effort to increase immunization rates among preschool-aged participants in the WIC Program. Through a strong partnership, these cooperators, are working to improve the quality of services and the health status of children under 2 years of age who are in need of nutrition assistance and/or immunizations.

As a result of this National initiative, numerous special immunization promotion activities are taking place.

—The WIC Program has regulatory responsibility to coordinate with immunization services and the degree of coordination is dictated by the priorities of State and local WIC agencies. Many WIC local agencies are located on site with health care services where immunizations are available. Other local agencies refer participants to health care services in the community.

—FNS, CDC, NAWD, ASTHO and AAP are developing a National Strategic Plan as a general guideline for States to consider to facilitate an increase in immunization coverage rates among WIC participants. Many of the ideas advanced in the plan were adapted from State initiatives that employ creative service delivery and cost sharing approaches.

—CDC, in conjunction with WIC State agencies, conducted demonstration projects and evaluations in several cities to determine the most effective methods of increasing access to immunization through the WIC Program. Data from these projects show that intensified collaboration and resource sharing between State/local WIC and immunization programs improve the service delivery capacity and quality of both programs.

—FNS is an active member of the Interagency Committee on Immunizations which is implementing an action plan to improve immunization services for preschool-age children and target resources to high-risk and hard-to-reach populations. FNS is also an active participant of the Immunization Education and Action Committee of the Healthy Mothers, Healthy Babies Coalition and the National Vaccine Advisory Committee.

—Through WIC and other food assistance programs, FNS cooperates with CDC and many other national organizations to actively promote the annual National Infant Immunization Week.

—NAWD, ASTHO, CDC, and FNS co-hosted a WIC immunization promotion conference, entitled "Working Together for Healthier Children," on February 12 and 13, 1997. The conference fostered positive communication at the State level between Immunization Programs and the WIC Program by: increasing understanding of each programs' goals and objectives; and highlighting win—win situations in State and local WIC and immunization partnerships. The conference

also focused on State WIC Directors' and Immunization Program Managers' concerns.

—FNS, CDC, NAWD, and ASTHO have formed the WIC/Immunization Research and Evaluation Subcommittee. The purpose of the this group is to coordinate research and evaluation activities directly related to immunization promotion efforts in WIC. The Subcommittee facilitates and reports on strategies that improve vaccination coverage rates among WIC participants.

—The Administration's Childhood Immunization Initiative has provided funds to States to strengthen their immunization infrastructure. These funds make vaccination services more widely available by helping public programs buy more vaccines and improve community service and outreach efforts. Many WIC State agencies use the funds to extend clinic hours, hire more staff, increase education efforts, and help create a national tracking system.

—During 1995, the Senate Committee on Appropriations, submitted the following in a report to accompany the 1996 DHHS Appropriation Bill: 1) The Committee directs CDC to ensure that all grantees receiving Immunization Action Plan (IAP) funds reserve 10 percent of those funds for the purpose of funding immunization assessment and referral services in WIC sites; 2) Immunization grantees must use the funds for WIC linkage unless the grantee can document that assessment and referral are taking place in WIC sites without the need for specific funds.

—FNS has been active and supportive of strengthening State Immunization Information Systems as a major initiative to improve immunization status assessment and referrals among WIC children. To further promote this linkage, in fiscal year 1996 FNS awarded grants totaling $946,793 for State WIC/Immunization System Linkage Grants to nine WIC State agencies to design, develop, and implement information system linkages between State Immunization Information Systems and WIC data systems at the State and local levels. Made possible through funding from the Centers for Disease Control and Prevention's National Immunization Program, the purpose of this partnership is to enhance automation capabilities in WIC clinics to facilitate accurate and efficient assessment of the immunization needs of WIC infants and children.

—During 1997, the 31st National Immunization Conference, held in Detroit, Michigan, the WIC Program was a prominent point of discussion. Representatives from FNS and State and local WIC staff presented workshops and poster sessions. The conference provided WIC with an opportunity to show the more than 2,000 attendees from both private and public sectors WIC's commitment to improving the quality of services, preventing the occurrence of health problems, and improving the health status of WIC participants under 2 years of age. It also provided an opportunity to further showcase WIC as the most important program to coordinate with to raise immunization coverage rates.

—FNS has developed a new publication, entitled "After You Deliver—Health Tips for Moms," which has just come off press in March, 1998. It contains a section "Immunize Against Disease" which emphasizes that shots are needed from birth through adulthood; why they are needed; and where they may be obtained. This publication is being distributed to all WIC State and local agencies for use in educating participants about the importance of age-appropriate immunizations.

Question. What level of funds are being transferred to WIC state agencies that are not reflected in the USDA budget justification materials?

Answer. In fiscal year 1996, approximately $1 million in funding was provided from the Center for Disease Control (CDC) to nine WIC State agencies to design, develop and implement information system linkages between State immunization information systems and WIC data systems at State and local levels. No additional funds were designated to be transferred from CDC in fiscal years 1997, 1998, and 1999.

Although CDC was not able to provide these specific resources in these years, it is important to note that WIC nutrition services and administrative funds may be expended on a wide range of immunization activities for WIC participants. Such expenditures are allowable WIC expenditure because they enhance WIC's role as an adjunct to health care, and immunization is certainly one such example of the kind of health service to which WIC refers on a routine basis. Such efforts range from comprehensive immunization screening and referral procedures and media campaigns to sending immunization reminders to clients to reimbursable activities an example of this is the actual administration of shots to WIC children, for which WIC receives compensation from immunization resources. The WIC regulations do not set standards on the level of effort that must be expended by WIC agencies. Instead, the type and intensity of immunization activities being carried out is at the discre-

tion of individual WIC State agencies and other offices within State Health Departments based on their priorities and resources.

Question. Would it be advisable to transfer funds directly from CDC to USDA rather than to the states? If so, why?

Answer. In fiscal year 1996, approximately $1 million in funding from the Center for Disease Control (CDC) was provided to nine WIC State agencies to design, develop and implement information system linkages between State immunization information systems and WIC data systems at State and local levels. No additional funds were designated to be transferred from CDC in fiscal years 1997, 1998, or 1999.

CDC considers the WIC Program one of its most important allies in raising and maintaining immunizations coverage rates among children at risk of vaccine-preventable disease. As such, a well coordinated ongoing cooperative effort has been developed between CDC and WIC at the Federal, State and local level. Since CDC has the primary responsibility for and is the leading expert on immunizations, and has an established working relationship with the Food and Nutrition Service, it would be desirable to maintain any available funding pertaining to immunizations under the direct management of CDC.

WIC PROGRAM MANAGEMENT

Question. As we approach full funding for WIC, it becomes more difficult to provide fine-tuned management for the program. Among the larger challenges for the program is bringing states with low participation rates (the so-called low "Fair Share" states) up to the same level with states (so-called "Stability Grant states) that maintain high, if not full, participation rates.

What is USDA doing to help Fair Share states increase their participation rates?

Answer. The proposed regulation revising the funding formulas will contain a provision that will direct additional funds, if available, to States that are serving a lesser proportion of their WIC eligible population as compared to other States—under fair share States. Over time, under fair share States will receive additional funding so that they have the opportunity to add participants to bring them closer to the level of service provided by State agencies that have received allocations above their fair share—the stability grant States.

Question. What are the budget implications of these activities?

Answer. There are no budget implications associated with the provision in the proposed funding formula regulation that would allocate additional funds, if available, to the under fair share States. The President's Budget Request for the WIC Program for fiscal year 1999 continues to support a full participation level of 7.5 million. The revised funding formula has no impact on the requested budget amount or the estimated number of participants to be served by the WIC Program.

Question. If more funds are directed to Fair Share states as a percentage of total funding, what steps will USDA take to protect the levels of Stability Grant states?

Answer. The proposed funding formula will continue to retain the stability component as part of the food funding formula. Stability will be defined as the prior year grant, and adjustments for inflation will occur if funds are available. In a stable funding environment, the vast majority of available funds will be allocated as stability funding, which will allow for consistent participation levels from year to year for most State agencies.

WIC FARMERS MARKET

Question. The budget request proposes an increase and to move the WIC Farmers Market program to the Commodity Assistance Program account.

Will the increase allow program expansion to new states or will it be used to increase activities in states already part of the program?

Answer. In accordance with the authorizing law, we must first provide all current State agencies with a base grant amount that is equal to their previous year's funding level. After base amounts are satisfied, the law provides for any remaining funds to be divided in a ratio of 75 percent for current States for expansion and 25 percent for new States that would like to begin a program. This split guarantees that a quarter of any funds available for program expansion will always be reserved for new State agencies.

COMMODITY ASSISTANCE PROGRAMS

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM (TEFAP) DONATIONS/FOOD GLEANING

Question. USDA continues to provide funding for food and administrative costs of food donations. At the same time, the Department is actively supporting food gleaning activities. In fiscal year 1997, TEFAP food purchase activities totals $130.2 million for 268 million pounds of food. That same year, the donated food only accounted for $29.5 million for 49.7 million pounds.

Is USDA's Gleaning Initiative expected to increase the amount of bonus commodities available through TEFAP?

Answer. No. Given that the USDA Food Recovery and Gleaning Initiative focuses on the free donation of excess food, it will not have any direct impact on the purchase of food through the bonus commodities program. However, it is important to note that much of the food provided to food banks, food pantries, food rescue groups, and other emergency feeding organizations through the Food Recovery and Gleaning Initiative will often be very similar to the types of food provided through bonus commodity purchases.

Question. What factors determine state allocations for TEFAP?

Answer. Section 214(a) of the Emergency Food Assistance Act of 1983 (EFAA) mandates the allocation of TEFAP commodities to States through a formula based 60 percent on the number of persons in the State with incomes below the poverty line, relative to national figures, and 40 percent on the average monthly number of unemployed persons in the State, again relative to national figures. Section 204(a)(1) of the EFAA in turn mandates that TEFAP administrative funds be allocated among the States on the same basis.

Question. What are the projections for food donations in fiscal year 1998?

Answer. While we cannot provide an accurate projection of foods to be donated to the Emergency Food Assistance Program (TEFAP) given that bonus purchases depend on rapidly changing market conditions, thus far in fiscal year 1998, the Department has donated to TEFAP $16.6 million in bonus canned salmon, frozen turkey, dry beans, dried fruit, and instant nonfat dry milk. In addition, purchases for food donations to TEFAP estimated at $5 million are currently in progress for fresh and frozen fruits and additional dry beans. Further, the Department has authorized up to $30 million to procure pork products to be donated primarily through TEFAP. Additional substantial purchases for food donations are currently under consideration.

Question. To what extent will the Gleaning Initiative play a part of TEFAP donations in fiscal year 1998?

Answer. The Food Recovery and Gleaning Initiative donations will have no direct impact upon the distribution of TEFAP commodities because they will be distinctly different programs with different focuses. The Food Recovery and Gleaning Initiative will focus on aiding community-based efforts to distribute food that is donated from the private sector for free directly to emergency feeding organizations, while the TEFAP program will continue to focus on purchasing commodities that are distributed through state agencies. However, it is important to note that many of the emergency feeding agencies that will be the ultimate recipients of food distributed through the Food Recovery and Gleaning Initiative will be the same emergency feeding organizations that ultimately receive TEFAP commodities.

Question. If the Gleaning Initiative is to become part of TEFAP, will there need to be an increase in the funds appropriated for TEFAP administrative costs?

Answer. We do not intend to make the Food Recovery and Gleaning Initiative a formal part of TEFAP, but rather to treat it an independent effort. We intend to ensure that the grants, cooperative agreements, technical assistance, and other assistance provided through the $20 million requested are utilized, in part, to cover some costs that are often handled by TEFAP Administrative funds, such as transportation, processing, packaging, sort, heating and refrigeration, and distribution of gleaned and recovered food. Thus, state TEFAP should not need additional funds—other than any funds they might receive from the $20 million—to benefit from this Initiative.

Question. Is it anticipated that the Gleaning Initiative will ever supplant or reduce the level of funding needed for USDA food assistance programs?

Answer. No. The Food Recovery and Gleaning Initiative is intended as a cost-effective supplement to, not a replacement for, existing Federal nutrition assistance programs. While USDA firmly believes that the bedrock Federal nutrition assistance programs, such as Food Stamps, WIC, and the National School Lunch and Breakfast programs, will continue to be the first line of defense for Americans facing hunger.

There is so much potential for gleaned and recovered food to provide nutritious additions to the diets of millions of low-income Americans. We see a terrific opportunity that we should capitalize on. We expect this relatively small investment to make a big difference in food recoveries and improve nutritional intakes of the needy far beyond its modest cost. Recovered food, like TEFAP food, helps needy families through temporary hard times, supplementing Food Stamps for some, and providing necessary sustenance on an occasional basis for others.

FOOD PROGRAM ADMINISTRATION

STUDIES AND EVALUATIONS

Question. The fiscal year 1998 Appropriations Act transferred the studies and evaluations activities of the Food and Nutrition Service to the Economic Research Service (ERS). The request for fiscal year 1999 would return them as prior to fiscal year 1998.

What has been the effect of not having these programs housed with the Food and Nutrition Service?

Answer. It is too soon to tell. Food and Nutrition Service (FNS) provided Economic Research Service (ERS) with a detailed description of FNS' information needs. They are now in the final stages of preparing a plan of action. Indications are that they will initiate research on many, but not all, of our priority information needs. It is also likely that ERS will pursue some lines of inquiry that are of lesser importance and relevance to the FNS.

It is also too soon to tell whether the implementation of the research will remain practical and relevant to FNS program operations and policy development. When study funding and authority were located with FNS we were able to make mid-course adjustments quickly so that studies were able to reflect current FNS priorities while the effect on study budgets was minor. While the need to coordinate across agencies is a challenge, we expect to work closely with ERS to achieve the best results possible.

Question. How many studies or evaluations have been conducted by ERS?

Answer. Economic Research Service (ERS) has not had time to complete any studies or evaluations funded in fiscal year 1998. On January 29, 1998 the General Accounting Office (GAO) released a report listing food assistance-related research projects conducted by the Food and Nutrition Service (FNS) and ERS during the past 3 fiscal years ("Food Assistance: Information on USDA's Research Activities," GAO/RCED–98–56R). After meeting with FNS and ERS officials to discuss their research activities during this period, the GAO identified 23 nutrition and food assistance projects conducted by ERS during the past 3 fiscal years.

Question. How many studies or evaluations did the Food and Nutrition Service conduct in fiscal year 1997?

Answer. The Food and Nutrition Service (FNS) started 9 studies during fiscal year 1997. On October 1, 1997 FNS had a total of 57 ongoing and new research projects underway.

Question. Please explain your reasons for returning these programs to the Food and Nutrition Service.

Answer. The best place to house research responsibilities for food assistance programs is with the agency, the Food and Nutrition Service (FNS), that administers the programs. It is the proximity of research, program, and policy staff that ensures a research program that is practical and relevant to program operations and policy development. Housing the research function within FNS achieves the critical balance between independence and effective communication with the programs served, taking advantage of FNS' ongoing, operational relationship with State and local administrative agencies and other related Federal agencies.

In addition, the range of issues surrounding FNS programs is very broad. They demand techniques that go beyond typical economic analyses if we are to reliably address the concerns of Congress and States. We are often required to initiate new nationally representative data collection efforts as well as complex demonstration activities (such as those that established the viability of Electronic Benefit Transfer). While the Economic Research Service (ERS) is a capable research organization, the expertise to administer such activities has been developed over the years in FNS.

FNS has managed one of the strongest applied policy research programs in all of government with a proven track record of conducting research relevant to program needs. The time it would take to replicate this in ERS seems a poor use of government resources. Moreover, efforts to coordinate between ERS and FNS and its program cooperators seems to introduce an unnecessary complexity into USDA operational procedures.

FUNDING LEVELS

Question. The budget request includes an increase in Food Program Administration funding over the fiscal year 1998 amount. In fiscal year 1998, an increase was provided above fiscal year 1997 after having been kept level for several years.

What additional activities in Food Program Administration did the increase in fiscal year 1998 provide?

Answer. The fiscal year 1998 appropriation provided an additional $1,591,000 for the Food Program Administration account above fiscal year 1997 levels. This increase was designated for funding 50 percent of the combined anticipated fiscal year 1998 pay raise and the annualization of the fiscal year 1997 pay raise.

Even with the $1.6 million increase, the agency was forced to further reduce staff by 27 staff years to cover the remaining 50 percent of the pay raise. The Food and Nutrition Service (FNS) cannot sustain additional cutbacks in staff without serious impediment to its mission. For example, activities that ensure program integrity, such as payment accuracy, store investigations, and on-site reviews, are labor-intensive, require a great deal of staff attention and travel funding, and are critical to our agency's mission in both the Food Stamp and Special Nutrition Programs. Keeping error rates low, which saves the government millions of dollars, can only be accomplished with staff attention. Changing program needs and new legislation have imposed significant, new, and ongoing administrative responsibilities at the same time that the agency has been called to improve the nutrition of program recipients, strengthen program integrity, and implement EBT nationwide. The agency also requires staff to take advantage of the new data analysis tools, EBT and new authorities in Welfare Reform that have provided a tremendous opportunity to increase program integrity among food stamp retailers.

The budget request is necessary to maintain staffing levels. It is imperative that FNS preserve a steady work force to ensure adequate oversight for fiscal and program integrity, reduce fraud and abuse, keep pace with changing legislation and program needs, progress towards improving the nutrition of program recipients, and still accomplish its mission.

Question. What other activities would you perform if the fiscal year 1999 request was provided?

Answer. The request budget increase of $4,150,000 will provide support for the Food and Nutrition Service (FNS) food assistance programs.

After providing for mandatory personnel costs, such as the pay raise, the requested increase will allow the agency to implement several important initiatives. FNS will implement an agency-wide Civil Rights Program Complaint Prevention Program, manage the agency's diversity effort, and fund reasonable accommodations for disabled individuals. FNS will also be able to support the publication of the Dietary Guidelines for Americans. With a very modest request of $1.45 million for the Program and Financial Integrity Advancement Initiative, the agency can work towards improving integrity in both the program and financial areas. These areas are essential to preserving billions of taxpayer dollars and have been under increased scrutiny from both the General Accounting Office and the Office of Inspector General. The focus on program integrity would concentrate on meal claiming and participant eligibility in both the Child and Adult Care Food Program and the National School Lunch Program; improved integrity of the Food Stamp Quality Control System; and vendor management and strengthening eligibility determination procedures within the Women, Infants and Children Program. Funding for financial integrity will allow the agency to enhance information and financial systems, as well as program oversight of State agencies. FNS would perform reviews of State agencies to prevent improper Federal charging and claims for reimbursement; examine expenditure validation; oversee special program activities; ensure consistent and efficient implementation of program policy; and train State agency personnel.

SUBCOMMITTEE RECESS

Senator COCHRAN. This concludes today's hearing, and I appreciate very much the cooperation of all witnesses.

The next hearing we will have will be on Tuesday, March 17, at 10:30 a.m. in this room, 138 of the Dirksen Senate Office Building.

We will hear from the Department witnesses on the budget request for the food safety, marketing, and regulatory programs of the Department of Agriculture.

Until then, we stand in recess.

[Whereupon, at 11:16 a.m., Tuesday, March 10, the subcommittee was recessed, to reconvene at 11:22 a.m., Tuesday, March 17.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, MARCH 17, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 11:22 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran and Bumpers.

DEPARTMENT OF AGRICULTURE

STATEMENTS OF:

CATHERINE WOTEKI, PH.D., R.D., UNDER SECRETARY, FOOD SAFETY

MICHAEL DUNN, ASSISTANT SECRETARY OF AGRICULTURE, MARKETING AND REGULATORY PROGRAMS

ACCOMPANIED BY DENNIS KAPLAN, BUDGET OFFICER

FOOD SAFETY AND INSPECTION SERVICE

STATEMENT OF THOMAS J. BILLY, ADMINISTRATOR

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

STATEMENT OF TERRY L. MEDLEY, ADMINISTRATOR

AGRICULTURAL MARKETING SERVICE

STATEMENT OF ENRIQUE FIGUEROA, ADMINISTRATOR

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

STATEMENT OF JAMES R. BAKER, ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order.

I apologize to all of our witnesses and those who are here for the subcommittee hearing about our conflict this morning with the markup of the supplemental appropriations bill which we have undertaken to address.

We have statements from all of our witnesses, and I am very pleased with your attendance at our hearing and the furnishing of the statements for our review.

Our hearing focuses specifically this morning on the request submitted by the President for funding of programs and activities of

the Department of Agriculture's Food Safety and Inspection Service and Marketing and Regulatory Programs. We are pleased that Under Secretary for the Food Safety and Inspection Service, Catherine Woteki, and the Assistant Secretary for Marketing and Regulatory Programs, Michael Dunn, are here to lead our discussion of this budget request. There are others who accompany them. We appreciate the attendance of all witnesses.

Because we have the statements, we will print them in the record. I have questions which I will submit for your attention and review and timely response. We will print that all in the record, but because of the shortage of time and the encroachment on our schedule of the full committee's activities, we will not undertake a full discussion of all of these issues. I hope you agree that this is appropriate. There are other things on the schedule later this morning that require witnesses' attention and also Senators'.

Senator Bumpers, the ranking minority member of the subcommittee, sends his regrets. He is still at the full committee markup. I escaped so I could come here and give this subject our attention for the time that we do have available.

USER FEE PROPOSAL

So, I am going to stop talking except to make one observation about the budget submission, and that is my very serious disappointment with the continued insistence by the administration to submit a budget request for activities under the jurisdiction of these witnesses and assume that Congress is going to enact massive new user fees to fund the budget request.

Just to give you an example of the seriousness of this situation as it affects the budget of the Food Safety and Inspection Service, the budget request is for $150 million. That is $440 million below the current fiscal year appropriated level. When you look at the other sections of the bill, for example, the Agriculture Marketing Service, or Grain Inspection, Packers and Stockyards Administration, we have a $31 million shortfall in the budget for those activities because of the proposal from the administration assuming that user fees will be enacted to recover those needed funds, to operate the programs, to do the things that are required by law under the statutes by these agencies.

So, if you add all that together, what you have got here is a budget request that is over $600 million short of the necessary level to do the work required by these agencies.

We start out in our appropriations process without the authorizing legislation even being proposed by the administration, and we know it is not going to be enacted. It has been proposed in the past and has not been enacted, but it is proposed again with a straight face that this is a legitimate budget process. Of course, it is a disgrace to put the committee in that kind of position at the outset.

What if the committee just said, OK, we will appropriate the request submitted by the President for these activities and we presume the administration will present legislation to correct the shortfall and lobby the Congress effectively between now and the beginning of the fiscal year to enact the legislation, impose the user fees on whomever and at whatever cost to pay these fees and ex-

penses for these activities? That is one option. This is the most irresponsible option and we will not do that.

So, we will take from other programs either in the administration's budget request and provide funds from those other programs or come up with funds from programs that other members of the committee might suggest that we cut to provide the funds needed here.

These are important areas. Food safety is something that is important to every American citizen, not just those who are in the business of processing meat and poultry, marketing those products or growing those products. It is important to everybody, and we are not going to put in jeopardy the lives and the safety of American citizens by being irresponsible with the way we deal with this challenge.

But having said that, I am going to stop and let the witnesses make whatever comments they would like to make about the subject at issue and make whatever comments you think would be helpful to the committee as we approach this interesting challenge.

PREPARED STATEMENTS

We have prepared statements from Senators Bumpers and Burns which will be made part of the hearing record. Shall we start with Ms. Woteki?

[The statements follow:]

PREPARED STATEMENT OF SENATOR BUMPERS

I would like to thank Secretary Woteki and Secretary Dunn for appearing before our subcommittee. I also want to extend a welcome to the other USDA officials here today representing the various agency missions under the larger umbrella of food safety, marketing, and regulatory functions. I would also be remiss if I did not give special recognition to fellow Arkansan, Jim Baker, who is with us today as head of the Grain Inspection, Packers and Stockyards Administration (GIPSA). Welcome to you all.

Last week we heard from the USDA agencies charged with protecting our people from the tragedy of hunger. Their budget request, by the represents the single largest segment of this subcommittee's annual appropriations bill. However, unless the food they make available by their efforts is safe, their entire mission fails as do those of us all. Ensuring a safe food supply for the American people is one of the most important responsibilities of the federal government and of this subcommittee.

Our commitment to food safety has come a long way since that day, almost a century ago, when President Teddy Roosevelt read Sinclair Lewis' description of food processing and reportedly threw his breakfast out a White House window. Along with our commitment has come technology and through the combination of these two driving forces we are able to maintain strong consumer confidence and the ability to lay claim to the fact that the United States has the safest food supply in the world.

In fact, we are now engaged in a new technological breakthrough in the realm of food safety. For years, the primary tools of FSIS inspectors were their very senses, literally. The system of food safety inspection on which we have relied for decades, the organoleptic system, is based on the simple perceptions of sight, smell and touch. While tests based on these senses can reveal much, there is certainly much that remains hidden. To replace this antiquated system we now have in place the Hazard Analysis at Critical Control Points (HACCP) system which, finally, brings the arbiter of science to the task.

The HACCP system was implemented two months ago for the 300 largest meat and poultry operations in the nation. Over the next two years, the small and very small operations are to be brought into HACCP as well. Once complete, the entire U.S. meat and poultry supply will reach consumers only after being submitted through a process based on scientific method and which should achieve the highest levels of safety reasonably attainable.

That is not to say that this new system will not be wrought with a series of growing pains as the old system is replaced by the new. I and, I am sure, many of my colleagues have already heard of problems with the new system and the costs associated with them. I am told that if these problems in program administration are not worked out before HACCP is mandated for the smaller companies, there are many small firms that won't survive the business disruptions that will befall them. I fully expect Secretary Woteki, Mr. Billy, and others associated with implementing HACCP to see the process is handled properly and fairly.

In my view, the key to the new system is sound science. The capability of HACCP in protecting our food supply is only as good as the science used in its process. As highly as I expect USDA to ensure fairness in administering HACCP, I am adamant about the use of the best science available in the program's implementation. Not long ago, a food safety issue was raised in my state and I quickly learned that various federal and state agencies all had different views on what had been and would be considered safe levels for human consumption. That is unacceptable. By finally bringing all parties to the table we were able to achieve a consensus, but science should be the final arbiter when it comes to food safety and we must settle for only the best.

Currently, the Senate is considering regulatory reform legislation. I intend to closely examine that bill as it comes to the Senate floor and I may offer an amendment better to ensure that regulatory actions related to science are tied to sound science. For example, if we were to ask the regulated community and the regulators to comment on the science now employed in the HACCP system, we might very well get two different views. If that is the case, it may be appropriate to assign certain decisions to a more objective analysis. A story in the Washington Post last week noted that a recent EPA brochure on "Pesticides on Food: Consumer Information" was considered "alarmist" by the grocery industry and "milquetoast" by environmental and consumer groups. There may be times when taking action that pleases no one may be evidence you have done your best. When it comes to science, we must always ask why not the best?

In previous hearings, this subcommittee has made pretty clear it's collective views on the various user fee assumptions in the fiscal year 1999 budget. By far, the largest single user fee proposal is that of FSIS to cover the costs of all inspection activities, a proposal that goes beyond any similar proposal previously submitted. It has been suggested that opposition to FSIS users fees is some indication of caving to the interests of the meat and poultry companies. I wish to set the record straight.

Regardless of the economic importance of the meat and poultry industries to a state like mine, which is substantial, there are issues tied to the user fee proposals that go far beyond the imposition of higher production costs for the hundreds of companies around the country. The programs of FSIS maintain the basic protections of food safety for all Americans. Although the President's budget this year seems lush with various user fee proposals, I don't see anyone rushing forward to propose user fees for basic police or fire protection. There are certain functions of government that should be borne by the public they serve. Food safety is and must remain at the top of that list. That is a matter of policy that must always transcend economics.

But if we want to talk about the economics of the user fee proposal, lets at least be honest about it. With all due respect to USDA, I find the analogy of the user fees to an almost unmeasurable price increase at the consumer level disingenuous. The meat and poultry industries are highly competitive, especially at the consumer level. To pretend that the companies are going to pass on the cost of user fees to consumers is ludicrous. The meat case in your local grocery store is the last place you are going to pay for FSIS user fees. Therefore, let's stop pretending that the "public" is still going to pay for the costs of inspection.

It is equally unrealistic to assume that the companies themselves are going to absorb these costs as long as they have someone else on which to pass them. Enter the producer. Of all federal agencies, USDA should be familiar with the long-held view that the agricultural producer is the one member of our economy who always buys his inputs at retail and sells his products at wholesale. Due to the nature and structure of the farm economy, anyone who is honest will quickly acknowledge that this user fee proposal will not be borne by the consumer or the companies. It will be borne, as always, by the sector of the economy least capable of absorbing it, the farmer. In fact, I have been told that some poultry grower contracts contain provisions that will adjust downward the price paid to the grower in the event these fees are enacted. I am not willing to tell the beef producer or contract poultry grower in my state to brace themselves for another economic hit in the name of "public policy".

As our marketplaces become more and more "global", we must be ever vigilant about the health and safety of the products that cross our borders. In my own state and across much of the South, the Imported Fire Ant is showing us how damaging newly introduced species to this country can become. In fact, the Fire Ant came to this country many years before the age of supersonic jets that can now carry bacteria, disease, and pests across the planet in a matter of hours.

The Fire Ant is only one example. The people of Hawaii are constantly on guard against the introduction of Brown Tree Snakes which have already, by accident, taken over the island of Guam. Imported, as well as native, pests and diseases continue to be a threat to our agricultural base as well as human health and safety.

We have seen some success. Brucelosis in cattle is nearly eradicated from the country. In many states, the boll weevil has been eliminated. But even with these goals in sight, we must stay vigilant. Until a disease is truly eliminated or a pest is eradicated completely, we remain at risk from reintroduction or resurgence. We can easily recognize the economic and public health benefits of these efforts and they must continue.

Just as our markets must be safe from pestilence and disease, they must also be made fair and equitable. As suggested in my earlier comment regarding user fees and the producer, the American farmer does not always fit into the classic model of American economics. The American consumer profits from the affordability and availability of a variety of foods that would not even be imaginable a generation ago. There is much at stake for the producer and consumer alike. Whether we ever stop to recognize it, every one of us fits into at least one of those two categories.

There are some items with the budget proposal of the agencies before us with which I find strong disagreement. However, I believe our goals are the same. I look forward to the testimony today and to engage in a productive dialogue in which all views can be aired in order for us to proceed with the task before us.

PREPARED STATEMENT OF SENATOR BURNS

Thank you, Mr. Chairman. I appreciate you calling this hearing this morning. As we look at the budget for the Department of Agriculture I see this as one of the more important hearings on the calendar. Both the Food Safety Inspection Service and the Agencies within Marketing and Regulatory Programs represented here today have a great deal to do with the way the people in the state of Montana go about their daily business.

As with most of the agencies which we have seen come before this committee, I am again concerned with the way that these agencies budgeting for the coming fiscal year. We once again see additional fees tacked onto services provided by these agencies in the form of user fees. Fees which this committee, has in the past, and appears will again this year look unfavorably upon.

As I look upon this budget for this year, I am concerned with the way the funds have once more been directed by the Department of Agriculture. I see funding cuts in areas where we have restored funds in past years. I also see programs continually proposed which this committee and Congress have told the Department that they are not inclined to agree with the Administration.

Last year, Assistant Secretary Dunn came before this committee with a proposal to move to a cooperative arrangement in states with large predator problems to pay an additional share of the costs associated with predator control. States like Montana where a large portion of the predator problem is placed on the state by actions of the Federal government. Unfortunately we see this proposal brought before the Committee once again.

In the area of Wildlife Services, we continue to see large cuts made in the budget. Yet in many of our rural states we see the population of predators on the rise. I have heard time and again, that the people who receive the services of the agencies involved in this program should pay additional funds to take care of the problem of predator control. A problem which has been placed on them by this government.

I have a number of producers of both sheep and cattle who have told me of the losses they experience to both coyotes and wolves in Montana. Yet under your plan they would be forced to expend additional dollars to protect their private property from animals forced on them by this government. I have also been informed that the Wildlife Services Agency in Montana will effectively be out of money for predator control before the end of the current fiscal year. Well wolves and coyotes don't understand high finance of this particular nature, and they will continue to feed on the livestock in the field.

Mr. Dunn, simple math will tell you that as wolf populations increase, damage to livestock will also increase. Wolves killed 70 head of livestock (both sheep and

cattle) in Montana, Idaho and Wyoming in 1996. By 1997, livestock kills increased to 140. Doesn't seem like a lot, unless of course you own one or two of those animals. Wildlife Services has $200,000 available in the fiscal year 1998 for wolf management, and I understand, anticipates a shortfall of about $70,000. In fiscal year 1999, $535,000 will be needed to address the escalating cost of livestock losses, a shortfall of over $200,000 from current program levels. With math like that it is not difficult to understand why the people on the ground don't trust the management of agencies within not only the Department of Agriculture but also the Department of the Interior.

This past year, the Animal Plant Health Inspection Service (APHIS), developed certain protocols to provide for additional trade in livestock with our neighbors to the north in Canada. However, they set forth their protocols before our neighbors did so and now we are faced with a program that shows little potential for future development. This does not assist our producers in meeting the needs that they have on the ground, or that were explained to them in the development of this trade process.

I have to tell you also Mr. Secretary, that I am more than a little concerned about what is happening with the funds that this Committee provided for the construction and operation of a bison quarantine facility in Montana last year. I have heard little or nothing about what has been done with the state to facilitate the construction and operation of the pens in Montana. I will be interested in hearing what has been going on and what APHIS plans for this facility.

On the ground in states like Montana, our producers are looking for some means of finding what the market is like on fatten cattle. Producers have come to you for a number of years providing options for you to choose, yet today we have no more of an idea of what is happening in the market than we did several years ago. Proposals have been put forward, and this past month the National Cattlemen's Beef Association supported a resolution on providing transparency in the cattle market. I will be interested in hearing what is being done to address these concerns.

On the issue of Food Safety. Well I guess we had better start spending our funds in that area of concern. It appears that this Administration is driving this country on a course where we will be required to purchase our food and fiber from foreign countries. I just don't know if the rest of the world takes as much care and concern in the commodities that they produce, as the American farmer and rancher does in producing the same commodities here in the United States.

As a result I joined with several Senators in introducing a bill that would require that all meat be labeled as to the Country of Origin. After much debate within the livestock industry and with other industries associated with meat sales we have developed another proposal which we will unveil soon. However, throughout this entire process I have heard nothing from the Department on what their position on this would be.

Overall, Mr. Chairman, I am supportive of the work and the mission of the Agencies before the Committee today. I am a vocal supporter of the work that APHIS provides. I will commit myself to working with both you and the ranking member of this Committee to find a way to provide the funding necessary for these agencies.

Thank you, Mr. Chairman.

STATEMENT OF CATHERINE WOTEKI

Dr. WOTEKI. Thank you, Mr. Chairman. I appreciate your introducing my statement and Mr. Billy's statement into the record. What I would propose to do is to just very briefly summarize some key information relevant to some of the points that you have just made.

Mr. Billy is sitting to my immediate left and to his left is Mr. Dennis Kaplan from our Office of Budget and Policy Analysis.

FISCAL YEAR 1999 BUDGET REQUEST

The budget that we have proposed for fiscal year 1999 is a program level of $709 million, which reflects a net increase of $34 million over our 1998 current estimate.

We are proposing in fiscal year 1999 to conduct our meat and poultry and egg inspection activities using our current level of staffing.

The programmatic increases that are contained in our request would continue the implementation of our new regulatory approach based on hazard analysis and critical control points. It also contains funds that would be used for a variety of different purposes under the President's interagency food safety initiative.

Collectively these increases would be used to continue implementation of HACCP, to extend HACCP training to the egg processing inspectors, to help to acquire some additional tools that would improve inspectors' ability to evaluate the product they are inspecting and also to facilitate the redeployment of inspectors to strengthen our compliance efforts.

FOOD SAFETY INITIATIVE

Overall the President's budget includes a $101 million request for an interagency food safety initiative. Of this sum, $11 million would come to the Food Safety and Inspection Service. The initiative identifies a number of very high priority food safety activities that provide a very integrated approach to reducing foodborne illnesses. In addition, these funds would help FSIS to facilitate the transformation of State programs to hazard analysis and critical control point systems by fiscal year 2000.

Funds also requested under the President's food safety initiative would focus on expanding consumer education, helping to develop voluntary measures to reduce the risk of pathogenic contamination that could occur on the farm or on the ranch.

USER FEE PROPOSAL

In the near future, the administration will be transmitting to you, to the Congress, the legislation necessary to support our fiscal year 1999 budget proposal to recover the full cost of the Federal meat, poultry, and egg products inspection through user fees. We do believe that the user fee proposal is important to ensure that we have sufficient resources to provide for the mandatory inspection services needed to meet the increasing demand from industry. The proposal will have an overall effect on prices, to the extent that we have been able to estimate, that will amount to less than 1 cent per pound of meat, poultry, and egg products. We also believe that implementation of a user fee should be designed and must be designed to be fair and equitable to promote accountability and efficiency and also to minimize the impact on the competitive balance among the affected industries.

Approximately $150 million of appropriated funds are requested to convert the Federal program to user fees and also to continue our obligations to States to help them in maintaining their State inspection programs.

We thank you for the opportunity to appear before you and I would also like in closing to thank you and the committee for your favorable actions this year on our budget request.

PREPARED STATEMENTS

Senator COCHRAN. Thank you, Dr. Woteki. Mr. Billy and Mr. Kaplan, we appreciate your presence as well. We will insert the

complete statements of Dr. Woteki and Mr. Billy in the hearing record.

[The statements follow:]

PREPARED STATEMENT OF CATHERINE E. WOTEKI

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to discuss the President's fiscal year 1999 budget for the Food Safety and Inspection Service. With me are Deputy Under Secretary for Food Safety Caren Wilcox, FSIS Administrator Thomas Billy, USDA Budget Director Stephen Dewhurst, and representatives from the FSIS budget office. Before I begin, I would like to thank you for looking favorably on our fiscal year 1998 budget request. This funding has helped us make progress in fulfilling our Federal responsibilities of maintaining a safe food supply while we make improvements in the inspection program.

BROADER FOOD SAFETY CHALLENGES

I would like to start by commenting briefly on our broad food safety agenda. As Congress pointed out in report language that accompanied the Department of Agriculture Reorganization Act of 1994, one of USDA's basic missions is to ensure the safety and quality of the Nation's food supply. The increasing importance of food safety issues to the future of agriculture led Congress to create this separate Subcabinet office to lead the effort to reform our food safety programs. It is my goal that the Under Secretary's office focus on long-term planning and policy development, on our legislative program required to ensure food safety, on oversight of the Food Safety and Inspection Service, and on providing general assistance and advice regarding food safety issues, as requested by the Secretary.

My office also has broader responsibilities related to our critical mission, and the inspection of meat, poultry and egg products. One example of our involvement in food safety activities that provide support to our inspection activities is our leadership in the international Codex Alimentarius Commission. Coordinating the United States' position on international food safety issues has required that my office develop expertise across agency and commodity lines. Although we also must take into account trade issues and the international community's interest in those trade issues, these issues are secondary to Codex's public health orientation and mission.

Secretary Glickman has also asked me to assume a leadership and coordination role consistent with our basic mission in such food safety areas as the President's Food Safety Initiative, which, among other things, includes the President's directive to develop and carry out a plan to ensure the safety of domestic and imported fruits and vegetables. We are working closely on these efforts with the Department of Health and Human Services, the Environmental Protection Agency, and other USDA agencies.

FARM TO TABLE STRATEGY

Our central responsibility of safeguarding the nation's meat, poultry, and egg supply provides us with a broad perspective on the problem of ensuring food safety. We recognize that not all contamination of meat and poultry and egg products occurs in the slaughter and processing plants we regulate. It can occur during animal production, during storage and transportation, and in distribution. It can occur in the grocery store and in restaurants. And, of course, it can occur in the home. This is the basis for our farm to table food safety strategy.

As you know, the President's 1998 and 1999 Food Safety Initiative embraces the farm to table philosophy of addressing food safety problems. Increased funding for research on microbial pathogen detection and prevention and agricultural production practices and for education and training of food handlers at home and in the commercial sector—as well as for surveillance, risk assessment, inspection, and strategic planning—is essential to making further improvements in food safety.

For example, while many consumers have a good foundation of food safety knowledge, there are some persistent misconceptions as well as confusion about specific food handling practices. Because we believe education is key to changing risky behaviors, the Federal government has used funds provided in fiscal year 1998 to launch the "Fight BAC" campaign to reduce the incidence of foodborne illness by educating Americans about safe food handling practices. "BAC," which is short for bacteria, is a green, slimy-looking character, and the result of a private-public partnership consisting of industry, consumer groups, and government. The "BAC" character puts a face on foodborne bacteria, which we believe will help Americans remember that they have the power to control bacteria in their home kitchens. Be-

cause "BAC" is a cartoon character, children are naturally attentive to him. We hope that "BAC" will be a carrier of food safety messages to consumers at a young age.

RESEARCH

Because of our experience with meat, poultry and egg products, we are positioned, I believe, to make recommendations on food safety research priorities and to develop effective consumer and industry education programs. Because FSIS is not a research agency, we must reach out to research agencies within the Federal government and to the private sector to meet our research needs. For that reason, FSIS has developed a Food Safety Research Agenda as one means of communicating with those outside of FSIS about our recommended priorities in food safety research.

INSPECTION RESPONSIBILITIES

I would like to talk now about our critical inspection responsibilities. I want to emphasize my commitment to fulfilling our basic mission—ensuring the safety of the nation's meat, poultry, and egg supply. Protection of the public health is our mandate, and that is what guides all that we do.

Of course, our primary vehicle for meeting our responsibilities is our inplant inspection and oversight of the products we regulate. While no country in the world can boast of an absolutely safe food supply, I—along with many others—believe the United States has the world's safest food, including meat, poultry, and egg products.

IMPORTANCE OF HACCP IMPLEMENTATION

I am pleased to say that we have begun the first phase of our new meat and poultry inspection system. There are some 300 plants that were required to implement HACCP as of January 26 of this year. These plants account for about 75 percent of the meat and poultry slaughtered in the United States. I am also pleased to report that HACCP implementation in these plants is going well. However, HACCP implementation is an ongoing process that will need fine tuning in the weeks and months ahead. This is to be expected with such a complex change. FSIS has already requested some changes from a few plants, and all of these companies have responded positively and have adjusted their HACCP plans to prevent future problems before they occur. I can assure you that the Agency is committed to working out any problems as they arise and to a common sense approach to problem solving.

Over the next two years, we will continue to work with all plants to make HACCP as effective as possible. We recognize that implementation of HACCP by smaller plants presents its own set of unique preparation problems. However, the Agency is ready. For example, approximately 380 small plants have participated in our HACCP small plant demonstration workshops. We also have available, technical guidance and materials consisting of software, videos, and written materials designed to assist the small plant owner or operator with developing their own HACCP plans. We are committed to improving food safety through HACCP. That commitment and follow-through will continue.

OTHER ITEMS OF NOTE

Government Performance and Results Act

The strategic plan we have developed is consistent with the Government Performance and Results Act, which calls on all Federal agencies and departments to coordinate their activities to be more effective, efficient and to avoid duplication. To this end, FSIS has communicated with agencies, both within and external to USDA, about common issues and interests in food safety. Our goal, as stated in our "Strategic Plan 1997–2002," is to enhance public health by minimizing foodborne illness from meat, poultry, and egg products. Our goal is a 25 percent reduction in the number of foodborne illnesses associated with meat, poultry, and egg products by the year 2000. This goal will be achieved by accomplishing all the daily tasks necessary to satisfy objectives in pathogen reduction, implementing the President's Food Safety Initiative, implementing our farm to table food safety strategy, fostering Agency cultural change, and cooperating with international groups on food safety matters.

Year 2000

FSIS, as with others in both the public and private sectors, is faced with a major technical challenge known as the "Year 2000 Problem." This refers to the possibility some computer systems in government and business may malfunction or cease to function as the year changes from 1999 to 2000. FSIS began working in 1997 to en-

sure that its systems are prepared to support the inspection program successfully into the year 2000 and beyond. For example, FSIS has designated eight of its automated information systems as mission critical. FSIS is making these systems "Year 2000 Compliant" using existing resources. A project plan is in place to carry out four major phases—assessment, renovation, validation and implementation—covering the period 1997 through 1999. We expect to finish all systems validation in 1998, and will complete implementation of systems by March 1999.

BUDGET HIGHLIGHTS

For 1999, the budget proposes a program level of $709 million, a net increase of $34 million over the 1998 current estimate. In 1999, FSIS will continue the process of transforming the inspection process with current staffing levels. In fiscal year 1999, the budget includes programmatic increases to build on the investments begun with the implementation of the Pathogen Reduction and HACCP systems rule and the President's Interagency Food Safety Initiative. Approximately $2 million is requested to improve the Federal inspection system by providing HACCP training to egg processing inspectors, acquiring tools that will improve an inspector's ability to evaluate product, and facilitating the redeployment of inspectors to strengthen compliance efforts.

The President's 1999 budget includes an increase of $101 million for the Interagency Food Safety Initiative, which includes $11 million for FSIS. The initiative identifies a number of high priority food safety activities that provide an integrated approach to reducing foodborne illness. With the additional funds, FSIS will facilitate the transformation of State programs to Hazard Analysis and Critical Control Point systems by fiscal year 2000, work cooperatively with other Federal agencies to expand consumer education, and develop voluntary measures to reduce the risk of pathogenic contamination of animals on the farm. These new activities would build on the successes and fill the gaps identified in the President's 1998 Food Safety Initiative.

In the near future, the Administration will be transmitting to Congress the legislation necessary to support the 1999 budget proposal to recover the full cost of providing Federal meat, poultry, and egg products inspection through user fees. Requiring the payment of user fees for Federal inspection services would ensure that sufficient resources are available to provide the mandatory inspection services needed to meet increasing industry demand. The overall impact on prices as a result of these fees has been estimated to be less than one cent per pound of meat, poultry, and egg products production. The implementation of the user fee authority would be designed to be fair and equitable, promote accountability and efficiency, and minimize the impact on the competitive balance among affected industries. Approximately $150 million in appropriated funds are requested to convert the Federal program to user fees and for maintaining State inspection programs.

CONCLUSION

These are a few of the issues I wanted to bring to your attention today. I believe we are on the right path to an even safer food supply. We have a good framework in place for making significant food safety improvements. I look forward to working with you to build the best food safety system we can.

Thank you again for the opportunity to appear here and discuss our goals to enhance food safety and the progress we have made. I will be happy to answer any questions you or other Members of the Subcommittee may have.

PREPARED STATEMENT OF THOMAS J. BILLY

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to discuss the President's fiscal year 1999 budget request for the Food Safety and Inspection Service, FSIS.

Having worked to promote food safety for most of my career in public service, I recognize the importance of working toward an essential and clearly defined goal. Our goal in food safety is to achieve the greatest possible reduction in the risk of foodborne illness associated with the consumption of meat, poultry, and egg products, consistent with available science and technology. Toward that end, we are applying resources in a prudent manner to make fundamental changes in inspection and build on our partnerships with other Federal agencies, the States, industry, academia, our employee organizations, consumer groups, and other interested segments of the public.

These are exciting times in food safety and it is because of your support that we are making real progress in improving food safety. Now, I would like to tell you how we are fulfilling our responsibilities and about our initiatives for better ensuring the safety of meat, poultry, and egg products.

CURRENT INSPECTION ACTIVITIES

FSIS has a long, proud history of protecting the public health. Our mission is to ensure that the Nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and accurately labeled, as required by the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act.

FSIS inspects approximately 6,000 plants that slaughter cattle, swine, sheep, goats, horses, chickens and turkeys and process eggs as well as produce a wide range of processed products, including hams, sausage, stews, pizzas, and frozen dinners.

In fiscal year 1997, our domestic inspectors examined approximately 72.9 billion pounds, dressed weight, of meat and poultry and 3.2 billion pounds of egg products for public consumption. While the inspection of domestically produced meat, poultry, and egg products consumes the bulk of FSIS resources, FSIS also recognizes the vital importance of inspecting imported products. To ensure the safety of imported products, FSIS maintains a comprehensive system of import controls to carry out the requirements of the Federal meat, poultry, and egg products inspection laws.

This system of import controls involves two major components: oversight and reinspection. In order to ensure that exporting countries have government controls equivalent to those of the United States, FSIS conducts a rigorous review of such before they can become eligible to export product to the United States. Additionally, periodic in-country reviews, including on-site plant audits, are carried out to maintain such eligibility.

Reinspection of meat and poultry products that enter the United States is based on statistical sampling and verifies that the country's inspection system is working. Approximately 70 import inspectors covering some 124 active import inspection locations carry out this reinspection. In 1997, FSIS passed 2.5 billion pounds of imported meat and poultry products for entry into the U.S.

Another part of the FSIS food safety program involves our laboratories, which provide scientific and technical support to inspection personnel through laboratory testing for microbiological contamination, chemical and antibiotic residues, pathology diagnostics, processed product composition, and economic adulteration.

FSIS currently operates three multidisciplinary laboratories to carry out food safety and composition tests. During fiscal year 1997, over 141,000 residue, chemical and microbiological analyses were performed on meat, poultry, and egg product samples by federally operated laboratories.

FSIS also conducts compliance and enforcement activities to address situations where unsafe, unwholesome, and inaccurately labeled products have been produced or marketed. FSIS investigates cases of administrative, civil, or criminal violation of meat, poultry, and egg product regulations and works in conjunction with the USDA Office of the General Counsel and the Department of Justice to correct problems and prosecute offenders when necessary.

In fiscal year 1997, 26,142 compliance reviews were conducted. As a result of these reviews and other compliance activities, more than 44 million pounds of meat, poultry, and egg products were detained for noncompliance with the respective laws. Fifty recalls were conducted involving almost 27.9 million pounds of product. In addition, 22 convictions were obtained against firms and individuals for violations of the meat and poultry inspection laws.

CHANGES UNDERWAY IN FSIS

In 1997, FSIS began implementing a comprehensive food safety strategy. This included implementation of the requirements for sanitation SOP's and microbial testing for generic *E. coli* at slaughter. In addition, we began implementation of a major agency reorganization which will be completed by fiscal year 1999. I'd like to discuss these key changes further and changes under our food safety strategy that continue in 1998 and are planned for 1999.

PATHOGEN REDUCTION AND HACCP

On July 25, 1996, FSIS published the final rule on Pathogen Reduction and the Hazard Analysis and Critical Control Point system, known as HACCP. This rule addresses the limitations of the traditional organoleptic inspection system in dealing adequately with the problem of pathogenic microorganisms—harmful bacteria—on raw meat and poultry products, which contribute significantly to foodborne illness

in the United States. HACCP's objective is to directly target and systematically reduce harmful bacteria on raw products, as well as other likely hazards, thereby reducing the risk of foodborne illness.

As required by the HACCP rule, on January 27, 1997, all plants had to implement plant-specific Sanitation Standard Operating Procedures, SSOP's, to ensure that they are meeting their responsibility for proper sanitation of facilities, equipment, and operations. The written SSOP's must describe the specific measures plant management will put in place to prevent direct product contamination. Follow-up reviews indicate that SSOP's are effective in the vast majority of plants; however, in about 14 instances, we have had to move into an enforcement mode to stimulate companies to correct their sanitation systems.

In addition, all slaughter plants began testing their products for generic *E. coli* as an indicator of process control effectiveness for preventing fecal contamination, the primary pathway for pathogenic bacteria. Both of these measures were in preparation for full HACCP implementation, which began January 26 of this year in federally inspected large plants.

Overall, some 300 large plants have moved to improve the safety of meat and poultry products by implementing their HACCP plans, which are based on the seven principles established by the National Advisory Committee on Microbiological Criteria for Foods. These HACCP plans are designed to meet performance standards for Salmonella that went into effect at the same time as the HACCP requirements.

From the very beginning of the process of developing the HACCP rule, we have held frequent public meetings to receive input from our constituencies and to provide assistance to plants required to implement the provisions of the HACCP rule. Consistent with our emphasis on communication and assistance, in December and January, we held HACCP implementation meetings around the country to brief the management of large plants on how the agency would conduct inspection subsequent to the January 26 deadline. We found these meetings, held in Washington, DC, Des Moines, Iowa, Denver, Colorado, and Memphis, Tennessee, to be very useful in aiding a smooth transition to the new regulations.

HACCP implementation will continue to be phased in according to plant size. Large plants with 500 or more employees implemented their plans on January 26. Small plants with 10 to 499 employees must have a plan in place by January 25, 1999, and very small plants, with fewer than 10 employees or annual sales of less than $2.5 million must have a plan in place by January 25, 2000.

HACCP remains a work in progress that will need fine-tuning in the weeks and months to come. This is to be expected with such a complex change, and I assure you that we are committed to working out any problems as they arise. In recognizing the special difficulties that all plants, especially small plants, will face, we have initiated an aggressive program to provide assistance to these plants. We are providing technical assistance and recently held a round of meetings targeted to the communication needs of small and very small plants. FSIS district managers are on call 24 hours a day, 7 days a week, to make rapid decisions and respond to emergencies. In addition, the Technical Services Center is operating a HACCP Hotline with four lines open between 6 a.m. and 6 p.m. Central Time, Monday through Friday, and an electronic message and paging service 24 hours a day, seven days a week. As a result of questions we have received regarding implementation, we have published a number of documents in the Federal Register clarifying certain aspects of the HACCP regulations, including offering an option for early HACCP implementation, to small and very small plants.

By January 25, 2000, all provisions of the final rule will be implemented. The final rule sets an important framework for performing our food safety mission, but it is not the culmination of our strategy for change. We will continue pursuing our goal of reducing the risk of foodborne illness and additional opportunities to improve the way we carry out inspection activities, to promote both food safety and the efficient use of resources.

Our nation's meat and poultry is far and away the safest and highest quality in the world. However, the HACCP final rule assures consistency between meat and poultry inspection across the country and will help us move toward a seamless national food safety program. There will be greater consistency in both Federal and State inspection, as well, based on a common, consistent regulatory framework.

INSPECTION CHANGES

HACCP is permitting us to make improvements in the inspection process and will permit us to redeploy some of our current in-plant inspection work force to HACCP verification tasks, and to new tasks outside of traditional in-plant settings in furtherance of our farm-to-table strategy. Our budget request includes a proposal to in-

crease support for these efforts, especially for travel to multiple destinations to perform monitoring and reviews.

We are making progress on addressing food safety risks to products once they leave Federally inspected plants by working closely with other government agencies, professional groups, academia, and industry. At the transportation level, we are working with FDA to develop guidelines covering the safety of foods during distribution. We are placing particular emphasis on time and temperature control as a means of minimizing the growth of pathogenic microorganisms. At the retail level, we are working again with FDA and with State officials to ensure the adoption of science-based standards and to foster HACCP-type preventative approaches—largely through the Food Code process.

FEDERAL-STATE COOPERATION IN FOOD SAFETY

In FSIS, we have a long history of working with State-administered meat and poultry inspection programs, and we are now in the process of taking steps to strengthen, and hopefully expand these programs. We consider them an integral part of the national regulatory system for ensuring the safety, quality, and accuracy of labeling of the Nation's meat and poultry supply.

Describing the State programs as part of the national system is an extremely important concept, because we cannot look at the Federal and State programs as separate entities. On the contrary, they must be considered as parts of a whole, and any initiatives we undertake must be carried out with that perspective in mind. That is why we have worked closely with the States throughout the rulemaking and implementation process as a means of ensuring that the provisions in the HACCP rule are appropriate for State, as well as Federal, plants. This intergovernmental cooperation is the basis for our budget request for special assistance with HACCP implementation in the State programs.

CHANGES IN THE FSIS ORGANIZATION

To help reach our strategic goal of reducing the risk of foodborne illness, we began implementing a major reorganization of the agency in 1996, which was needed to optimize the management structure and allocation of our resources in performing our regulatory responsibilities. Originally, we expected the reorganization to be fully implemented by fiscal year 1999, but we exceeded our own expectations and much of the reorganization was completed in 1997. The change in organizational structure was designed to make the best possible use of agency resources so that FSIS could meet the future food safety and consumer protection challenges. The reorganization is based on a top-to-bottom review of the Agency's regulatory roles, resource allocations, and organizational needs.

We have flattened and streamlined management structures both at headquarters and in the field, recognizing that the Agency needs fewer non-frontline staff. As we continue streamlining the organization, we will continue to increase the proportion of resources deployed to the frontline work force—food inspectors, in-plant veterinarians, import inspectors, laboratory personnel, compliance officers, and first-level supervisors.

I am very proud that we have reduced the number of headquarters units reporting to the Administrator by nearly half, from thirteen to seven, eliminated one layer of management, and reduced the number of supervisory positions. In fiscal year 1997, we reduced the number of field management offices from 46 field offices to 18 district offices and four field support offices. The 18 new district offices have already demonstrated that they will make supervisory spans of control more manageable and better balance the workload. In addition, administrative services provided to field locations were consolidated with the opening of the Financial Processing Center in Des Moines, Iowa, and assumption of further personnel support in the existing Personnel Operations Branch in Minneapolis, Minnesota.

A new Technical Services Center opened in Omaha, Nebraska, in June 1997. Center employees provide technical expertise and guidance to inspection personnel on the interpretation, enforcement, and application of domestic and import regulations, policies, and systems. The Center is also available to industry and enables FSIS to provide much quicker and more consistent technical assistance in inspection across the country. An example of this assistance is the newly operating HACCP Hotline that I mentioned earlier.

EMPHASIS ON PUBLIC HEALTH IN PERFORMANCE

Our strategic goal is to reduce to the greatest possible extent the risk of foodborne illness associated with eating meat, poultry, and egg products. In short, we want food to be safer so that fewer people will get sick. As you know, the Government

Performance and Results Act of 1993, known as GPRA, directs Federal agencies to measure the results of their programs in terms of societal impacts. Year after year, we have been able to tell you how many pounds of product we inspected and how many laboratory tests we conducted. What we now need to tell you is how these programs make a difference to public health.

Within our Strategic Plan and Annual Performance Plan, our goal is supported by six objectives, which incorporate strategies for enhancing the public health by minimizing foodborne illness. These objectives are to:

—Reduce pathogens on raw products by continuing the implementation of the Pathogen Reduction/HACCP rule;

—Collaborate with other public health agencies and stakeholders to implement the near term program objectives contained in the President's National Food Safety Initiative;

—Develop a comprehensive strategy for promoting food safety from farm-to-table;

—Continue the necessary cultural changes to support HACCP and HACCP related food safety initiatives by training the work force to carry out the re-defined regulatory procedures, and by ensuring industry and State programs understand their new roles and responsibilities;

—Assure HACCP equivalent systems for imported products; and

—Streamline and improve the effectiveness, efficiency, and diversity of administrative and human resources support functions.

In order to obtain much needed baseline data on the incidence of foodborne illness in the U.S. that is attributable to consumption of meat, poultry, and egg products, FSIS began working with the Centers for Disease Control and Prevention, CDC, and the FDA in 1995, to monitor seven foodborne illness "sentinel sites" through the FoodNet system. The sites include Northern California, Oregon, the Minneapolis/St. Paul metropolitan area, the Atlanta metropolitan area, Connecticut, several counties in upstate New York, and counties around Baltimore, Maryland. The data from FoodNet will enable us to estimate the national incidence of the major foodborne diseases and to explore what relationships may exist between specific pathogens and the types of meat, poultry, and other food products associated with them. FoodNet information will assist in reviewing the impact of HACCP programs and will trigger changes, where appropriate, to prevent future outbreaks of foodborne illness. This information is critical to improving the overall performance of our food safety mission because it will demonstrate the effectiveness of present and new strategies and greatly assist efforts to reduce the risk of foodborne illness.

As you know, we were directed by you in the fiscal year 1998 Committee Report to report on the incidence of foodborne illness in cooperation with CDC. Data for 1997 will be finalized by the end of March, and we will be able to provide the report in April.

We are continuing our nationwide baseline studies to measure the levels of pathogens that currently exist on meat and poultry products. With this and other information, we expect to know earlier in the process if a potential public health problem exists and take the necessary action to further reduce risks.

As a regulatory agency focused on public health, we must be able to rapidly adjust our policies and procedures to new information and emerging public health risk. With our enhanced front-line capability under the new organizational structure, we were well equipped to fulfill our food safety responsibilities in the 1997 product recalls. We demonstrated that we are able to address immediate public health problems, as well as adjust our regulatory policies and procedures as necessary.

PRESIDENT'S NATIONAL FOOD SAFETY INITIATIVE

The President's Food Safety Initiative is an integrated, multi-agency plan for improving the safety of the Nation's food supply. Building on the 1998 initiative, the FSIS budget proposal will support efforts to reduce the risk of foodborne illness from the farm to the table. Addressing the need for increased efforts to address food safety on the farm, the initiative supports development of voluntary measures that producers can utilize to reduce pathogenic contamination of animals before they reach the slaughterhouse. In addition, to move toward a seamless national food safety program, FSIS proposes to increase the share of Federal funding to assist State programs with HACCP implementation. Mindful of our responsibilities to consumers, we also propose an expansion of food safety education. These proposals will work in tandem with complementary proposals within USDA and in other Federal programs to reduce the risk of foodborne illness.

REGULATORY REFORM

FSIS is making steady progress in reforming its existing regulations and is delivering on the commitment we made in December 1995 when we described our regulatory reform strategy in an advanced notice of proposed rulemaking. FSIS has already ended the prior approval requirements for facility blueprints and equipment, and most partial quality control programs through a final regulation that was published in August 1997.

The Agency continues working to convert command and control regulations into performance standards in an effort to achieve consistency with the HACCP final rule. We have published a proposal to change all of the detailed sanitation requirements into performance standards. We have also published a proposed regulation on one uniform set of rules of practice. We are in the final stages of clearing a final rule to establish a performance standard for certain cooked meat and poultry products that will be the model for a series of product food safety performance standards, which will eventually encompass all categories of products. Whenever possible, FSIS has replaced the separate meat and poultry provisions with a single regulatory requirement that takes differing characteristics of meat and poultry into account.

To supplement these planned regulatory reform activities, we have developed guidance material to assist the industry in meeting HACCP requirements, as mentioned earlier. The materials include guidance on how to collect the required samples for generic *E. coli* testing of both livestock and poultry carcasses; how to develop HACCP plans; how to identify food safety hazards associated with processes at inspected establishments; and thirteen generic HACCP models. We have printed these materials in quantity and we distribute them without charge. Public meetings that I discussed as part of HACCP implementation have facilitated useful communications with various segments of the industry and have assisted implementation of regulatory reform. In addition, FSIS has completed implementing Directives for the HACCP final rule and revision of the automated system, which schedules inspection procedures to accommodate HACCP implementation in large establishments. Finally, the Agency has published the first of a series of policy notices designed to clarify its expectations about certain aspects of HACCP implementation, which address misunderstandings that the industry has communicated informally.

EGG SAFETY

I'd like to now address our strategy for egg products. As you well know, USDA has the responsibility to regulate the safety of egg products, while FDA has the responsibility to regulate the safety of shell eggs. This shared jurisdiction necessitates that USDA and FDA work closely together to develop a food safety strategy for these products, and that is exactly what we are doing.

The HACCP final rule that is now being implemented does not address egg safety, but egg safety is certainly part of our agenda. FSIS and FDA firmly believe that a farm-to-table food safety strategy must include eggs, be science-based, and address the entire farm-to-table chain. FSIS' 1999 budget request proposes implementation of HACCP in the Egg Products Inspection program and calls for establishment of a microbiological baseline and training for the egg products inspection work force.

Egg safety is of particular concern to us because of the prevalence of foodborne illnesses caused by the pathogen *Salmonella enteriditis*, or *SE*, through the consumption of eggs and egg products. Data from CDC indicate that SE is one of the most commonly reported causes of foodborne illness in the United States and has been increasing since 1976. Contaminated eggs have been the most commonly identified food source for outbreaks of *SE*, therefore we must take a comprehensive approach to improve the safety of both shell eggs and egg products.

USDA, FDA, CDC, and academia are continuing to conduct a quantitative risk assessment for *SE* in eggs and egg products to help ensure that any actions taken will address the human risks identified. The risk assessment will give us a more definitive understanding of the risks from shell eggs and egg products, and it will help us evaluate the alternative ways in which the risks might be reduced. It will also tell us what additional data are needed and help us to prioritize data collection efforts; and to focus our risk/benefit analysis.

To address these broad and complex issues, we are continuing to work jointly with FDA to develop an advanced notice of proposed rulemaking, or ANPR, that meets our farm-to-table and science-based criteria. The ANPR will look at eggs during production, packing, processing, labeling, distribution, retail, and preparation. We are seeking a rational and comprehensive approach to addressing the safety of eggs and egg products. We are mindful of the requirement in the 1998 Appropriations Act to promulgate a final rule requiring a 45 degrees Fahrenheit ambient air temperature for the transportation and storage of eggs. While we believe this ANPR is the appro-

priate way to proceed, we will promulgate the required final rule if we cannot publish a more comprehensive regulation within the required time.

INFORMATION TECHNOLOGY

Through the Field Automation and Information Management project, or FAIM, which you have supported, we are able to reinforce both the Agency's field reorganization and HACCP implementation by equipping our inspection personnel with information technology. All large HACCP plants are now covered by FAIM as of January 1998, the effective date of the HACCP rule for these plants.

With FAIM implementation and new automation capability, lab results are available for immediate overnight distribution. Our work force has direct access to necessary regulations and directives, and can communicate and keep in contact with other inspection personnel via e-mail. FAIM also enables inspectors to receive on-site training in such areas as HACCP, beef and poultry slaughter techniques, and import inspection.

In October 1997, the Industry Advisory Council and Chief Information Officers Council jointly published a report titled "Best IT Practices in the Federal Government." In that publication, FAIM was cited as one of the top twenty Information Technology Programs in the Federal Government.

INTERNATIONAL CHANGES

FSIS remains committed to working through the Codex Alimentarius Commission to continue to stress the role of science in international standard setting and to actively participate in the process. Over the past year, the FSIS Office of Codex has accomplished a great deal. A U.S. Codex site on the FSIS web site was established, a Codex Strategic Planning document was published as a notice in the Federal Register, and a public meeting on Codex strategic planning was held here in Washington, DC. Also, FSIS published a notice in the Federal Register informing the public of the sanitary and phyto-sanitary standard setting activities of the Commission, and a public meeting was held to take comment on the U.S. positions on issues to be considered by the Codex Alimentarius Commission and its Executive Committee.

Significant achievements were made at the June 22, 1997 meeting of the Commission. At that meeting, the Commission adopted three vitally important food safety standards through documents forwarded from the Food Hygiene Committee. One document outlines the basic principles of good hygiene as applied throughout the food chain by governments, food producers, and consumers, alike. The second document provides guidance to countries on the application of HACCP. The third document provides a framework to address the occurrence of microbial organisms including important pathogens such as *E. coli* O157:H7 and Salmonella in food.

The Commission endorsed the inclusion of the four science principles in the Codex Procedural Manual, approved the inclusion of principles of risk assessment, and began work on the elaboration of principles of risk management. The incorporation of these important human health factors and a scientific and systematic approach to their application in the Codex process will facilitate future Codex work.

Major progress was achieved by adopting the Codex General Standard on Food Additives (GSFA). This standard has been a prime goal of the Commission, and one sought by the U.S. for some time. It is tailored after the U.S. approach.

The Commission also adopted standards for 170 food additives, which can be used in any food, within the constraints of Good Manufacturing Practices. This list of additives comprises a substantial fraction of the food additives currently in use in international trade. These standards were urgently needed to remove one of the principal barriers to trade in value-added processed foods, which had been subject to differing national food additive standards.

I am also pleased to report that I was selected to be a Vice-Chairman of the Codex Alimentarius Commission at the 22nd Session of the Commission. I will serve as Vice-Chairman through the 23rd Session of the Commission, scheduled to be held in Rome in June 1999.

1999 BUDGET REQUEST

We welcome the increased emphasis being placed on food safety throughout USDA and other Federal programs and support the initiatives included in the President's Food Safety Initiative.

To continue making food safety improvements and to accomplish our goals, the 1999 budget proposes a program level of $709 million—an increase of $33.6 million over the amount provided for 1998. To continue transformation of the Federal inspection program, this proposal includes a net increase of $20.7 million, of which $18.4 million will support the current Federal inspection work force through manda-

tory pay increases and non-salary costs increases and $2.3 million will support new initiatives. In addition, the request includes $11.3 million for the President's Food Safety Initiative and $1.6 million in State program-related initiatives.

In fiscal year 1999, FSIS will again continue the process of transforming the inspection process within the current staffing ceiling, a commitment we made in the 1997 budget. We are maintaining the same inspection staffing levels in 1999 that we have in 1998, and are equipping our work force to perform in-plant inspection under HACCP requirements while planning to utilize other redeployed personnel to assure the safety of inspected meat, poultry, and egg products in-distribution. Widening inspection coverage to both the in-plant setting and in-distribution as we implement HACCP is critical to implementing our farm-to-table food safety strategy.

In fiscal year 1999, FSIS proposes to build on the changes and investments we have begun during the last few years. I am confident that the results will improve both food safety and FSIS' efficiency. Let me describe the initiatives for program investment covered by this budget request.

1999 BUDGET INITIATIVES

I spoke earlier of the importance of the President's Food Safety Initiative and for fiscal year 1999, our request will strengthen our partnerships with consumers, producers, and the State programs to improve overall food safety. We are requesting $0.5 million for food safety education of consumers and those who prepare food, which will focus on food handling behaviors and improving the food safety awareness of children and youth. An increase of $3.0 million is requested to provide producers with the information they need to implement voluntary measures to reduce pathogen contamination of animals before slaughter. Of this amount, we will use $1.0 million to conduct risk assessments that will lead to the development of appropriate voluntary control strategies for application by producers. The remaining $2.0 million will be used for producer education. This education is necessary to ensure that producers understand the changes that are occurring in the industry due to the implementation of HACCP, and to inform them of the ways in which risk mitigation strategies can assist them in meeting these new challenges. We do not, nor are we seeking authority to, mandate on-farm practices. We have been working with producers to develop voluntary animal management practices to improve food safety and more can be done to assist them in their efforts to improve food safety from farm-to-table.

The Initiative also includes a $7.8 million increase in special assistance to facilitate the adoption of HACCP by State Inspection Programs that is short-term enhanced funding for HACCP implementation. Successful implementation of HACCP by States is critical to ensuring that their requirements are "equal to" Federal requirements. Specifically, $5.8 million of the increase is needed to extend the FAIM project to the State inspection programs. This funding will ensure that State programs have the necessary automated infrastructure support in time to fully implement the provisions of the HACCP final rule. The FAIM project will save FSIS and the States developmental costs, and provide for consistency in food safety data and information nationwide. A $1.3 million increase in special assistance is needed for equipment to assist States in meeting HACCP requirements for extensive laboratory testing for pathogens. An additional $0.7 million is needed to develop and deliver HACCP training so that State inspection personnel will be able to perform in the same manner as their Federal counterparts. To assist the States on a short-term basis through the transition to HACCP, the budget includes new appropriations language that will increase the Federal share of funding for these initiatives from 50 percent to 75 percent.

Redeployment of inspection personnel to perform new inspection work within the plant and in-distribution enables FSIS to operate within existing staffing levels, but requires increased operating support to assure peak performance. We are proposing an increase of $2.3 million for upgraded HACCP inspection technology within the plant, implementation of HACCP in the Egg Products Inspection program, and specialized equipment and increased travel for in-distribution compliance activity.

As I have stated, the State inspection programs perform a key role in ensuring a safe and wholesome, nationwide food supply. We are requesting a net increase of $1.6 million in support of State inspection programs. About half of the increase will provide the federal share of increased State inspection costs, and the balance will enable FSIS to perform intensified audits of all 25 State inspection programs in 1999, which is needed to assure that their requirements are "equal to" the Federal program. These comprehensive reviews will enable FSIS to assist and monitor efforts in managing the extensive changes required by both the industry and State inspection programs as a result of mandatory HACCP provisions.

USER FEES

The budget assumes enactment of legislation to recover a total of $573.4 million in new user fees to cover the full cost of the Federal inspection program. For 1999, we are requesting an appropriation of $149.6 million for the Grants to States program, special assistance for State programs, and leave liability and start-up costs for the new user fee program. This proposal is intended to assure that resources are available now and in the future to provide the level of inspection necessary to meet the demand for such services and maintain consumer confidence, within the balanced Federal budget context.

We are currently evaluating a user fee plan to assess inspection fees based on pounds of inspected product by industry segment, including slaughter, processing, egg products, and import inspection. The overall impact on consumer prices as a result of these fees would be less than one cent per pound of meat and poultry production.

To accomplish a balanced Federal budget, cost burdens must be shifted from taxpayers to those who benefit directly from the provided services. The food industry profits in the marketplace from the level of consumer confidence provided by the Federal inspection programs. Additionally, the inspection programs provide a level playing field in maintaining standards of safety, wholesomeness and labeling among individual industry entities competing for market advantage.

CONCLUSION

Mr. Chairman, this concludes my prepared statement. Thank you for the opportunity to testify and speak to the Subcommittee on how FSIS is meeting its responsibilities in working with Congress and other partners to improve the safety of meat, poultry, and egg products, and thereby reduce the incidence of foodborne illness. I will be happy to answer any questions that you or other members of the Subcommittee may have.

BIOGRAPHICAL SKETCHES

CATHERINE WOTEKI

Dr. Catherine Woteki is Under Secretary for Food Safety for the U.S. Department of Agriculture. In this position, she is USDA's top food safety official, overseeing implementation of the new science-based inspection system for meat and poultry.

Prior to being sworn in to her present position on July 31, 1997, she served as Acting Under Secretary for Research, Education, and Economics. From 1994 to 1995, she was Deputy to the Associate Director of Science of the Office of Science and Technology Policy. From 1990 to 1994, she was Director of the Food and Nutrition Board, Institute of Medicine, National Academy of Sciences.

Dr. Woteki was born in Fort Leavenworth, Kansas. A biology and chemistry major at Mary Washington College in Fredericksburg, Virginia, she pursued graduate studies in human nutrition at Virginia Polytechnic Institute and State University, Blacksburg, Virginia, and received a Ph.D. in human nutrition. She is a registered dietitian.

For two years, she performed clinical research in the Department of Medicine of the University of Texas Medical School at San Antonio. She was appointed assistant professor in the Department of Nutrition and Food Science at Drexel University in Philadelphia in 1975. In July 1977, she joined the Congressional Office of Technology Assessment as Nutrition Project Director.

From 1980 to 1983, she worked for the U.S. Department of Agriculture in two capacities: as leader of the Food and Diet Appraisal Research Group in the Consumer Nutrition Center, and as Acting Associate Administrator of the Human Nutrition Information Service. Dr. Woteki was Deputy Director of the Division of Health Examination Statistics, National Center for Health Statistics, U.S. Department of Health and Human Services, from 1983 to 1990.

Dr. Woteki has published 48 articles and numerous technical reports and books on food and nutrition policy and nutrition monitoring. During her tenure as Director of the Food and Nutrition Board, she directed studies that resulted in 20 publications by the Institute of Medicine. Dr. Woteki is the co-editor of "Eat for Life: The Food and Nutrition Board's Guide to Reducing Your Risk of Chronic Disease," a book selected by the Book of the Month Club.

Dr. Woteki received the Elijah White Award from the National Center for Health Statistics, the Special Recognition Award from the U.S. Public Health Service, and the Staff Achievement Award from the Institute of Medicine. She was selected as

the outstanding alumna of the College of Human Resources, Virginia Polytechnic Institute and State University, in 1987. She also presented the 1997 Lenna Frances Cooper Memorial Lecture at the annual meeting and exhibition of the American Dietetic Association. She and her husband, Tom, reside in Washington, D.C.

CAREN A. WILCOX

Caren A. Wilcox is Deputy Under Secretary for Food Safety of the U.S. Department of Agriculture. Her position is part of the restructuring of USDA's 1994 reorganization plan. Her key responsibilities include working with the Under Secretary and the Administrator of FSIS on the implementation of the Hazard Analysis and Critical Control Points [HACCP] system, a science-based process control system to improve the safety of American meat and poultry. She also works on many of the President's initiatives as they impact food safety mission responsibilities. Wilcox oversees certain areas of responsibility for the Under Secretary including assignments in strategic and communications planning regarding the Office of the Under Secretary.

Prior to her present appointment, which began November 18, 1997, she was with the U.S. Small Business Administration where she was regional advocate for the mid-Atlantic states and the District of Columbia. In this position, she worked to enhance the growth of small businesses in the region. She also served as executive vice president of the National Association of Women Business Owners [NAWBO].

At USDA, Wilcox combines her experience in the small business community with almost 20 years in the food industry, having served as manager, then director of government relations for Hershey Foods Corporation. While with the corporation, she was involved in the establishment of voluntary HACCP programs in its plants, and sat on the corporate oversight committee which reviewed food safety and quality issues. She also planned, organized, and managed public policy development and legislative representation of the corporation at all levels of government.

In 1993 and 1994 she aided the Clinton administration by working with the business community on such issues as the President's economic programs, health care, school-to-work, GATT, and the Summit of the Americas. She served as Deputy Director for Business in the Political Department in the Clinton/Gore Campaign in 1992 in Little Rock.

Ms. Wilcox, a longtime resident of Pennsylvania, graduated from Wellesley College in Massachusetts and received her master of arts in international relations from the University of Pennsylvania in Philadelphia. She also served as assistant dean of the College of Liberal Arts for Women at the university. Early in her career, Ms. Wilcox was involved in international educational programs and worked at Institut IMEDE in Lausanne, Switzerland.

Ms. Wilcox has received many awards for her outstanding leadership at senior levels of business, government, academia, and public affairs management. She presently resides in Washington, DC.

STATEMENT OF MICHAEL DUNN

Senator COCHRAN. Mr. Dunn, Mr. Secretary, you may proceed.

Mr. DUNN. Thank you, Mr. Chairman. I appreciate the opportunity.

With me here today is Mr. Baker, who is the Administrator of the Grain Inspection, Packers and Stockyards Administration; Dr. Figueroa, who is the Administrator of the Agricultural Marketing Service; and Mr. Medley, who is the Administrator of the Animal and Plant Health and Inspection Service. These three Administrators make up the marketing and regulatory programs.

Beneficiaries of program services, as well as taxpayers, provide for the funds needed to operate marketing and regulatory program activities. In total, the appropriations and user fee resources are proposed to carry out $804 million of program level activities. Beneficiaries of these services pay over $397 million. Currently marketing and regulatory programs administer over 50 percent of the Department's user fee programs. These programs have been

market tested and continue to meet the demand of the market's challenges.

In fiscal year 1999, the budget request proposes to appropriate $11.8 million for the Grain Inspection, Packers and Stockyards Administration, $59.7 million for the Agricultural Marketing Service, and $423 million for the Animal and Plant Health Inspection Service.

We will, as you pointed out, be submitting legislation for $31 million more in user fees. The budget assumes that these would be passed.

GRAIN INSPECTION, PACKERS AND STOCKYARDS

The 1999 budget proposes an increase of $795,000 for monitoring and analyzing packer competition and industry structure, $750,000 to broaden the size and scope of poultry compliance investigation, and $225,000 to establish electronic filing procedures.

In addition, the budget requests $3 million to reorganize the 11 packers and stockyards field offices in order to implement the Office of Inspector General's recommendations for improving packers and stockyards' investigative capabilities.

MARKETING AND REGULATORY PROGRAMS

Legislation required us to publish two pieces of proposed rules this year, one for national standards for organic production, and the other for milk marketing order reform. Both of these rules have made extensive use of the Internet. For the organic standards alone, we have received over 17,000 comments.

We are requesting $10.5 million for three efforts to expand the Pesticide Data Program for the Agricultural Marketing Service.

First, we request an additional $2.5 million to restore the funding to the level available in 1996.

Second, we need $1.7 million to protect American agriculture from unnecessary losses in pesticide registration.

Third, we are requesting $6.3 million to begin microbiological testing of fruits and vegetables as part of the President's food safety initiative.

The budget includes an increase of $300,000 to expand International Market News reporting.

The budget also includes a request of $500,000 for the National Organic Standards Program to be started up. These funds will be recouped through user fees and deposited in the Treasury.

APHIS

The 1999 budget request is an example of good government. They are proposing to do more with less. The 1999 APHIS request for salary and expense is $9.9 million below that of 1998. Even so, APHIS proposes to spend $13 million more on high-priority efforts such as the $4.6 million increase for the National Animal Health Monitoring System.

PREPARED STATEMENTS

Mr. Chairman, I appreciate the opportunity to come before the committee, and we will submit the written testimony of myself and the Administrators.

Senator COCHRAN. Thank you very much.

[The statements follow:]

PREPARED STATEMENT OF MICHAEL DUNN

Mr. Chairman and members of the Committee, I am pleased to appear before you to discuss the activities of the Marketing and Regulatory Programs of the U.S. Department of Agriculture and to present our fiscal year 1999 budget proposals.

With me today are Terry Medley, Administrator of the Animal and Plant Health Inspection Service, Enrique Figueroa, Administrator of the Agricultural Marketing Service, and James Baker, Administrator of the Grain Inspection, Packers and Stockyards Administration. They have statements for the record and will answer questions regarding specific budget proposals.

STRATEGIC GOALS

Our goals contribute to the Department's three strategic goals that support the rural economy, assure food safety and sensibly manage the natural resources. Specifically, the MRP goals include: enhancing consumer access to safe, affordable, and quality products and to assure producer access to competitive markets; and facilitating the global marketing of U.S. agricultural products.

FUNDING SOURCES

The Marketing and Regulatory Program activities are funded by both the taxpayers and beneficiaries of program services. In total, the appropriations and user fee resources are proposed to carry-out $804 million of program level activity.

On the appropriation side, we are requesting $417.8 million for salaries and expenses and $5.2 million for buildings and facilities for the Animal and Plant Health Inspection Service; $58.5 million for Marketing Services and $1.2 million for the Federal-State Marketing Improvement Program for the Agricultural Marketing Service; and $11.8 million for the Grain Inspection, Packers and Stockyards Administration. Legislation will be submitted to recover $31 million more in user fees and the budget assumes that this legislation will be enacted. The budget also assumes enactment of legislation authorizing new license fees to recover the cost of administering the Packers and Stockyards Act (P&S Act), additional fees for selected APHIS activities, and additional fees for developing grain standards and methods to improve techniques for grain inspection. I will use the remainder of my time to highlight the Department's budget requests for the Marketing and Regulatory Programs.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

GIPSA's strategic plan was developed to guide the agency into the next century and to help ensure that our programs and services remain relevant to our customers and American agriculture. It was developed in a cooperative effort with all GIPSA employees and our customers. The two goals in the strategic plan that will guide them through the upcoming years include: ensuring a fair, open, and competitive marketing environment for livestock, meat, and poultry; and promoting and protecting the integrity of the domestic and global marketing of U.S. grain for the benefit of American agriculture.

Program Plan and Accomplishments

During 1997, GIPSA's Packers and Stockyards Program had 1,335 stockyards; 6,900 market agencies/dealers; and 2,125 packer buyers registered to engage in the livestock marketing business. There also were approximately 6,000 slaughtering and processing packers; an estimated 6,500 meat distributors, brokers, and dealers; and 210 poultry firms subject to the P&S Act.

In fiscal year 1997, GIPSA concentrated resources on providing financial protection and promoting fair business practices and a competitive marketing environment for livestock, meat, and poultry. The Agency conducted over 1,800 investigations, disclosing 515 violations of the Packers and Stockyards (P&S) Act. During fiscal year 1997, 46 formal cases were resolved and 29 new court cases were filed to bring subject firms into compliance with the provisions of the P&S Act. These complaints

alleged violations of the P&S Act, including failure to compete in the purchase of livestock, paying livestock sellers on the basis of false and inaccurate weights, failure to pay and failure to pay promptly for livestock, operating without bond coverage, and delayed weighing of live poultry.

In February 1997, the USDA Office of the Inspector General (OIG) issued an evaluation report which concluded that the P&S program needed to reorganize its national and regional offices. They found that the 11 regional offices did not provide enough staff to perform the full range of investigations, including complex anticompetitive practice investigations, and that P&S needed to incorporate economic, statistical, and legal expertise in its field offices. The National Commission on Small Farms came to the same conclusion. GIPSA has Departmental approval to restructure its P&S Programs that consolidates 2 operating divisions and 6 branches into a single policy/litigation support office at headquarters. This office will focus on the core responsibilities under the P&S Act—competition, fair trade practices, and payment protection. The 11 field offices will be consolidated at 3 regional locations. Another 35 resident agents will operate out of their homes or a few small suboffices. Resident agents will handle the most basic services and routine investigations in outlying areas.

GIPSA's Federal grain inspection personnel work with over 2,000 State and private inspectors to provide high-quality inspection and weighing services on a user-fee basis. Federal inspectors service 42 export elevators located in Georgia, Illinois, Indiana, Louisiana, Maryland, New York, Ohio, Oregon, and Texas. A small Federal staff also provides service at 6 export elevators in Eastern Canada for U.S. grain transshipped through Canadian ports. Eight (8) delegated States provide service at an additional 20 export elevators located in Alabama, California, Minnesota, Mississippi, South Carolina, Virginia, Washington, and Wisconsin. Sixty-five (65) designated agencies service the domestic market under GIPSA supervision. In 1997, this unique mix of Federal, State, and private inspection agencies provided 2.1 million inspections on over 225 million metric tons of grains and oilseeds; weighed over 97 million metric tons of grain; and issued over 87,000 official weight certificates.

For an average cost of 27 cents per metric ton of grain in fiscal year 1997, exporters received USDA export certificates from GIPSA. These certificates facilitate the marketing of over $20 billion worth of grains and oilseeds. Likewise, here at home, buyers and handlers requested over 1.9 million inspections that facilitated the trading of 124 million metric tons of cereals and oilseeds destined for domestic use.

In fiscal year 1997, GIPSA continued to work closely with the U.S. grain handling industry on Electronic Data Interchange (EDI), an industry-driven electronic commerce initiative that is designed to automate the exchange of financial transaction documents among businesses. GIPSA established the standardized electronic file format that will be used for the EDI system and by official inspection providers.

GIPSA believes that America's producers are entitled to a market that treats them fairly and honestly. In fiscal year 1997, GIPSA completed a long-term investigation of charges against ConAgra, Inc., one of the Nation's largest food companies. In March 1997, ConAgra paid an $8.3 million penalty after pleading guilty to Federal charges of adulteration, improper grading, and improper weighing of grain by the company's grain division, Peavey Grain. GIPSA continues to enforce its 1995 enactment of a prohibition on adding water to grain, which remains an enduring legacy of GIPSA's commitment to ensuring the integrity of the American grain marketing system and to safeguarding the rights and well-being of America's producers.

GIPSA'S 1999 BUDGET REQUEST

To fund these important initiatives and to enable GIPSA to remain a valuable part of American agriculture, GIPSA's total program level request for fiscal year 1999 is $71.6 million, of which $11.8 million represents appropriations. The remaining $59.8 million represents continuing user fee authority for inspection and weighing services, and the implementation of new user fees for standardization and methods development activities in the grain program, and license fees to fund the Packers and Stockyards' (P&S) program.

For fiscal year 1999, the President's budget proposes a total program level for grain inspection of $53.6 million, with $4.6 million appropriated for compliance activities. The fiscal year 1999 budget also assumes enactment of legislation to authorize the collection of $3.6 million in new user fees to cover the costs of grain standardization activities and $2.8 million for methods development activities.

The budget proposes an increase of $225,000 to allow GIPSA to establish electronic filing procedures for annual reports, which is consistent with the requirements of the Paperwork Reduction Act of 1995; an increase of $795,000 for activities in the packer competition and industry structure areas; an increase of $750,000 for

poultry compliance activities; and $3 million for the one-time costs of reorganizing P&S' headquarters and field structures.

Finally, the fiscal year 1999 budget assumes enactment of legislation to authorize the collection of license fees to administer all activities under the P&S Act. All meat packers, live poultry dealers, stockyard owners, market agencies, and dealers, as defined in the P&S Act, would be subject to the license fees. Also included is a legislative proposal regarding a statutory dealer trust to require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock. The $225,000 cost to implement this provision would be recouped through license fees.

AGRICULTURAL MARKETING SERVICE

The strategic goals for AMS include: facilitating the strategic marketing of U.S. agricultural products in domestic and international markets, and ensuring fair and competitive agricultural marketing through marketing tools and regulations.

AMS' activities include the dissemination of market information, development of grade standards that are used in the voluntary grading programs funded by user fees, protection of producers from unfair marketing practices, statistically reliable testing of commodities for pesticide residues, oversight of industry funded programs to promote agricultural products, and research and technical assistance aimed at improving efficiency of food marketing and distribution. AMS also administers marketing agreements and orders at the national level and purchases commodities that support domestic feeding programs.

Program Accomplishments and Plans

AMS published the proposed rule on Federal Milk Marketing Order reform in late January with a comment period that has been extended until April 30, 1998. To draft the proposed rule, we solicited comments from all sectors of the public and industry. AMS received nearly 3,700 comments and participated in 250 meetings with over 22,000 people. During the comment period we are holding listening sessions to continue the national dialogue.

AMS was successful in advancing U.S. interests in international commodity standards through active participation at the Economic Commission for Europe (ECE) and Codex. For example, ECE work was completed on pork cut specifications and begun on beef cut specifications that will result in standards that closely mirror existing U.S. standards being adopted throughout Europe. To facilitate international trade, AMS held several seminars for small business exporters to better acquaint them with import requirements in several key markets. In a cooperative effort between AMS and other government representatives from Canada and Mexico, the NAFTA Advisory Committee on Private Commercial Disputes Regarding Agricultural Goods developed a consensus recommendation to establish an industry-driven mechanism for the resolution of private commercial disputes involving fresh fruit and vegetable commerce between the 3 countries. AMS also worked with Mexico and Canada to conduct a series of seminars for fruit and vegetable shippers regarding import requirements for each country.

On December 16, 1997, AMS published the proposed rule for the National Organic Standards Program. Public meetings have been scheduled for February and March to provide USDA an opportunity to present the public an overview of the rule, respond to questions, and obtain public comment. The final rule will facilitate the movement of organic products domestically and internationally by assuring consumers of the validity and integrity of the organic label for the quality of product they are looking for in the marketplace.

AMS expanded the use of the Internet for program delivery to improve customer service. Daily market new reports will be made fully available through the Internet and we have placed the proposed rule for the Organic Standards Program on the Internet to facilitate public discussion and comment.

AMS Funding

For 1999, we are requesting a budget of $58.5 million for the Marketing Services Program and $1.2 million for the Federal-State Marketing Improvement Program. AMS will continue to improve ongoing program activities while achieving management efficiencies. For 1999, we are requesting program increases of $11.8 million and a $1 million decrease for Market Development and Assistance due to completion of marketing assistance to Alaska.

An increase of $0.3 million is needed to expand international market news reporting. Agricultural exports are playing an increasingly important role in the U.S. agricultural economy. In 1998, agricultural exports are expected to increase by $1.2 billion to a total of $58.5 billion. Market surveys conducted by AMS have indicated

a stronger demand for export market information by the industry as they seek opportunities for increased international trade in the post-GATT and NAFTA economy. With the additional resources requested, AMS will be able to develop or obtain reports from major export markets and incorporate them into existing market news reporting. Improving AMS' ability to gather time-sensitive overseas market information will have a significant positive impact on the ability of U.S. products to take advantage of timely placement in the international marketplace.

In support of the recommendations made by the Secretary's Advisory Committee on Agricultural Concentration, AMS' 1999 budget request includes an increase of $0.5 million to expand reporting of livestock and poultry markets to help ensure fair competition. AMS will improve market coverage and provide more detailed market information through: (1) increased reporting on terms of contract sales or captive supply transactions, (2) expanded reporting that includes value-based pricing indicators, (3) reporting share of slaughter by grade and yield, (4) reporting daily live cattle and hog crossings from Canada and Mexico, (5) increasing the reported volumes of forward sales of boxed beef, (6) expanding producer reported hog marketing information, and (7) reporting regional and national marketing of the direct feeder pig trade.

With the publication of the final rule for the National Organic Standards Program expected in early fiscal year 1999, AMS will require an additional $0.5 million to ensure effective national implementation of the program. Additional personnel will be needed to review applications, develop and distribute manuals, and provide accreditation of certifiers. Once the program is established, growers and handlers will be assessed a certification fee and certification agents will be assessed fees for USDA accreditation to recover program costs. The user fees collected will be deposited into the Treasury rather than serving to offset the appropriation. As a result, we need additional appropriations authority in order to meet the anticipated expenses to implement the program.

For 1999, the budget includes an increase of $10.5 million for the Pesticide Data Program (PDP). The requested increase includes $2.5 million to maintain the sampling levels necessary for statistical reliability. For 1996 the PDP operated with a budget of $11.6 million. In 1997, the funding was shifted to the Environmental Protection Agency (EPA) and the program had an operating budget of $10.6 million, with spending at $8.8 million. The program was shifted back to AMS for 1998 with a budget of $8 million, plus $1.8 million provided to AMS from carryover from EPA. With the additional funds requested for 1999, AMS will be able to maintain statistically reliable sampling, upgrade the program's laboratory capability to test a broader range of commodities and to conduct more specific analyses of greater use to EPA. At the current $8 million level of funding, the program would have to drop up to 4 States from the program or reduce sampling rates by 13 percent. These actions would destroy the statistical sampling infrastructure of the program.

The budget request for PDP also includes an increase of $1.7 million to establish a rapid response capability necessary to support risk assessment analysis for minor use pesticides. With the implementation of the Food Quality Protection Act, there is an increased demand for providing the EPA pesticide residue data for minor-use pesticides on a rapid basis. EPA will need the data to conduct dietary risk assessment reviews for over 9,000 tolerances over the next 10 years as required by the Food Quality Protection Act (FQPA). Without the data, EPA will be required to make conservative assumptions about pesticide levels that could result in overestimation of risk and loss of pesticide registrations. The increased funds will permit increased sampling of specific commodities at a faster rate.

In support of the President's Food Safety Initiative, the AMS budget includes an increase of $6.3 million to establish a microbiological data program. Utilizing the existing programmatic infrastructure of the PDP program, AMS will establish a statistically reliable estimate of microbiological contamination on domestic and imported fruits and vegetables. This information will be used by other agencies to assess the risk of contamination and will assist in the development of appropriate intervention strategies for ensuring the safety of these commodities.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The APHIS Strategic Plan was developed to guide the agency into the next century and to help ensure that its programs and services remain relevant to our customers and American agriculture. The Agency has identified 5 strategic goals to achieve its expanded role. They include: safeguarding U.S. plant and animal resources from foreign pests and diseases; quickly detecting and responding to outbreaks of foreign agricultural pests and diseases; effectively managing domestic plant and animal pests and diseases and wildlife damage; ensuring the humane care

and treatment of animals; and facilitating the development of safe and effective scientific pest and disease control methods.

APHIS provides leadership in anticipating and responding to issues involving animal and plant health, conflicts with wildlife, environmental stewardship, and animal well-being. With its customers and stakeholders, APHIS promotes the health of animal and plant resources and facilitates their movement in the global marketplace. Global trade has changed the responsibilities of APHIS. A significant new commercial protection role has fallen to APHIS—to respond to other countries' animal and plant health import requirements and to negotiate science-based standards that ensure America's agricultural exports are protected from unjustified trade restrictions. The development of new "rules" of trade through World Trade Organization (WTO), GATT, and other agreements now must address sanitary and phytosanitary barriers based upon risk assessment procedures, regionalization and equivalence. APHIS is ready to meet the opportunity and challenge to develop new partnerships with States, industry, and the public through prevention, monitoring systems and response actions.

Program Plan and Accomplishments

One of the most visible jobs performed by APHIS is the Agricultural Quarantine Inspection (AQI) program which works to protect American agriculture and enhance trade. This is the Agency's first line of defense in protecting American agriculture from exotic pests and diseases and helps facilitate the entry of U.S. agricultural products into international markets. In 1997, APHIS inspected approximately 77 million passengers from international arrivals. The predeparture and preclearance programs intercepted 65,000 pests. Without these measures to mitigate the spread of pests and diseases via imports of contaminated commodities, U.S. exporters would face a challenge of meeting another country's Sanitary and Phytosanitary measures (SPS) requirements would increase dramatically.

Recently, APHIS' SPS was involved with the resolution of trade barrier issues worth nearly $7 billion in exports of U.S. agricultural commodities. This represents about 12 percent of the total $60 billion of U.S. agricultural exports in fiscal year 1996. Three issues: (1) wheat exports threatened by karnal bunt, (2) poultry meat to Russia, and (3) poultry meat to China—were worth a total of $6.6 billion, or about 95 percent of the total value of APHIS' SPS accomplishments. All three issues were related to legitimate concerns about plant or animal health for countries importing U.S. products.

The Animal Health Monitoring and Surveillance program maintains the capability of consistent disease surveillance and detection, emergency disease preparedness and response, animal health monitoring, and epidemiological delivery. It enables APHIS to rapidly eliminate outbreaks of foreign animal diseases, to assess the risk of new and emerging domestic animal health issues, and to support APHIS' control and eradication programs. In 1997, APHIS conducted 316 investigations for suspected foreign animal diseases. APHIS' proactive animal health monitoring and disease surveillance program produced and interpreted scientifically valid information used by policy makers, producers, and consumers.

On the plant side, APHIS took quick action to address pest and disease outbreaks. Medflies were detected in the Tampa, Florida area in late May, posing a serious threat to Florida's $6 billion agricultural market. In response to these captures, APHIS and the State of Florida were able to rapidly start a cooperative Medfly emergency program. The sterile fly release area covered more than 313 square miles. No wild Medflies have been detected in Florida since late August 1997; the emergency program is expected to be completed in fiscal year 1998.

APHIS used its contingency funds to implement the citrus canker emergency project in the Palmetto, Florida area where an outbreak was detected in June 1997. If citrus canker spread to commercial groves and nurseries, it would be very disruptive to commercial production of grapefruit, which is Florida's leading fresh market produce.

Recently, we have seen a surge of foreign animal diseases in Europe and elsewhere. Hog cholera has been diagnosed in Belgium, Germany, Spain and several other countries. As a result, we have implemented science based import restrictions. Hog cholera has also been confirmed in the Dominican Republic, following the outbreak of a highly virulent strain in neighboring Haiti a year earlier. APHIS is providing officials in the Dominican Republic with technical and laboratory assistance in diagnosing and managing the outbreak and has increased its agricultural quarantine inspection and monitoring efforts at ports of entry.

Another foreign animal disease we are monitoring closely is bovine spongiform encephalopathy (BSE), better known as "Mad Cow disease." Since 1989, the Department has severely restricted the importation of cattle, other ruminants, and rumi-

nant products from Great Britain and other countries where BSE exists. APHIS has also educated veterinary practitioners, laboratory diagnosticians, and producers on the clinical signs and pathology of the disease. In addition, the Agency conducted a comprehensive program for BSE surveillance, which involves laboratory examination of brain tissue from high-risk cattle. As of October 31, 1997, we have examined more than 6,508 cattle brains from throughout this country and found no evidence of the disease.

To make meat and poultry more plentiful and affordable, APHIS is continuing to make headway in several domestic animal health programs. Currently, the cooperative State-Federal bovine tuberculosis eradication program has only three infected cattle herds under quarantine, all in Texas' El Paso Milkshed area. In July 1997, APHIS detected and quarantined an infected beef herd on the Hawaiian Island of Molokai. This herd has been depopulated. Nationwide eradication is projected by the end of 1999.

With California's recent advancement to brucellosis-free status, we have now eradicated the disease in 40 States as well as the U.S. Virgin Islands and Puerto Rico. Another 6 States are in the qualifying period for brucellosis-free status and have no known infection. Nationwide, as of February 12, only 11 cattle herds in Texas and 1 domestic bison herd in South Dakota are known to be infected. This compares to 39 herds under quarantine a year earlier. Eradication in cattle herds is still on track for the end of 1998.

We are also making strides in reaching a long-term solution to the Yellowstone bison problem. In June, APHIS, the Forest Service, the National Park Service, and Montana officials announced agreement on a long-term approach for managing brucellosis in the Yellowstone bison population. This interim plan meets the primary goals of maintaining a wild, free-ranging population of bison and also addressing the risk of brucellosis for livestock interests in the area.

Successes in the boll weevil eradication program utilizing the Farm Service Agency loans allow for a reduced appropriations request. This mostly grower-funded and managed program needs 100 percent participation and is mandated by State law following a positive grower referendum. The program funded at least 70 percent by non-federal cooperators, has been extremely successful in improving cotton yields and reducing production costs on over 4 million acres in the eradicated areas. The rate of return on funds invested in boll weevil eradication is estimated to be $12 for every $1 in program cost. Economic studies indicate that once boll weevil eradication is accomplished there is an estimated yield increase of at least 69 pounds per acre, pesticide savings of at least $30 per acre, and land value increases of $14 per acre. The goal of eradicating this pest is by 2003.

This past year, the Animal Damage Control program underwent a name change to Wildlife Services (WS) which more accurately reflects its program operations. Cooperative efforts allow us to make the best use of our funds. In fiscal year 1997, the WS budget for field operations was almost $23 million. For that same period, the cooperative funds provided by States, industry and private individuals totaled approximately $24 million—reflecting a projected increase of about $1 million from the previous year. The willingness of many States to provide more than a dollar-for-dollar match shows commitment and a large measure of customer satisfaction. We are working toward the goal of having, within the next 2–3 years, cooperators in States with large direct control efforts to pay for at least 50 percent of the program benefits they receive.

APHIS recently shifted its strategy to conduct more in-depth Animal Welfare Act inspections, particularly of those licensees and registrants with historical compliance problems. This approach resulted in a slight decrease in the overall number of inspections, but a significant increase in the amount of time spent inspecting facilities. Similarly, we redirected our enforcement efforts away from a rigid, "one size fits all" philosophy to a flexible approach that evaluates cases on their individual merits.

The Agency continued its efforts to trace back dogs and cats sold by class B dealers to research facilities. In fiscal year 1997, we were able to trace back about 95.5 percent of animals sold to research to their original source—up from approximately 40 percent in fiscal year 1993. We believe all these and many other efforts are leading to one positive end: Improved welfare for all animals protected under the AWA.

APHIS continued developing a strategic plan for the horse protection program that would provide for more effective use of resources and gain increased compliance with the Horse Protection Act. This plan has been developed jointly with horse industry organizations and APHIS veterinarians. This partnership will place increased regulatory authority and enforcement responsibilities on USDA—certified organizations.

Future challenges to the environment cannot be ignored. As the world population increases, we must develop methods to ensure that our agricultural production keeps pace with growing food demands while remaining stewards of the earth, water, and air. APHIS is well positioned to see that many of the necessary solutions are coming by way of agricultural biotechnology.

As part of its regulatory mission, APHIS oversees the field testing of genetically engineered plant varieties to ensure that they pose no significant impact on the environment or agriculture. Since the first field trial under our regulations in 1987, they have evaluated more than 3,600 field trials at more than 14,000 sites throughout the United States.

APHIS also makes decisions about whether to deregulate new plant varieties, thus clearing the way for their commercialization. These new plant varieties may hold the key to meeting our biggest future challenges in agriculture—those of feeding a growing world population while sustaining our environmental resources. In 1997, a corn hybrid engineered for resistance to the European corn borer averaged 15 more bushels per acre than other corn hybrids, without the use of additional pesticides.

With the benefits of increased international trade, come new scientific responsibilities and the essential need for trading partners to exchange information. In this regard, a great challenge for APHIS is the need to educate our trading partners about the safety and benefits of these new, genetically enhanced plant products. In addition to ensuring that genetically engineered plants pose no danger to agriculture or the environment, we need to help governments and consumers across the world understand that they are safe. Increased understanding of the benefits of these products, as well as the extent to which they are tested, is critical to their acceptance and success in the international marketplace.

On August 4, 1997, the Denver Wildlife Research Center in Lakewood, Colorado officially closed and the National Wildlife Research Center (NWRC) in Fort Collins, Colorado opened. As of that date, all NWRC headquarters' personnel began working out of a combination of permanent and GSA leased facilities in Fort Collins. Work on the new headquarters office/laboratory building on 43 acres on the foothills research campus of Colorado State University was initiated shortly thereafter. Occupancy of the 82,000 square foot building is expected to begin in late 1998, at which time all personnel will be located at one site after about four years in transition.

The Integrated Systems Acquisition Project (ISAP) is an APHIS strategic initiative to replace aging, obsolete, and non-integrated Information Technology platforms. The ISAP initiative will result in an integrated hardware and software platform across the entire Agency to provide information and data sharing at all levels of the organization. The Agency will fully redeploy in-house and contractor resources to comply with Year 2000 requirements.

APHIS' 1999 BUDGET REQUEST

The budget request proposes $417.8 million for salaries and expenses. The fiscal year 1999 budget proposes a redirection of $12 million from APHIS' appropriations for the cotton growers share of boll weevil eradication to a USDA loan program. The redirection from boll weevil eradication results without a reduction in program operations by relying on the foundations to borrow cost sharing funds from CCC. The program successes in brucellosis allow an $8 million redirection to higher priority activities which help the Agency comply with international trade agreements. The budget assumes increased cost sharing from beneficiaries of Wildlife Services activities. Also, this budget supports activities to significantly increase agricultural exports. It maintains funding for our important data gathering and risk analysis used in negotiations concerning sanitary and phytosanitary trade barriers and restrictions on genetically engineered products entering world markets. Funding increases are provided for Pest and Disease Exclusion activities such as Agricultural Quarantine Inspection at the borders. APHIS will likely inspect upwards of 85 million passengers potentially carrying banned agricultural products into the United States.

The budget also assumes enactment of legislation to recover the costs of providing certain costs for animal welfare, veterinary biologics, pink bollworm, biotechnology and the Swine Health Protection Act. We believe that the identifiable beneficiaries of these Federal programs, rather than the general taxpayer, should pay for the services they receive.

An appropriation of $5.2 million is proposed for general maintenance and to support continued modernization of APHIS facilities in 1999 and to complement the Agricultural Research Service's request to continue modernization of the Plum Island Animal Disease Center.

This concludes my statement. I am looking forward to working with the Committee on the 1999 budget for the Marketing and Regulatory Programs. We believe the proposed funding amounts and sources of funding will provide the level of service desired by our customers—the farmers and ranchers, the agricultural marketing industry, consumers, as well as the taxpayers who desire a balanced budget. We are happy to answer any questions.

PREPARED STATEMENT OF TERRY L. MEDLEY

Mr. Chairman and members of the Committee, I am pleased to report on our accomplishments and the challenges facing APHIS as we work to help ensure a wholesome, affordable food supply while stimulating global economies, safeguarding agricultural resources, and protecting ecological systems.

OUR MISSION

APHIS leads the way in anticipating and responding to issues involving animal and plant health, conflicts with wildlife, environmental stewardship, and animal well-being. Together with our customers and stakeholders, we promote the health of animal and plant resources to facilitate their movement in the global marketplace and to ensure abundant agricultural products and services for U.S. customers.

OUR FOCUS

Over the past 25 years, APHIS has played a key operational role in USDA's efforts to protect America's animal and plant resources from agricultural pests and diseases. The continued profitability and viability of U.S. agriculture, however, now also depends on the ability of U.S. producers to be competitive in a world market. In recent years, APHIS expanded beyond just regulating the imports of agricultural products in the U.S. to reduce the risk of exotic pests and diseases. Aggressively promoting U.S. exports will continue to be a dominant USDA focus for stimulating domestic farm employment and income. A significant new commercial protection role has fallen to APHIS—to respond to other countries' animal and plant health import requirements and to negotiate science-based standards that ensure America's agricultural exports are protected from unjustified trade restrictions. APHIS' protection role has also expanded over the years to include important functions related to the welfare of animals and to interactions with America's wildlife.

The Agency has identified five strategic goals to help us achieve our expanded role. I would like to address each of those goals and our accomplishments toward fulfilling them.

GOAL 1

Safeguard U.S. plant and animal resources against introductions of foreign pests and diseases while meeting international trade obligations

Exports climbed to $59.8 billion in 1996; the U.S. share of global agricultural trade has also increased. Today we are the world's leading exporter of agricultural products, commanding a 23 percent share of world agricultural trade—up from 17 percent a decade ago. Our agricultural trade surplus totaled $27 billion in 1996—the largest in history—making the agricultural sector the largest positive contributor to the U.S. balance of trade.

Consider for a moment APHIS' work to protect American agriculture and enhance trade. The Agricultural Quarantine Inspection (AQI) program is the Agency's first line of defense in protecting American agriculture from exotic pests and diseases and helps facilitate the entry of U.S. agricultural products into international markets. In 1997, APHIS inspected approximately 77 million passengers from international arrivals, and the predeparture and preclearance programs and intercepted 65,000 pests. For 1999, total inspections are expected to reach 85 million—48 million funded through user fees and the remainder through appropriated funds. These efforts protect domestic producers and industries. But without these measures in place to mitigate the spread of pests and diseases via imports of contaminated commodities, the challenge U.S. exporters would face in terms of meeting another country's Sanitary and Phytosanitary measures (SPS) requirements would increase dramatically. APHIS personnel have made and continue to make major contributions in resolving issues related to the World Trade Organization (WTO) Agreement on the Application of SPS Measures.

Export Issues

Recently, APHIS' SPS accomplishments included assisting in the resolution of trade barrier issues worth nearly $7 billion in exports of U.S. agricultural commodities. This represents about 12 percent of the total $60 billion of U.S. agricultural exports in fiscal year 1996.

The $7 billion of unjustified trade restrictions on U.S. exports involved a wide variety of issues with a total of 16 countries. The value of export markets enhanced by these efforts ranged from a low of $400,000 for an individual issue (export access for goats to Taiwan; swine to Vietnam) to a high of $4.9 billion (worldwide wheat export markets retained after a threatened cutoff due to Karnal bunt in the United States). The median value of the SPS issues was $5 million.

Recently, APHIS' efforts to retain markets threatened by SPS concerned nearly $6 billion of exports. The retention of U.S. wheat export markets threatened by the discovery of Karnal bunt in some areas of the United States was the largest contributing issue ($4.9 billion). Another large market retained in fiscal year 1996 was the $700 million Russian poultry meat market which was threatened by Russian concerns about sanitary controls of the U.S. poultry industry. A third major SPS accomplishment, expansion of poultry meat exports to China, was worth an estimated $1 billion.

These three issues—(1) wheat exports threatened by Karnal bunt, (2) poultry meat to Russia, and (3) poultry meat to China—were worth a total of $6.6 billion, or about 95 percent of the total value of APHIS' SPS accomplishments. All three issues were related to legitimate concerns about plant or animal health for countries importing U.S. products. The issues were resolved in the United States' favor because APHIS scientists were able to demonstrate that the commodities involved posed negligible risks to the importing countries.

Import Issues

In fiscal year 1996, consistent with its obligations under the SPS Agreement, APHIS enabled the importation of several previously prohibited commodities into the United States. Examples are citrus from South Africa and fruit trees from France. Through the use of risk assessments, APHIS determined that these commodities, worth almost $16 million in increased exports for the countries involved, did not pose a threat to U.S. animal and plant health. These import issues are considered APHIS SPS accomplishments, because prohibiting the importation of these commodities might have been considered an unjustified SPS trade barrier. By actively heading off potential challenges, APHIS was able to show its commitment to the SPS Agreement while still maintaining adequate safeguards for U.S. agriculture. In agriculture, the U.S. is likely to be the clear winner when SPS standards are science-based and fair.

One of the most significant concepts introduced under the SPS agreements is regionalization—the idea that, for trade purposes, we can recognize pest and disease free zones or areas of low pest or disease incidences. Under these agreements, countries are committed to adapting their import requirements to the health conditions of the specific zone or area from which a plant or animal commodity originates. The concept of regionalization recognizes that health conditions vary tremendously across a country as a result of ecological, environmental, and quarantine differences. The burden of demonstrating a free or low prevalence area is on the exporting country.

Under NAFTA and GATT, we are working to ensure opportunities for trade occur. As with any commodity, once the opportunity to trade is negotiated, a lot of work has to be done to make sure the pest and disease requirements are met and maintained. A crucial part of fair and free trade is establishing a process for resolving commercial trade disputes. Under NAFTA, a trilateral advisory committee of Mexico, the United States, and Canada are working to develop such a process. In addition, we have and will continue to use the trade dispute settlement process under the World Trade Organization to challenge countries who are not living up to their commitments under the free trade agreements.

For its part, Mexico recently permitted the importation of U.S. sweet cherries from Washington, Oregon, and California in accordance with an approach designed to prevent the introduction of pests of concern. Just last September, Mexico officials recognized Arizona's citrus production areas as free of Mediterranean and Mexican fruit flies, removing any phytosanitary barriers to the export of those fruits. We also continue to discuss the possibility of permitting Florida citrus exports to Mexico. With every such decision rooted firmly in scientific information, we move much closer to fully actualizing the principles and agreements to which we have committed.

GOAL 2

Quickly detect and respond to introductions of foreign agricultural pests and diseases or other emerging agricultural health threats, to minimize production losses and export market disruptions

APHIS' domestic programs which monitor, survey, impose Federal quarantines, and conduct eradication programs, is the force that permits U.S. agricultural commodities to be as widely accepted throughout the world as they are today. Without the maintenance of a strong domestic program, APHIS' ability to certify to the SPS requirements of other countries would be marginal.

Our Animal Health Monitoring and Surveillance program maintains the capability of consistent disease surveillance and detection, emergency disease preparedness and response, animal health monitoring, and epidemiological delivery. It enables APHIS to rapidly eliminate outbreaks of foreign animal diseases, to assess the risk of new and emerging domestic animal health issues, and to support APHIS' control and eradication programs. In 1997, APHIS conducted 316 investigations for suspected foreign animal diseases. APHIS' proactive animal health monitoring and disease surveillance program produced and interpreted scientifically valid information used by policy makers, producers, and consumers. This program delivered objective information addressing animal health as it pertains to U.S. trade, agricultural productivity, public health, and on-farm quality assurance. Through effective partnerships with animal commodity producer groups—and with State governments, university researchers and other Federal Agencies—the program met producers' and the U.S. Public's information demands in a cost-effective, collaborative manner minimizing duplication of effort.

On the plant side, APHIS took quick action to address pest and disease outbreaks. Medflies were detected in the Tampa, Florida, area in late May, posing a serious threat to Florida's $6 billion agricultural market. In response to these detections, APHIS and the State of Florida were able to rapidly start a cooperative Medfly emergency program. The sterile fly release area covered more than 313 square miles. No wild Medflies have been detected in Florida since late August 1997; the emergency program is expected to be completed in fiscal year 1998.

APHIS funded efforts for the citrus canker emergency project in the Palmetto, Florida, area where an outbreak was detected in June 1997. To effectively prevent the spread of citrus canker in Palmetto, APHIS and the State of Florida established a quarantine zone of 34 square miles and in Miami, the quarantine zone was more than 361 square miles. If citrus canker spread to commercial groves and nurseries, it would be very disruptive to commercial production of grapefruit, which is Florida's leading fresh market produce.

Also in 1997, APHIS used contingency funds to battle an Asian longhorned beetle (ALB) emergency control project in New York State. The program consists of tree removal, detection and delimiting surveys, and education efforts. During fiscal year 1997, the program achieved drastic reductions of ALB populations in areas that had been heavily infested. If ALB spreads, it would threaten trees nationwide and pose problems for the sugar maple industry in upstate New York and its surrounding areas.

In addition to these eradication programs, APHIS closely monitored two other animal disease situations. The first is the outbreak of vesicular stomatitis in the Western States. In response to this disease situation, Canada and the European Union have prohibited the importation of horses, ruminants, and swine from these States. APHIS continues to work with the affected States to closely monitor the situation and help producers meet trade requirements.

The second disease situation is a low pathogenic strain of H7N2 avian influenza that has been detected in 14 commercial poultry flocks near Lancaster County, Pennsylvania, last year. At the State's request, we have authorized the production and storage of an H7N2 vaccine for possible emergency use. APHIS will utilize the avian influenza vaccine as a tool only in the unlikely event of an outbreak of the highly pathogenic form of the disease.

Our commitment to preventing the entry of foreign agricultural diseases and pests remains as strong as ever. We recognize that our initiatives to prevent the entry of agricultural diseases and pests have taken on increasing importance in this era of growing international trade and travel. Now more than ever, export opportunities hinge on a country's ability to prevent the entry of agricultural diseases, to document scientifically the health of its agricultural industry, and to respond quickly and decisively to disease and pest emergencies in the event prevention strategies are breached.

To improve its emergency management strategy even further, APHIS has streamlined its Regional Emergency Animal Disease Eradication Organization to improve

Departmental responsiveness to animal disease emergencies. Now, two highly prepared and trained regional teams can be dispatched immediately at the first indication of foreign livestock or poultry disease, such as in 1996 when exotic Newcastle disease was detected at a pet bird facility in Missouri and vesicular stomatitis was diagnosed in horses and cattle in Arizona, New Mexico, Colorado, and Utah.

Recently, we have seen a resurgence of foreign animal diseases in Europe and elsewhere. Hog cholera has been diagnosed in Belgium, Bulgaria, Croatia, the Czech Republic, Germany, Italy, the Netherlands, and Spain. As a result, we have implemented appropriate import restrictions. Hog cholera has also been confirmed in the Dominican Republic, following the outbreak of a highly virulent strain in neighboring Haiti a year earlier. APHIS is providing officials in the Dominican Republic with technical and laboratory assistance in diagnosing and managing the outbreak and has increased its agricultural quarantine inspection and monitoring efforts at ports of entry.

Another foreign animal disease we are monitoring closely is bovine spongiform encephalopathy (BSE). Since 1989, we have severely restricted the importation of cattle, other ruminants, and ruminant products from Great Britain and other countries where BSE exists. We have also educated veterinary practitioners, laboratory diagnosticians, and producers on the clinical signs and pathology of the disease. In addition, we conduct a comprehensive program for BSE surveillance, which involves laboratory examination of brain tissue from high-risk cattle. As of October 31, 1997, we have examined more than 6,508 cattle brains from throughout this country and found no evidence of the disease.

GOAL 3

Effectively manage plant and animal pests and diseases and wildlife damage which pose risks to agriculture, natural resources, or public health

U.S. livestock and poultry producers provide households throughout the Nation—and the world—with high quality, affordable products. Because of their efforts, Americans are eating more meat and poultry than ever before. Estimates indicate that the average American adult eats more than 160 pounds of meat and poultry a year. Per person, that's 1.5 pounds more meat and poultry consumed per year than 10 years ago.

To make meat and poultry more plentiful and affordable, APHIS is continuing to make headway in several domestic animal health programs. Currently, the cooperative State-Federal bovine tuberculosis eradication program has only three infected cattle herds under quarantine, all in Texas' El Paso Milkshed area. In July 1997, APHIS detected and quarantined an infected beef herd on the Hawaiian Island of Molokai. This herd has been depopulated. We are still aiming for nationwide eradication by the end of 2000.

In regard to pseudorabies, with the addition of Tennessee in August and the U.S. Virgin Islands this month, 26 States and two U.S. Territories—including Puerto Rico—are currently free of the disease. Since 1992, the number in infected herds has dropped from approximately 8,000 to nearly 2,000. Nationwide eradication of this disease is also set for the end of 2000.

With California's recent advancement to brucellosis-free status, we have now eradicated the disease in 40 States as well as the U.S. Virgin Islands and Puerto Rico. Another six States are in the qualifying period for brucellosis-free status and have no known infection. The number of herds under quarantine has declined from 959 herds in fiscal year 1991 to 11 cattle herds as of February 12, 1998. The number of newly infected herds has also declined, from 400 in fiscal year 1991 to 64 in fiscal year 1997.

We are also making strides in reaching a long-term solution to the Yellowstone bison problem. In June, APHIS, the Forest Service, the National Park Service, and Montana officials announced agreement on a long-term approach to manage brucellosis and the Yellowstone bison population. This plan meets the primary goals of maintaining a wild, free-ranging population of bison and also addressing the risk of brucellosis for livestock interests in the area.

While livestock and poultry producers face many challenges in their efforts to meet the rising demand for their products at home and abroad, they can be reassured that they do not face these challenges alone. APHIS is working hard to protect the health of U.S. livestock and poultry and to facilitate agricultural trade based on fair, science-based standards.

The cooperative boll weevil program uses judicious application of pesticides based on the extensive and timely use of pheromone traps to reach the goal of eradicating the pest by 2003. This mostly grower-funded and managed program needs 100 percent participation and is mandated by State law following a positive grower referen-

dum. The program, funded at least 70 percent by non-federal cooperators, has been extremely successful in improving cotton yields and reducing production costs on over 4 million acres in the eradicated areas. The rate of return on funds invested in boll weevil eradication is estimated to be $12 for every $1 in program cost. Economic studies indicate that once boll weevil eradication is accomplished there is an estimated yield increase of at least 69 pounds per acre, pesticide savings of at least $30 per acre, and land value increases of $14 per acre.

Clearly, success in APHIS' active control programs such as brucellosis and boll weevil will require less funding as the pests and diseases are eradicated. This will allow APHIS to strategically focus on prevention by increased monitoring and surveillance, using the latest diagnostic techniques.

This past year, we changed the name of the Animal Damage Control Program to Wildlife Services (WS) to more accurately reflect what we do. Besides protecting agricultural resources, WS continued its efforts to protect public health and safety, property and threatened and endangered species. WS also continued its interagency agreement with the National Agricultural Statistics Service (NASS) to determine the magnitude and extent of wildlife damage to various agricultural resources. In January 1997, NASS surveyed approximately 1,500 catfish producers. Sixty-eight percent of the respondents indicated they had spent some effort to avoid wildlife caused losses to their catfish crops. The overall cost of preventing losses and damage were projected to have cost catfish producers about $17 million during 1996.

In 1998, the WS program is partnering with the Federal Aviation Administration (FAA) and the Department of Defense (DOD) on the National Performance Review's Reinvention Impact Center Initiative to increase airline safety and reduce economic losses to aircraft. Partnering with FAA and DOD will allow for greater levering of resources to provide a safer environment for the flying public and military personnel both domestically and internationally. Approximately 10,000 civilian aircraft and 3,000 military aircraft collide with wildlife in the United States each year. These strikes have resulted in the loss of human life and economic damage to aircraft of approximately $300 million annually.

During fiscal year 1997 and fiscal year 1998, WS personnel assisted Texas Department of Health officials distribute over 5 million oral rabies vaccine baits to stop the canine strain of rabies in coyotes and foxes in south and central portions of Texas. To date, the vaccines have been successful in stopping the spread of this disease. WS personnel also assisted with either oral rabies vaccine bait distributions, monitoring, or surveillance activities in Vermont, Ohio, and New York to stop the spread of the Mid-Atlantic strain of rabies in the raccoon population in those States.

The wolf management programs in Idaho, Montana, Wyoming, and Minnesota continues to accelerate as the number of wolves increase and disperse into previously wolf-free areas. The rapidly expanding wolf population and resulting requests for assistance, continues to present a challenge for WS. In March 1998, the Fish and Wildlife Service (FWS) plans to reintroduce Mexican wolves into Arizona. With funding from the FWS, WS has placed a wolf management specialist in that State. Two other Wolf Management Specialists are presently located in Minnesota and Montana where they work closely with officials from the FWS, National Park Service, and livestock producers.

It is gratifying to see the support for WS from Congress and the States where we provide service. Cooperative efforts allow us to make the best use of our funds. In fiscal year 1997, WS' budget for field operations was almost $23 million. For that same period, the cooperative funds provided by States, industry and private individuals totaled approximately $24 million—reflecting a projected increase of about $1 million from the previous year. Their overall nationwide dollar-for-dollar match commitment is the ultimate measure of customer satisfaction.

GOAL 4

Ensure the humane care and treatment of animals covered under the Animal Welfare Act and the Horse Protection Act

After 30 years of focusing almost entirely on conducting as many inspections as possible, we shifted our strategy to conducting more in-depth inspections, particularly of those licensees and registrants who historically had compliance problems. This approach resulted in a slight decrease in the overall number of inspections, but a significant increase in the amount of time spent inspecting facilities. We used this time to take a closer look at licensees' and registrants' animals, facilities, and records. Similarly, we redirected our enforcement efforts away from a rigid, "one size fits all" philosophy to a flexible approach that evaluates cases on their individual merits. This approach enables us to work with individuals who recognize their errant ways and want to improve the welfare of their animals. At the same time,

it allows us to impose stringent sanctions on licensees and registrants who continue to show little or no effort to provide better care or housing for their animals. The success of this approach is becoming evident in two ways. First, there is an increasing number of facilities found in full compliance upon inspection; currently about 56 percent. Additionally, we have taken prompt and severe action when the violations were egregious or normal efforts to achieve compliance failed. During the year, 43 Animal Welfare Act licenses were suspended or revoked, or unlicensed operators disqualified from having a license. A record sanction of $175,000 was also assessed from a dog dealer whose license was permanently revoked. During 1997, we were able to reduce a backlog of AWA cases that developed over the past several years by about 25 percent.

Under our umbrella strategic direction initiative, we also began preparing our Animal Care (AC) program for the 21st Century. This change initiative involves employees from all levels of the program and is aimed at making AC a recognized leader in the field of animal welfare.

In fiscal year 1997, we advanced the initiative in many ways, such as equipping all AC field personnel with laptop computers on which they now generate inspection reports and developing a formal risk-based inspection system that will eventually enable us to direct our limited inspection resources where they are needed most.

Complementing this initiative were numerous special projects. These projects included our increased emphasis on public outreach, which resulted in a quarterly report to the program's stakeholders. They also included AC's efforts to partner with another APHIS unit in inspecting animal handlers at airports.

Perhaps most impressively, however, were our ongoing efforts to trace back dogs and cats sold by class B dealers to research facilities. In fiscal year 1997, we were able to trace back an impressive 95.5 percent of animals sold to research to their original source—up from approximately 40 percent in fiscal year 1993. We believe all these and many other efforts are leading to one positive end: improved welfare for all animals protected under the AWA.

APHIS continued developing a strategic plan for the horse protection program that would provide for more effective use of resources and gain increased compliance with the HPA. This plan has been developed jointly with horse industry organizations and APHIS veterinarians. This partnership will place increased regulatory authority and enforcement responsibilities on USDA-certified organizations.

GOAL 5

Facilitate the development of safe and effective veterinary biologics, biotechnology-derived products, and other scientific methods for the benefit of agricultural producers and consumers and to protect the health of American agriculture

Of course, the future also holds other challenges and hard realities that cannot be ignored. For example, as the world population increases, we must develop methods to ensure that our agricultural production keeps pace with growing food demands. Moreover, as we do so, we must remain sensitive to the toll we take upon the environment. We cannot afford to sacrifice our natural resources. Fortunately, these challenges are already prompting new ways of thinking, leading to the development of new solutions. APHIS is well positioned to see that many of these solutions are coming by way of agricultural biotechnology.

As part of our regulatory mission, APHIS oversees the field testing of genetically engineered plant varieties to ensure that they pose no significant impact on the environment or agriculture. Since the first field trial under our regulations in 1987, we have evaluated more than 3,600 field trials at more than 14,000 sites throughout the United States.

Overall, derivatives of 48 different plant species have been field tested to date, including species as diverse as sugar cane, poplar trees, turfgrass, rice, and sunflowers. Derivatives of most major U.S. crops—corn, soybeans, potatoes, tomatoes, cotton, and tobacco—have each had a large number of trials.

APHIS also makes decisions about whether to deregulate new plant varieties, thus clearing the way for their commercialization. In 1992, Calgene's delayed-ripening tomato, the Flavr Savr, became the first genetically modified crop approved for deregulation. Since then, we have deregulated nearly 30 more products—including varieties of virus-resistant squash and papayas; insect-resistant cotton, corn, and potatoes; herbicide-tolerant corn and soybeans; high-laureate canola; and delayed-softening tomatoes. The wave of new products shows no sign of slowing. These new plant varieties may hold the key to meeting our biggest future challenges in agriculture—those of feeding a growing world population while sustaining our environmental resources. For example, herbicide tolerant plants like the Roundup Ready soybeans enable farmers to reduce herbicide applications drastically. Insect-resist-

ant crops like Bt cotton and corn can result in increased yields and substantial deceases in pesticide use. For example, in 1997, a corn hybrid engineered for resistance to the European corn borer averaged 15 more bushels per acre than other corn hybrids, without the use of additional pesticides.

In addition to these developments, plants like the papaya and the potato are being genetically engineered for resistance to viral diseases. We estimate that viral disease and damage cause about 20 percent of all vegetable crop loss. Scientists are also working on crops with additional nutritional or medicinal properties, as well as plants that can tolerate a variety of adverse environmental conditions, such as soil salinity and drought.

With the benefits of increased international trade, come new scientific responsibilities and the essential need for trading partners to exchange information. In this regard, a great challenge for APHIS is the need to educate our trading partners about the safety and benefits of these new, genetically enhanced plant products. In addition to ensuring that genetically engineered plants pose no danger to agriculture or the environment, we need to help governments and consumers across the world understand that they are safe. Increased understanding of the benefits of these products, as well as the extent to which they are tested, is critical to their acceptance and success in the international marketplace. If we can meet this challenge, the rewards for the environment and people around the world will be considerable.

On August 4, 1997, the Denver Wildlife Research Center in Lakewood, Colorado officially closed and the National Wildlife Research Center (NWRC) in Fort Collins, Colorado opened. As of that date, all NWRC headquarters' personnel began working out of a combination of permanent and GSA leased facilities in Fort Collins. Work on the new headquarters office/laboratory building on 43 acres on the foothills research campus of Colorado State University was initiated shortly thereafter. Occupancy of the 82,000 square foot building, which is being constructed by GSA, is expected to begin in late 1998, at which time all personnel will finally be located at one site after about four years in transition.

During 1997, WS methods development established new or continued work on existing cooperative agreements which enhance the Center's research program. One example is the agreement with the DOD to continue research into the development of chemical control methods for brown tree snake control on Guam. The NWRC has 20 identified research projects that seek to address the research needs of its stakeholders. These projects are between 3–5 years in duration and are developed around nationwide research needs assessments conducted in 1989 and 1996. Two examples of projects regarding coyote studies include a study to determine the effectiveness of using llamas as livestock guarding animals, and a project to evaluate the effectiveness of chemical reproductive control on coyotes. Another ongoing research project is the management and analysis of the FAA's National Database on bird and other wildlife strikes with aircraft, which can be a serious economic and safety problem for civilian aircraft in the United States. Pilots and others report strikes to the FAA. Biologists now have over 17,000 strike reports from 1989 through 1997 edited and accurately entered into a National Wildlife Strike Database. This database already is proving to be invaluable in providing biologists, aeronautical engineers, and airport managers with specific information on strike histories.

The Integrated Systems Acquisition Project (ISAP) is an APHIS strategic initiative to replace aging, obsolete, and non-integrated Information Technology platforms. The ISAP initiative will result in an integrated hardware and software platform across the entire Agency to provide information and data sharing at all levels of the organization. The Agency will fully redeploy in-house and contractor resources to comply with year 2000 (Y2K) requirements. Of the 145 applications in APHIS, 21 have been identified as mission critical and are scheduled for Y2K remediation. All 21 mission critical applications will be made Y2K compliant by September 1998 with implementation no later than March 1999.

FISCAL YEAR 1999 BUDGET REQUEST

The 1999 Budget proposes an appropriation level of $417.8 million for Salaries and Expenses, a $9.9 million decrease below the 1998 current estimate. A critical part of this request is pay and retirement costs of almost $8.6 million. This funding is crucial to maintaining our existing infrastructure to carry out all Agency programs.

The Agricultural Quarantine Inspection (AQI) program is the Nation's frontline defense against the introduction of dangerous agricultural pests and diseases from other countries. The 1996 FAIR Act set up the funding mechanism for the AQI—User Fees program which inspects international passengers, aircraft, ships, railcars,

and trucks. Essentially, there are three funding parts—Congressional appropriation; the reserve amount at the end of 1996; and collections over $100 million. An appropriation of less than $100 million means either that more funding must come from the reserve available at the end of 1996 which is rapidly becoming depleted, or that fees to the public will have to be increased unnecessarily to offset funds that have already been collected, but cannot be used until 2003. With the $100 million appropriation, we can address increased traffic of Asian and European agricultural products into the United States. This has created the need for increased inspections to reduce the risk of introducing exotic agricultural pests into the U.S. APHIS will likely make over 85 million inspections to intercept banned agricultural products from entering the United States.

Animal Health Monitoring and Surveillance is the corner stone of our animal health infrastructure and is key to preserving and enhancing America's animal health. Without this program, we could not quickly detect and respond to introductions of foreign agricultural disease that may cause production losses and export market disruptions. The budget requests a $4.6 million increase from fiscal year 1998. We intend to expand the National Animal Health Monitoring System to routinely identify diseases and death loss trends in sentinel feedlot and dairy cattle and swine. The Agency would enhance its emergency preparedness and response capabilities by upgrading its Foreign Animal Diseases Reporting and Networking System and developing and training on biological terrorism and other emerging disease issues. Finally, we would also work cooperatively with State and Federal wildlife agencies to investigate, study, and evaluate disease conditions in wildlife.

The budget proposes an increase of $259 thousand for pest detection activities, which would be contributed toward cooperative research agreements to improve responses to plant pest and disease outbreaks and infestations, such as Karnal Bunt. Beyond the increase in fiscal year 1999, APHIS also plans to devote $1 million to develop a strong fruit fly trapping and detection program to prevent the recurrence of fruit flies in Florida, which the state is expected to match. By detecting intrusions quickly, we will be able to control them within available funds and avoid the need for large, expensive emergency programs. These measures would reassure our international trading partners of APHIS' commitment to fruit fly control and deter them from prohibiting the entry of U.S. citrus and other agricultural products. At the same time, this would enable APHIS to cooperate with Florida on a similar basis as will California, providing an equal safeguarding level of this country's two largest citrus exporting states.

The budget provides a program increase of $0.7 million to strengthen fruit fly exclusion and detection activities. The agency will carry out Environmental Protection Agency recommendations to minimize the use of pesticides by strengthening domestic fruit fly detection and control by increasing detection surveys in expanding urban areas where introduction is most likely. The increased funding will assure U.S. trading partners of our commitment to fruit fly control and ease entry of U.S. produce into foreign countries. The budget also requests a program increase of $0.6 million for international programs. APHIS would open new offices in Southeast Asia and Brazil to direct APHIS Sanitary/Phytosanitary (SPS) activities. The Agency has taken on greater responsibility for resolving SPS conflicts since the signing of the World Trade Organization agreement. Further, funds would be used to resolve SPS standards requirements for U.S. agricultural trade. Such funding would help meet the Secretary's goal to double agricultural exports over the next several years.

The 1999 request for screwworm proposes a $1.4 million program reduction. Active eradication efforts will focus on Costa Rica and Panama where the total land mass is less than in Nicaragua and eradication costs can be reduced. The Agency will begin sterile fly releases into Panama, the last country before the barrier is established in the Isthmus of Panama. The program expects to begin planning for the new Panama facility in fiscal year 1999 with an architectural and engineering study.

The budget proposes an $8.5 million program reduction in brucellosis eradication expenditures. APHIS has 9 States in the final stages of eradication and anticipates that all 50 States will be in Class "Free" Status by the end of 1999. The budget proposes a program reduction for boll weevil of $12.2 million below the 1998 current level. The Agency is gradually transferring full operational responsibility for program activities where the boll weevil no longer exists to grower organizations. APHIS would continue to oversee and provide technical support to boll weevil detection and control activities in eradicated and non-infested areas. Growers can pay a greater share of program costs due to loans made available from USDA's Farm Service Agency. Therefore, funding above the Administration's request for both the brucellosis and boll weevil programs is not needed in fiscal year 1999 and can be used for other priority needs.

The 1999 budget proposes a program reduction of $3.4 million (for a net reduction of $2.5 million) for Wildlife Services (WS) which represents a total increase of $2.3 million, or 10 percent above the Administration's proposal for fiscal year 1998, as a result of several changes that we have made. Subject to the overall funding level, the proposal still calls for a reasonable (minimum 50 percent) match for all States, to reduce the significant disparity among States. The proposal allows States from two to three years to reach that goal. In addition, the basic infrastructure of each State will be funded by the Federal government, regardless of that States's contribution. Finally, funds have been set aside for needs that may cross State boundaries, and therefore may not be the responsibility of any single State. These changes address concerns that were raised with last year's proposal. However, behind the proposals in both years is the Administration's belief that cooperators in States that receive benefits should pay a reasonable portion of the government's costs of providing these benefits, and that the current significant disparity among States forces States and taxpayers to make up the difference.

For buildings and facilities, we proposed $2 million for general maintenance. The Agency has not received general maintenance funding for the past two years making additional funding necessary to maintain existing facilities. APHIS controls and operates a broad range of facilities throughout the United States and overseas in support of our mission. These facilities include veterinary laboratories, animal quarantine and holding facilities, quarantine greenhouses, sterile insect rearing and production facilities, plant and soil analysis laboratories, and biological control laboratories and have a value of approximately $186 million. Many of these facilities are over 20 years old. As the controlling Agency, APHIS is responsible for maintaining these facilities in a good state of repair and complying with national, State, and local building codes, the Life Safety Code, the National Fire Code, Occupational Safety and Health Administration regulations, and the Environmental Protection Agency regulations. The budget also proposes $3.2 million to support continued modernization of Plum Island Animal Disease Center.

The proposed budget assumes passage of legislation to collect fees for animal welfare inspection, veterinary biologics, biotechnology, pink bollworm, and Swine Health Protection Act inspection activities. In total, the fees would make up $9.9 million.

FINAL THOUGHTS

Much has been said about the primary mission of APHIS—whether it is to protect American agriculture from foreign diseases and pests, or to facilitate the export of American food and fiber products by helping our farmers and producers meet the animal and plant health standards of importing countries. Without question, APHIS' role as a domestic regulatory agency is still key. However, because of our role in developing and enforcing import requirements, as well as in providing key services to facilitate exports, APHIS must also focus its resources on issues relating to international trade. In fact, the two roles are inseparable.

To succeed in the 21st century—and by that I mean to feed our populations, sustain our environment, and encourage economic growth through healthy agricultural trade—we will need to be effective in both roles by using all of the tools within our reach. We will need to explore and use the technologies available to better our crops and our production. In addition, we will need to build trust in trade with science-based decisions. In this global trade environment, where our actions and livelihoods are increasingly interdependent, it is crucial that we strive to make those decisions that will help ensure our mutual benefit.

We appreciate the Committee's strong support of our programs in the past, and look forward to meeting the challenge of protecting and strengthening American agriculture in the future. We will be happy to answer any questions.

PREPARED STATEMENT OF ENRIQUE E. FIGUEROA

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to represent the Agricultural Marketing Service and to present our fiscal year 1999 budget proposals.

Although I am new to the Agricultural Marketing Service, or AMS, I am familiar with the economic and trading challenges faced by U.S. agriculture in domestic and international markets. Before coming to AMS, I was an associate professor at Cornell University's Department of Agricultural, Resource and Managerial Economics. At Cornell, my work was focused on horticultural product marketing issues. While at Cornell, I also served as a member of Secretary Glickman's NAFTA Advisory Committee on Private Commercial Disputes Regarding Agricultural Goods. Several

years ago, I worked as a staff assistant for the House Committee on Agriculture, and spent four years with the California Conservation Corps. Since coming to AMS in November, I have been able to put my agricultural background to use for this agency and the customers we serve.

MISSION, GOALS, AND PROGRAMS

I would like to take a few moments at the outset to review the agency's mission and strategic goals before I present our budget proposals.

Our mission in AMS is to facilitate the strategic marketing of agricultural products in domestic and international markets, while ensuring fair trading practices, and promoting a competitive and efficient marketplace, to the benefit of producers, traders, and consumers of U.S. food and fiber products. AMS' two major strategic goals are: (1) to facilitate the strategic marketing of U.S. agricultural products in domestic and international markets, and (2) to ensure fair and competitive agricultural marketing through marketing tools and regulations.

Our first goal aims to enhance the efficiency of agricultural marketing, which will allow producers to maximize returns while reducing overall marketing costs, resulting in better values to consumers. AMS programs related to this goal include Market News, Quality Standards, Organic Certification, Pesticide Data, Wholesale Market Development, Transportation Services, Commodity Purchase Services, Grading and Certification, and Commodity Research and Promotion programs. Our Market News program provides timely, accurate, and unbiased market buying, selling, and pricing information on numerous agricultural commodities. Commodity standards provide a common language of quality for buyers and sellers in the U.S. and abroad. AMS user-funded grading and certification services provide an impartial evaluation of product quality so that purchasers can buy commodities without having to personally inspect them. The Organic Certification program is developing national standards and definitions to govern the production and handling of "organic" agricultural products so that consumers can be assured of the validity and integrity of the label. The program will accredit agents who will certify organic products to facilitate trading between the states and abroad. Our Pesticide Data Program develops and communicates comprehensive, statistically-reliable information on pesticide residues in food for use in Government dietary risk assessments and policy decisions. Since the nation's transportation system is crucial for agricultural products to reach their markets, AMS provides technical assistance to shippers and carriers and participates in transportation regulatory actions. We also provide economic analysis and recommend improvements to domestic and international agricultural transportation. AMS purchases selected meats, fish, poultry, fruits and vegetables to remove excess supplies from markets while providing a dependable supply of agricultural commodities for the National School Lunch and other domestic feeding programs. Research and promotion programs are used by agricultural producers to broaden and enhance national and international markets for various commodities. These AMS programs are directly related to USDA's strategic goal to open, expand, and maintain global market opportunities for agricultural producers.

The aim of AMS' second goal is to ensure fair and competitive trading in agricultural markets for the benefit of producers and consumers of agricultural commodities. AMS programs that accomplish this important goal include Shell Egg Surveillance, Federal Seed, Pesticide Recordkeeping, Marketing Agreements and Orders, Plant Variety Protection, and the Perishable Agricultural Commodities Act, or PACA program. The Shell Egg Surveillance program promotes fair competition in the sale of consumer grade shell eggs by monitoring the proper disposition of certain undergrade and restricted eggs through regular inspections of shell egg handling operations. Marketing orders and agreements also help serve this goal by facilitating orderly marketing, and assuring equitable returns to producers and a dependable, reasonably-priced supply of products to consumers. The PACA program protects producers, shippers and distributors from loss due to unfair and fraudulent practices in the marketing of perishable agricultural commodities. These activities also help serve USDA's first strategic goal, and some serve USDA's second goal—to ensure a safe, affordable, nutritious, and accessible food supply.

FUNDING SOURCES

The wide range of activities provided by AMS are funded from a variety of sources. AMS is uniquely entrepreneurial among governmental organizations. For the vast majority of our programs, our ability to "stay in business" depends on the earnings generated from customers who are under no obligation to buy our services, and who request those services only if they believe the service adds a proven value to their products in the marketplace. Nearly 75 percent of AMS funding is revenues

generated from services provided to satisfied customers. This entrepreneurial climate drives us to be customer service-oriented, cost-conscious, committed to performance that will satisfy our customers, and innovative in service delivery. Customers pay for our services in grading, inspection and certification, and industry-generated self-help programs like research and promotion reimburse us for our oversight assistance to ensure that the programs comply with legislative intent and provisions. AMS also administers activities to protect and promote a level playing field in trade. Licenses and fees fully finance these programs. Finally, some of our activities provide a public good for millions of beneficiaries—such as issuing daily market reports and procuring food for Federal feeding programs. These activities are appropriations funded.

CURRENT ISSUES AND ACCOMPLISHMENTS

I would like to review a few current issues and accomplishments of the past year.

Federal Milk Marketing Order Reform

AMS has completed drafting the proposed rule on Federal Milk Order reform in accordance with the mandate of the 1996 Farm Bill. To reach that goal, we engaged academics, solicited public comments, and released proposals and other documents to spark national debate and lead to a reform package. In preparation for the proposed rule, AMS received nearly 3,700 comments and participated in 250 meetings with over 22,000 people. The proposed rule was published on January 20. The initial 60-day comment period was recently extended until April 30. During the comment period, we anticipate holding listening sessions to continue as broad a national dialogue as possible.

Rail and Other Transportation Issues

U.S. agriculture faces increased reliance on market forces and export markets at a time when the performance and integrity of the transportation infrastructure is becoming an issue. Rail car shortages, crumbling locks, and old roads can result in bottlenecks that impede the most efficient movement of agricultural commodities. With a responsibility to monitor and represent the interests of agricultural shippers, Assistant Secretary Dunn has announced that AMS will take the lead in conducting a broadly based study to examine the transportation needs of U.S. agriculture.

In October and December, AMS represented agricultural interests when rail car congestion problems at the Union Pacific/Southern Pacific's Houston rail hub spread throughout the western states. USDA filed written comments, and testified at emergency meetings of the Surface Transportation Board, or STB, to recommend alternatives that would quickly improve service to grain shippers. The STB issued orders that addressed USDA's requests and recent data from the railroads indicate that progress is being made to alleviate the rail car shortages and improve performance for shippers.

International Activities and Issues

In the international arena, AMS continues to be successful in advancing U.S. interests in international commodity standards, through active participation at the Economic Commission for Europe, or ECE, as well as Codex. For example, last March, ECE work was completed on pork cut specifications and progressed on beef cut specifications that will be adopted throughout Europe and should closely mirror existing U.S. standards. AMS has increased price reporting data from foreign markets and made contacts for future international market reporting. We also held several seminars for small business exporters to better acquaint them with import requirements in key international markets. In cooperation with government representatives from Canada and Mexico and under AMS leadership, the NAFTA Advisory Committee on Private Commercial Disputes Regarding Agricultural Goods developed a consensus recommendation to establish an industry-driven mechanism for the resolution of private commercial disputes involving fresh fruit and vegetable commerce between the three countries. AMS also worked closely with the Canadian and Mexican governments to conduct a series of seminars for fruit and vegetable shippers regarding import requirements for each country.

Voluntary HACCP for Fruits and Vegetables

AMS has been piloting a voluntary HACCP program for fresh-cut fruits and vegetables. This Quality Through Verification, or QTV, program encompassed five fresh cut fruit and vegetable firms during its pilot phase. The program was reviewed by FDA, which has regulatory responsibility for the safety of produce, and received that agency's support as an important component of FDA's overall effort to enhance the safety of produce. This year, we expect to complete a memorandum of understanding

with FDA outlining the respective responsibilities of each agency in the program's operation. Several dozen additional firms are awaiting acceptance into the program, and we expect to extend QTV service to many of those firms.

Expanded Use of Internet

Another improvement in service to our customers is our expanded use of the Internet to enhance program delivery. In 1998, all of our daily market news reports will be available through the Internet, and we are exploring additional opportunities to use the Internet to make proposed rules available for public comment. In addition, we will expand the amount and depth of information on such topics as commodity procurement actions through our web site, following up on the recent business process re-engineering we undertook for our Commodity Procurement program.

FISCAL YEAR 1999 BUDGET REQUESTS

Let me turn now to our budget requests for fiscal year 1999. We are requesting a net increase in Marketing Services funds of $11.9 million which would cover the following activities: $320,000 for international market reporting, $500,000 to expand market reporting to address the potential effects of market concentration, $505,000 to expedite nationwide development of the Organic Certification Program, $2.5 million to maintain statistically reliable sampling and testing in cooperation with all ten participating states in the Pesticide Data Program, $1.7 million to initiate a rapid response capability in the Pesticide Data Program to meet requirements of the Food Quality Protection Act of 1996, $6.3 million for the Microbiology Data Program (part of the Administration's Food Safety Initiative), $770,000 for pay costs, and $329,000 for added retirement costs. Our budget request also reflects a decrease of $1 million that was provided in fiscal year 1998 for salmon marketing. This request will assure our goals of facilitating the strategic marketing of U.S. agricultural products in domestic and international markets while ensuring fair and competitive markets for the benefit of producers and consumers. Let me explain these program requests in more detail.

International Market News

To effectively compete in foreign as well as domestic markets, U.S. agriculture must have ready access to consistent, accurate, timely, and reliable information on international prices. With an increasing share of agriculture's income dependent on market expansion and export growth, USDA's role is to protect and expand the position of American agricultural products in foreign markets. Tariff reductions, resulting from international agreements, and rising incomes in many countries have continued to drive demand for U.S. agricultural products and expand our export markets. But international marketing challenges continue, and we want to ensure that a lack of market information is not a barrier to market access and, therefore, an impediment to the continued growth of U.S. agricultural exports.

AMS is currently collecting limited international market information, but more in-depth information from a wider array of markets is needed. In a recent AMS customer service survey, respondents requested market information from 23 countries in Europe, North and South America, and the Pacific Rim for all fresh fruits, vegetables, and tree nuts. Various poultry and egg industry associations—the National Broiler Council, National Turkey Federation, United Egg Producers, United States Egg Marketers, National Poultry and Food Distributors Association, and USA Poultry and Egg Export Council—have also requested additional international market information. Our poultry market news program receives between 50 and 60 inquiries per week from various sources requesting information on international markets. Comments from customer surveys also indicate a strong need for more information regarding international market conditions. Our dairy market news program has concentrated on covering the dairy product markets of the U.S.' major international trade competitors, but now there is a growing need for dairy product information in those areas that are potential markets for U.S. dairy products such as Mexico, South America, and the Pacific Rim countries. The U.S. Dairy Export Council, a private organization consisting of dairy product processors, exporters, producers, and suppliers, has specifically requested market news for the Pacific Rim.

We firmly subscribe to the principle that market information makes markets more efficient and contributes to the competitiveness of U.S. agriculture. In order to facilitate the development of international market news within available resources, AMS reporters have been working to establish contacts with private companies and government sources in foreign markets to collect and exchange market information. Industry has been so keenly interested in foreign market information that demand exceeds AMS resources. Additional personnel and increased automation would allow us to develop or obtain additional reports from major export markets and incor-

porate them into AMS' market news reports to the benefit of U.S. trade. Improving the availability of information on overseas markets should have a significant positive impact on the continued ability of U.S. products to compete successfully in the international marketplace.

Domestic Market Reporting to Address Agricultural Concentration

In domestic markets as well, we must also ensure that the lack of information is not a barrier or impediment to marketing opportunities for our producers. Increasing concentration within the meat and poultry industries has raised concerns over potential non-competitive behavior. Although there are some positive effects of concentration on the marketplace, the concern for potential non-competitive behavior by large companies leads to distrust and suspicion by many growers and smaller segments of the industry. A lack of complete market information only worsens the situation, fueling mistrust and suspicions of unfair market practices. The Secretary's Advisory Committee on Agricultural Concentration recommended that price discovery and reporting be enhanced wherever possible to ensure fair competition. Although AMS has developed several new reports in response to the advisory committee recommendations, such as export reporting, our resources are not sufficient to meet our commitments to agriculture in this critical area. Producers need all the information they can get to successfully compete in today's markets. New and expanded market reports will provide broader coverage of market information and a more in-depth look at market activity. Although a lack of resources limits our ability to be fully responsive, we have taken some initial steps to address these information needs. However, to realize their full potential, these initiatives will require additional AMS reporters covering more markets and improved information technology.

Organic Certification

Sales of organic foods are estimated at more than $3.5 billion and growing at a rate of 22 percent a year. With this growth has come multiple definitions of what constitutes an organic product, resulting in confusion among buyers and consumers. The Organic Foods Production Act of 1990 required the Secretary to establish an organic certification program for producers and handlers of agricultural products that are produced using organic methods. With recommendations from the National Organic Standards Board, or NOSB, and public input from certifiers, consumers, producers and handlers, AMS has developed a public-private partnership that encourages innovation within the boundaries of organic principles and legislative intent.

In fiscal 1997, AMS focused on completing and clearing the proposed organic rule. The rule was published in the Federal Register on December 16, 1997. For the first time, AMS is providing one of the most open and accessible public rulemakings in Federal experience—a fully electronic public rulemaking via the Internet. Four public information meetings to discuss the proposed rule were scheduled for February and March in various locations across the country, and these meetings will provide an opportunity for USDA to present an overview of the proposed rule, respond to questions, and expand the public dialogue on this important program.

There are now approximately 28 states with some type of organic legislation in place, ranging from labeling laws to full-scale certification programs. Of these, only 11 states have certification programs in operation. Some are planning to adopt the national program and possibly implement certification programs; some states have established requirements for organic producers, but leave certification to private organizations; and others with existing programs likely will revise their organic programs when the Federal program goes into effect.

National standards and definitions of agricultural products that are organically produced will facilitate the movement of products between States and assure consumers of the validity and integrity of the organic label. Beyond the domestic market, nomenclature and standards for organic production will facilitate international marketing of U.S. organic products. After the final rule is implemented, we will work to harmonize the eventual program standards with those of existing and developing international organic programs.

AMS needs additional resources to expedite nationwide development of the program, ensure labeling integrity, and facilitate global trade of our country's organic products. Once the program is fully established, we will charge fees to certifying agents for USDA accreditation, as authorized by current legislation. Fees collected will be deposited into the U.S. Treasury.

Pesticide Data Program

Pesticide residue data are a critical component of the Food Quality Protection Act, or FQPA, of 1996. The Act requires the Secretary of Agriculture to ensure the improved collection of pesticide residue data and the increased sampling of foods most

likely consumed by children. AMS' statistically reliable procedures are designed to make unbiased estimates of residues in products collected in the ten cooperating states that represent almost half of the U.S. population. The pesticides targeted for data collection are selected by the Environmental Protection Agency, or EPA, in consultation with AMS. The commodities chosen for testing are among those most prevalently consumed by the American public.

The fiscal year 1998 Appropriations Act provided $8 million in funding to AMS for the Pesticide Data Program, or PDP—a lower funding level than was made available for the program in previous years; in fact, about 30 percent less than the fiscal year 1996 level. With the additional funding requested for PDP program operations, we will be able to maintain statistical reliability of the data and provide the level of sampling and testing that will meet the needs of the EPA and other government agencies in responding to public health concerns.

In addition to the FQPA, our pesticide residue testing has served the Department in several other important areas. AMS residue testing results have been used to confront barriers to international trade of U.S. agricultural commodities and are useful in the establishment of international standards. USDA's Foreign Agricultural Service, or FAS, uses data from the program to convince foreign governments that our food is safe. Pesticide data also have been used in the development of international standards by international organizations such as the Codex Alimentarius Commission and the World Health Organization.

Rapid Response Initiative

Title III, Section 301(c) of the FQPA directs the Secretary to ensure improved sampling and collection of pesticide residue data. To further respond to the requirements of the FQPA, AMS proposes to initiate a rapid response capability for pesticide residue testing. In the next ten years, EPA is required to review more than 9,000 tolerances to ensure compliance with the more stringent safety standards of the FQPA. Under FQPA, EPA needs to complete risk assessment evaluations for pesticides with common toxic mechanisms and using aggregate exposure models. Up to date pesticide residue data generated by the Pesticide Data Program will allow the EPA to conduct realistic dietary risk assessments. A rapid response capability will increase productivity, especially for a commodity where PDP has collected data for other commodities in the same class, and for acute pesticide toxicity studies requiring single serving size surveys. PDP would add these commodities at a special sampling rate that provides a rapid response while maintaining statistical reliability. Without up to date and accurate residue data, EPA will be forced to make more conservative assumptions about residue levels that could potentially overestimate risk.

Microbiology Data Program

As part of the President's Food Safety Initiative, AMS proposes to initiate the Microbiology Data Program. The program is designed to address increasing public concerns about microorganisms in the U.S. food supply by helping to determine the incidence, number, and type of important foodborne microorganisms in domestically-produced and imported products with statistical reliability. With the data collected, a national database can be established identifying the incidence of key microorganisms in fruits and vegetables. The data will be used to establish "benchmarks" that can be used to evaluate the effectiveness of procedures to reduce or eliminate harmful foodborne microorganisms. The program also will provide Federal public health agencies with statistically reliable microbiological data to assess the impact of various regulations and agricultural practices. The produce industry and regulatory health agencies will benefit from data that enables them to assess processing and handling techniques from the farm almost to the grocery store, and identify the most effective modifications to the food distribution system. As a result, both the quality and the wholesomeness of the food supply will be improved. Stakeholders—including state agencies, consumers, growers, processors, retail stores, food handlers, food transporters, medical institutions, academia, global traders, and international organizations setting international standards—will benefit from this valuable data that will be available for study and decision making.

To minimize the cost of this initiative, AMS proposes to use the existing infrastructure of the Pesticide Data Program for statistically-reliable sampling, including the laboratory capacity of participating State and Federal laboratories, and the electronic data reporting capabilities already in place with PDP. The 10 states currently participating in the PDP—California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin—will be asked to also participate in the microbiology program. Initially, fresh fruit and vegetables will be sampled; other products could be included later. Organisms initially under consideration are *E. coli,*

Listeria monocytogenes, Salmonella, and *Shigella.* Fruit and vegetable samples will be obtained at food terminal markets and chain store distribution centers.

The proposed microbiological program offers a unique and innovative approach to identifying foodborne pathogens and focusing on those hazards in the food distribution system that present the greatest risks. No similar program exists at either the State or Federal level. AMS will coordinate our activities with other agencies within USDA, including ARS, NASS, ERS, and FSIS, as well as the FDA, and the Centers for Disease Control and Prevention, or CDC. CDC's primary responsibility is surveillance and tracking of foodborne illness; FDA notifies CDC of findings related to regulatory and laboratory investigations; and State and local health departments report foodborne illness cases after their investigations. Outbreaks involving restaurants or institutions are more likely to be recognized than those involving foods prepared in the home. Fruits and vegetables can become contaminated with pathogenic and spoilage microorganisms while growing, or during harvesting, processing, and distribution. Two earlier CDC reviews of foodborne illness revealed that fruits and vegetables can act as a vehicle in transmitting foodborne illness. Questionable practices in food production and handling, mass preparation of prepared meals, the trend toward greater consumption of meals away from home, the emphasis on increasing fresh fruits and vegetables in the diet, and product distribution logistics can all raise the risks of foodborne illnesses. The proposed program will help to gain important insight on the presence of pathogens in our food supply.

BUDGET REQUEST SUMMARY

In total, our 1999 budget request includes $58.5 million in appropriated funding for our marketing services programs and $1.2 million for Payments to States and Possessions. In addition, we are requesting $11 million for formulation and administration of marketing agreements and orders and $6.3 million for administration of commodity purchase services from Section 32 funds.

Thank you for this opportunity to present our budget proposals.

PREPARED STATEMENT OF JAMES R. BAKER

Mr. Chairman and members of the Committee, I am pleased to submit the fiscal year 1999 budget proposal for the Grain Inspection, Packers and Stockyards Administration (GIPSA).

GIPSA is part of USDA's Marketing and Regulatory Programs, which are working to ensure a productive and competitive global marketplace for U.S. agricultural products. GIPSA's mission is to facilitate the marketing of livestock, poultry, meat, cereals, oilseeds, and related agricultural products, and to promote fair and competitive trading practices for the overall benefit of consumers and American agriculture.

Our mission is carried out in two major segments of American agriculture. GIPSA's Packers and Stockyards Programs (P&S) ensure open and competitive markets for livestock, meat, and poultry. The Agency's Federal Grain Inspection Service (FGIS) provides the U.S. grain market with Federal quality standards and a uniform system for applying them.

GIPSA has both service and regulatory roles. The Agency provides financial protection to livestock producers and ensures fair and competitive markets. It also provides impartial, accurate measurements of grain quality to create an environment that promotes fairness and efficiency in the U.S. grain marketing system.

The existence of GIPSA as an unbiased, third-party entity helps ensure a fair and competitive marketing system for all involved in the merchandising of livestock, meat, and poultry, and grain and related products.

ORGANIZATION

GIPSA is comprised of approximately 800 personnel, including full-time, temporary, and intermittent employees. GIPSA personnel are situated in field locations across the country to serve our customers.

Of GIPSA's Packers and Stockyards Program's 180 allotted staff years, approximately 28 percent are located at headquarters. Following the planned reorganization of this program, the total staff located at headquarters will be reduced to no more than 20 percent of total staff years. During fiscal year 1997, GIPSA concentrated P&S program resources on providing financial protection and promoting fair business practices and a competitive marketing environment for livestock, meat, and poultry. The Agency conducted over 1,800 investigations, disclosing 515 violations of the Packers and Stockyards (P&S) Act. Most violations are corrected on a voluntary basis with several resulting in livestock and poultry producers receiving

additional funds for the sale of their product. During fiscal year 1997, 46 formal cases were resolved and 29 new cases were filed to bring subject firms into compliance with the provisions of the P&S Act. These complaints alleged violations of the P&S Act, including failure to compete in the purchase of livestock, paying livestock sellers on the basis of false and inaccurate weights, failure to pay and failure to pay promptly for livestock, operating without bond coverage, and delayed weighing of live poultry. GIPSA is appealing an adverse decision in the IBP, Inc., case which alleged that the packer had given undue or unreasonable preference to a select group of feedlots.

Federal grain personnel work with over 2,000 State and private inspectors to provide high-quality inspection and weighing services on a user-fee basis. Federal inspectors service 42 export elevators located in Georgia, Illinois, Indiana, Louisiana, Maryland, New York, Ohio, Oregon, and Texas. A small Federal staff also provides service at 6 export elevators in Eastern Canada for U.S. grain transshipped through Canadian ports. Eight delegated States provide service at an additional 20 export elevators located in Alabama, California, Minnesota, Mississippi, South Carolina, Virginia, Washington, and Wisconsin. Sixty-five (65) designated agencies service the domestic market under GIPSA supervision. In 1997, this unique mix of Federal, State, and private inspection agencies provided 2.1 million inspections on over 225 million metric tons of grains and oilseeds; weighed over 97 million metric tons of grain; and issued over 87,000 official weight certificates.

This, of course, is only a brief summary of our accomplishments. I'd like to now provide some more in-depth information about our programs and their activities.

GIPSA'S PACKERS AND STOCKYARDS PROGRAMS (P&S)

GIPSA Strategic Goal No. 1.—Ensure a fair, open and competitive marketing environment for livestock, meat, and poultry.

GIPSA's P&S program provides financial protection and promotes fair business practices and a competitive marketing environment for livestock, meat, and poultry. Our programs foster fair and open competition, and guard against deceptive and fraudulent practices affecting the movement and price of meat animals and their products. We also work to protect consumers and members of the livestock, meat, and poultry industries from unfair business practices. To carry out these important roles, GIPSA:

—Administers the Packers and Stockyards Act of 1921.

—Carries out the Secretary's responsibilities under Section 1324 of the Food Security Act of 1985, which permits States to establish "central filing systems" to prenotify buyers, commission merchants, and selling agencies of security interests against farm products, and issue regulations and certify the systems that meet the criteria in the statute.

—Enforces the Truth-in-Lending Act, the Fair Credit Reporting Act, and the Freedom of Information Act as each relates to persons and firms subject to the P&S Act.

The production and marketing of livestock, meat, and poultry are important to American agriculture and significantly impact the Nation's economy. The Commerce Department estimates the annual wholesale value of livestock, meat, and poultry products to be $105 billion. At the close of fiscal year 1997, there were 1,335 stockyards; 6,900 market agencies/dealers; and 2,125 packer buyers registered with GIPSA to engage in the livestock marketing business. There also were approximately 6,000 slaughtering and processing packers; an estimated 6,500 meat distributors, brokers, and dealers; and 210 poultry firms subject to the P&S Act.

GIPSA's P&S Programs continues to provide payment protection to livestock and poultry producers by focusing on the financial area. Financial investigations during fiscal year 1997 resulted in $1.9 million being restored to custodial accounts established and maintained for the benefit of livestock sellers. Packer and poultry trust activities also returned $264,000 to livestock sellers and $10,000 to poultry growers during the fiscal year. Dealers and market agencies are required to meet solvency requirements, a critical component of payment protection of the P&S Act. During fiscal year 1997, 186 insolvent dealers and market agencies corrected or reduced their insolvencies by $34.4 million.

GIPSA closely monitors anticompetitive practices which may be impeding the free trade of livestock. Any practice, agreement, or understanding that excludes potential buyers from bidding in open competition is considered a restraint on competition. Examples of such practices include apportioning territories, price agreements or arrangements not to compete, and payoffs or kickbacks to buyers. A high priority is placed on investigating all complaints and further developing information received

concerning the failure of livestock dealers, market agencies, or packers to compete for the purchase of livestock.

During fiscal year 1997, GIPSA issued an administrative complaint against two dealers alleging they failed to conduct their buying operations in competition with and independently of one another. The complaint alleged the dealers entered into arrangements for the purpose and with the effect of restricting competition and thereby controlling the prices for slaughter cows at auction markets. Another investigation is underway to determine if other livestock dealers and packers in the Northwest region of the United States have entered into similar types of arrangements to restrict competition.

GIPSA is currently conducting a broad investigation of fed steer and heifer procurement in the Texas Panhandle. The investigation was initiated in the summer of 1996 and includes 16 months of procurement data, over 37,000 transactions, and over 6 million head of cattle. Transaction data from packers has been collected, processed, and documented. Preliminary descriptive and graphical analyses have been completed and portions have been reported to the industry. Purchase and slaughter patterns over the period of investigation have been examined to identify potential occurrences of aberrant or unusual procurement practices. While the analyses conducted thus far have not disclosed obvious violations of the P&S Act, econometric and statistical analyses of the data are still being documented to identify relationships between spot market prices and non-spot purchases, and to reveal relationships that may not be apparent in the descriptive and graphical analysis. Completion of the investigation will depend on the findings of the econometric analysis. Two university researchers are collaborating on the econometric and statistical analyses.

An investigation of slaughter hog procurement in the central United States also is underway. The investigation includes analysis of contractual arrangements between packers and hog producers, and will analyze price relationships between various procurement arrangements. The data also are being analyzed to ensure that firms are actively competing and to gain a better understanding of each firm's procurement operations. The investigation involves procurement data from a dozen major hog slaughter plants in the western Corn Belt. These plants slaughtered approximately one-third of the Nation's slaughter hogs in 1996. Descriptive and graphical analyses should be completed and available by late spring 1998. Econometric and statistical analyses are underway with the cooperation of personnel from USDA's Economic Research Service and National Agricultural Statistics Service. While these analyses will take several months, they should be completed by late this year.

Other major investigations underway include an investigation of slaughter lamb procurement in the Western United States and two poultry investigations. The slaughter lamb procurement investigation is focussing on evaluating competition and the use of supply contracts. One of the poultry investigations currently being conducted focuses on alleged discriminatory treatment of contract growers by a major poultry firm. The investigation involves analyzing settlements of nearly 1,000 growers over a 2-year period. The other poultry investigation is being conducted to determine whether contract settlements that base payment on grower cost comparisons contain unfair elements. Data collection for both of the poultry investigations has been completed and analysis of the data is currently underway.

Also in fiscal year 1997, GIPSA published an Advanced Notice of Proposed Rulemaking in the Federal Register seeking comments on the need for additional rules to protect contract poultry growers regarding (1) grower payment based on performance compared with other growers for a specified time period (usually all growers whose birds are killed within a 1- or 2-week period); (2) the accuracy of feed weights and feed delivery and pickup procedures; and (3) procedures for weighing live birds picked up for slaughter and the accuracy of the weights. We are concerned that contract poultry growers are in an unequal bargaining position with the integrated poultry companies and is considering the need to issue substantive regulations to provide growers with assurance that their settlements will be equitable. A review committee analyzed over 3,400 comments received in response to the notice. Recommendations of the committee and an analysis of grower comparison settlements by major poultry companies currently are being reviewed to determine the need for further regulation to ensure fair grower settlements.

In order to create a forum for public discussion, the Department of Agriculture published a petition requesting rulemaking to restrict certain procurement practices regarding forward contracting and packer feeding. The petition was submitted by the Western Organization of Resource Councils. USDA received over 1,700 comments on the Federal Register notice by the April 14, 1997, closing date. A USDA team with economic, legal, and industry expertise was established to review and

analyze the comments received. USDA is continuing to move forward on this matter and a decision regarding the petition is anticipated in the near future.

Finally, in fiscal year 1997, GIPSA took preliminary steps to restructure its P&S program. The headquarters and field office structures of the P&S program were put in place in 1963. Since that time, there have been minor adjustments to both the field and headquarters structures, but the basic framework has remained unchanged. The field structure, which currently includes 11 regional offices, was designed to provide area coverage. The headquarters structure divides the enforcement activities into two program division with six branches based on the major titles in the P&S Act—a Packer and Poultry Division, which covers the responsibilities under Title II of the Act, and a livestock Marketing Division, which covers the activities under Title III.

Major structural changes and most of the concentration in the livestock and meat packing industries have taken place since the current P&S structure was established. As the industry structure has changed, the lines between Titles II and III enforcement activities have become increasingly blurred. In addition, livestock and poultry production and slaughter has become concentrated in relatively narrow geographic areas.

In an Evaluation Report released in February 1997, the USDA Office of the Inspector General (OIG) concluded that the P&S program needed to reorganize its national and regional offices, because its 11 regional offices do not provide enough staff to perform the full range of investigations, including complex anticompetitive practice investigations, and that P&S needed to incorporate economic, statistical, and legal expertise in its field offices.

GIPSA recognizes the need to restructure its P&S program to enhance its ability to address competitive issues. The Agency's restructuring plan is consistent with OIG's recommendations.

At headquarters, two operating divisions and six branches will be consolidated into a single policy/litigation support office with three branches that focus on the core responsibilities under the P&S Act—competition, fair trade practices, and payment protection. The 11 field offices will be consolidated into 3 regional offices with approximately 35 resident agents operating either out of their homes or 1 of 3 sub-offices. Resident agents will handle the most basic services and routine investigations in outlying areas.

One-time costs associated with consolidating the field offices and relocating displaced employees are projected at $3 million. The appropriation needed to fund the reorganization is included in the Department's fiscal year 1999 budget request as a one-time increase. While the Administration continues to seek additional resources to address competitive issues in the livestock, meat, and poultry industries, the restructuring itself will be budget neutral except for the one-time cost.

The restructuring of the P&S program is vital to meeting the Department's responsibility, and industry's concerns, relating to competitive behavior in the livestock, meat, and poultry industries. While the restructuring plan is budget neutral in the out years, it represents a unique opportunity to strengthen P&S' ability to investigate anticompetitive practices and provide greater flexibility and efficiency in Agency operations.

GIPSA'S FEDERAL GRAIN INSPECTION SERVICE

GIPSA Strategic Goal No. 2.—Promote and protect the integrity of the domestic and global marketing of U.S. grain for the benefit of American agriculture.

GIPSA's grain program plays a critically important role in facilitating the marketing of U.S. grain and related commodities. We provide the U.S. grain market with Federal quality standards and a uniform system to apply these standards. Through this program, GIPSA provides descriptions (grades) and testing methodologies for measuring the quality and quantity of grain, rice, edible beans, and related commodities, and, provides an array of inspection and weighing services, on a fee basis, through a unique partnership of Federal, State, and private laboratories.

By serving as an impartial third party, GIPSA ensures that the standards are applied and the weights recorded in a fair and accurate manner. Our presence in the market advances the orderly and efficient marketing and effective distribution of U.S. grain and other assigned commodities from the Nation's farms to domestic and international buyers.

Our guidance in carrying out these important tasks is provided by the U.S. Grain Standards Act (USGSA) and the Agricultural Marketing Act of 1946 (AMA) as it relates to the inspection of rice, pulses, lentils, and processed grain products. Under these two Acts, GIPSA:

—Establishes official U.S. grading standards and testing procedures for eight grains (barley, corn, oats, rye, sorghum, triticale, wheat, and mixed grain), and four oilseeds (canola, flaxseed, soybeans, and sunflower seed) under the USGSA; and for rice, lentils, dry peas, and a variety of edible beans under the AMA.

—Provides American agriculture and customers of U.S. grain around the world with a national inspection and weighing system that applies the official grading and testing standards and procedures in a uniform, accurate, and impartial manner.

—Inspects and weighs exported grain and oilseeds. Domestic grain and oilseed shipments, grain and oilseed imported into the United States, and crops with standards under the AMA are inspected and weighed upon request.

—Monitors grain handling practices to prevent the deceptive use of the grading standards and official inspection and weighing results, and the degradation of grain quality through the introduction of foreign material, dockage, or other nongrain material to grain.

Through these permissive and mandatory programs, GIPSA promotes the efficient and effective marketing of U.S. grain and other commodities from farmers to end users.

For an average cost of 27 cents per metric ton of grain in fiscal year 1997, exporters received USDA export certificates from GIPSA on which they relied to facilitate the marketing of over $20 billion worth of cereals and oilseeds. Likewise, here at home, buyers and handlers requested over 1.9 million inspections that facilitated the trading of 124 million metric tons of cereals and oilseeds destined for domestic use.

While current services are effective and efficient, GIPSA recognizes that to remain relevant in today's marketplace, continuous service improvement is essential and ongoing.

In fiscal year 1997, GIPSA continued to work closely with the U.S. grain handling industry on Electronic Data Interchange (EDI), an industry-driven electronic commerce initiative that is designed to automate the exchange of financial transaction documents among businesses. GIPSA established the standardized electronic file format that will be used for the EDI system and by official inspection providers.

GIPSA also continues to assist major export elevators in their ongoing efforts to integrate automation into official weighing and grain handling operations. Five fully automated weighing systems have been approved; five systems are being installed or debugged; and one system is in the proposal preparation stage. GIPSA continues to respond to inquiries from other elevators regarding automation initiatives. In addition, GIPSA has established a team of experts to develop, in partnership with the grain industry, an automated grain inspection system that will improve the efficiency and productivity of U.S. grain handling facilities, thereby making them more competitive in today's global marketplace.

Also in fiscal year 1997, GIPSA began implementing an enhanced quality assurance and quality control program to ensure the quality and accuracy of official inspection results nationwide. The program balances national and localized monitoring, and emphasizes proactive actions to prevent problems from occurring. The new program will greatly improve GIPSA's efforts to provide our customers with the accurate and timely information they need to market America's grain.

GIPSA continued cooperative efforts with the National Institute of Standards and Technology and the National Conference on Weights and Measures to standardize commercial grain inspection equipment as part of the National Type Evaluation Program (NTEP). GIPSA serves as the sole NTEP laboratory for grain inspection equipment. In fiscal year 1997, another grain moisture meter model was certified as conforming to NTEP requirements, bringing to seven the number of NTEP-certified models. The calibration data collected by GIPSA during fiscal years 1995, 1996, and part of 1997 were used as the basis for numerous grain moisture meter calibration changes to improve the accuracy and consistency of commercial grain moisture measurements.

Our efforts to facilitate the marketing of U.S. grain are not limited to technological applications to service delivery. In fiscal year 1997, to further GIPSA's commitment to providing market-oriented inspection and weighing services, the Agency initiated a nationwide program to encourage and facilitate GIPSA field-level outreach to the U.S. agricultural community. Agency representatives conducted group and private meetings with field managers, producers, handlers, and processors throughout the United States to educate our customers about the official system, demonstrate the Department's commitment to U.S. agriculture, and explore better ways to serve the industry. This effort has resulted in GIPSA's undertaking creative and innovative initiatives to meet our customers' needs.

For example, a farmers' cooperative in Iowa recently approached GIPSA for an innovative inspection and weighing approach to help them take advantage of railroad incentives, avoid demurrage, and improve their overall efficiency. The cooperative needed to improve their ability to manage grain inventories and increase railcar loading efficiency; to get onsite grade results to maximize their blending capabilities and stay within contract limits; and a training process to improve the quality assurance/control skills of the cooperative's employees. To meet the cooperative needs, GIPSA had to take a new approach to providing official services. The solution was an innovative cooperative agreement among three official agencies to provide inspection service to the cooperative. Using three mobile inspection labs, official inbound truck and bin inspections are provided at ten rail loading sites. This arrangement has allowed the cooperative to handle greater volumes of grain more quickly and efficiently. Further, the sampling and grading seminars that are routinely conducted for cooperative employees by official inspectors has increased the use of uniform sampling and grading techniques, thereby providing the cooperative's managers with an accurate assessment of the quality of their grain inventory.

As an integral part of America's grain handling infrastructure—a superior infrastructure of storage facilities, rail lines, and waterways that makes American agriculture preeminently successful in the global marketplace—GIPSA will continue to provide all members of the U.S. grain handling system with the innovative, high-quality official inspection services they need to efficiently and effectively meet the challenges of a changing marketing environment.

Our commitment to reaching our customers does not end at our borders. Exporters, importers, and end users of U.S. grains and oilseeds, as well as other USDA agencies, USDA cooperator organizations, and other governments, frequently ask GIPSA personnel to travel overseas to represent USDA at grain marketing and grading seminars, meet with foreign governments and grain industry representatives to resolve grain quality and weight discrepancies, help other countries develop domestic grain and commodity standards and marketing infrastructures, assist importers with quality specifications, and train local inspectors in U.S. inspection methods and procedures. At home, GIPSA regularly holds seminars and meetings to educate our worldwide customers about the quality and value of U.S. grain exports. In fiscal year 1997, GIPSA representatives met in the United States with 81 teams from 38 countries to provide information, technical guidance, and educational seminars. These international outreach efforts help promote greater harmony between U.S. and international standards. This, in turn, facilitates the export of U.S. agricultural products by reducing the risk of new barriers in today's open and freer global marketplace.

GIPSA believes that America's producers are entitled to a market that treats them fairly and honestly. In fiscal year 1997, GIPSA's commitment to this tenet was exemplified as a long-term GIPSA investigation came to fruition in a legal action against ConAgra, Inc., one of the nation's largest food companies. In March 1997, ConAgra agreed to pay $8.3 million in penalties after pleading guilty to federal charges of adulteration, misgrading, and misweighing of grain by the company's grain division, Peavey Grain. The settlement culminated a 4-year investigation conducted by GIPSA, USDA's Office of the Inspector General, and the Farm Service Agency. Central to the case was the work of GIPSA investigators, who documented ConAgra's widespread practice of adding water to grain to increase its weight. GIPSA determined that the addition of water to grain could degrade American agriculture's reputation for quality and excellence, and defraud buyers of U.S. grain. The conclusion of the ConAgra case complimented GIPSA's 1995 enactment of a prohibition on adding water to grain, which remains an enduring legacy of GIPSA's commitment to ensuring the integrity of the American grain marketing system and to safeguarding the rights and well-being of America's producers.

The grain program will continue to work to ensure our relevance and value to American agriculture. We are reaffirming our commitment to facilitating the marketing of U.S. grain by responding to our customers' needs and providing the highest quality grain inspection and weighing services to all whom we serve—from farmer to domestic and international end users, and all those in between.

Our efforts in fiscal year 1998 will focus on networking the Federal, State, and private partners comprising the system, and working with our customers to identify how we can apply automation to reengineer our administrative and inspection processes to achieve greater efficiency and productivity. In fiscal year 1998, our commitment to improved efficiency and effectiveness will continue to serve American agriculture well, as U.S. agricultural exports are expected to total over $56 billion ("Outlook for U.S. Agricultural Exports," February 1998).

GIPSA accomplished a great deal in fiscal year 1997 and much is planned for fiscal year 1998. Our efforts to continuously improve our programs and services were

further guided by the Agency's Strategic Plan, developed under the provisions of the Government Performance and Results Act.

YEAR 2000

A great deal of planning and action also is underway to ensure that all GIPSA systems are Year 2000 (Y2K) compliant. GIPSA's Y2K efforts are of the highest priority and are focussed on addressing three basic areas of compliance: information technology, vulnerable systems, and telecommunications.

GIPSA recognizes that disruption of our automated systems—including database reporting systems—would be extremely disruptive to the U.S. agricultural markets we serve. For example, GIPSA maintains an Export Grain Information System (EGIS), a comprehensive database of inspection and weighing information for all export grain that receives official services. It contains data on the number of carriers, volume of grain, number of lots and volume of lots at various grade levels. The database represents 90 percent or more of the grain exported from the United States (the remaining portion is exported under official inspection waiver provisions and is not, therefore, included in the system). Overall, EGIS provides the critically important information on the amount of specific grains available for export from the United States at a given time.

This data on grain availability influences trading prices. Each week, EGIS reports are released to the public at precisely 11:00 AM Eastern Standard Time on Monday mornings. This time was established in cooperation with the Chicago Board of Trade to allow traders on the floor of the exchange to make bids prior to the close of the Market on Monday afternoons. Weekly updated EGIS data also is provided to USDA's Economic Research Service, Foreign Agricultural Service, and Agricultural Marketing Service, as well as to external customers such as Bluewater Shipping, Cargill, Columbia Grain, Continental, Koch Agriculture, and Sparks Commodities who rely on the data to support their critical grain trading functions.

GIPSA is committed to ensuring that all needed resources are available for this effort—our success is of utmost importance to agency operations and to ensuring that there is no service disruption to our customers in America's cereal, oilseed, livestock, poultry, and meat markets.

CIVIL RIGHTS

In addition to improving our services and programs in fiscal year 1997, GIPSA also accomplished a great deal in the area of civil rights. The Secretary of Agriculture's goal is that each employee and customer of the Department of Agriculture be treated fairly and equitably, and with dignity and respect. The Secretary appointed a Civil Rights Action Team (CRAT) to develop recommendations to address institutional and underlying problems and ways to implement actions to ensure accountability and follow up on civil rights issues. The team's report laid the groundwork for many initiatives undertaken to address civil rights in USDA.

In keeping with the CRAT report and in support of the Secretary's goal, GIPSA took a number of actions in fiscal year 1997. We established the agency's first Office of Civil Rights; adopted, by policy, the Secretary's policy of zero tolerance for reprisal; established a civil rights performance standard for managers and supervisors; implemented mandatory civil rights training for all employees; resolved many Title VII employment discrimination complaint cases at the lowest level; broadened Title VI reviews to ensure that GIPSA maintains its record of zero complaints of discrimination in service delivery; provided continuous support, resources, and funding for programs at 1890 land grant and other minority institutions; and established an outreach liaison to insure that all employees and customers are treated with dignity and respect.

These are only some of the steps taken by GIPSA to support civil rights improvement in USDA. Like the Secretary, GIPSA has and will continue to make Civil Rights a part of our everyday work and an abiding priority.

FISCAL YEAR 1999 BUDGET REQUEST

To fund these important initiatives and to enable GIPSA to remain a valuable part of American agriculture, GIPSA's budget request for fiscal year 1999 is $11.8 million for appropriations and a limitation of $42.6 million in our revolving fund. GIPSA also proposes to collect $21.5 million in new user and license fees in fiscal year 1999.

For fiscal year 1999, the President's budget proposes an appropriation request for grain inspection of $4.6 million for compliance activities. The fiscal year 1999 budget also assumes legislation to authorize the collection of $3.6 million in new user fees

to cover the costs of grain standardization activities and $2.8 million for methods development activities.

The budget also assumes legislation to authorize the collection of $15.1 million in new user fees to cover the cost of the P&S Program. There are proposed increases of $225,000 to allow GIPSA to establish electronic filing procedures for annual reports, which is consistent with the requirements of the Paperwork Reduction Act of 1995; $795,000 for activities in the packer competition and industry structure areas; and $750,000 for poultry compliance activities; and $3,000,000 for the one-time costs of reorganizing P&S' headquarters and field structures.

GIPSA's fiscal year 1999 budget request includes an increase of $4,200,000 in one-time start-up costs to convert to new user fees and license fee status, and to maintain an adequate reserve. It is anticipated that $3,000,000 would be used for P&S activities and $1,200,000 would be used for standardization and methods development activities. Therefore, to summarize, the fiscal year 1999 request of $11.8 million consists of ongoing expenses of $4.6 million for grain compliance activities, a one-time increase of $3.0 million for relocation expenses, and a one-time request of $4.2 million for up-front costs for the transition to user-fee financing.

The increase of $225,000 will allow GIPSA's P&S Programs to implement the requirements of the Paperwork Reduction Act that call for developing simpler reporting requirements for businesses and to provide for electronic submission of reports. Sustained low prices for beef and pork at the farm level have resulted in increased concern about concentration in the meat packing industry. Packer use of captive supplies, formula pricing, and other procurement initiatives require P&S to collect extensive data from packers for extended periods of time. Providing for the electronic submission of this data would reduce the cost to packers, improve the timeliness and increase the volume of data collection, and create a better understanding of the data on a real-time basis.

Increasing concentration, structural change, market performance, and the use of complex formula and value-based marketing systems by packers continue to raise questions of regulatory and policy significance. Additional resources will allow GIPSA to expand our capability to monitor and investigate the competitive implications of structural changes and behavioral practices in the meat packing industry, and will increase our ability to support legal actions that require complex economic and statistical analyses. Continuous, systematic collection and analysis of data along with aggressive investigative activities are required to address these issues effectively. Additional resources are critical to expanding the Agency's capability to monitor and investigate the competitive implications of structural changes and behavioral practices in the meat packing industry, and will enhance our capability to support legal actions that require complex economic and statistical analyses.

To promote competition and improve market performance and confidence in the livestock and poultry sectors, the Secretary's Advisory Committee on Agricultural Concentration recommended increased monitoring and enforcement of antitrust and regulatory policy and, specifically, increased antitrust enforcement under current regulations of the P&S Act. Since anticompetitive practices are complex and often encompass broad geographic areas, investigations involving building cases for unacceptable behavior has become more difficult and resource-intensive.

The requested increase of $795,000 for packer competition and industry structure will allow GIPSA to conduct additional detailed investigations and analyses in selected geographic markets on a timely basis. It also will help us meet our responsibility of fostering fair and open competition, and guarding against deceptive and fraudulent practices that affect the movement and price of meat animals and meat food products.

As the industry continues to rapidly move to value-based methods of pricing, the complexity and sophistication of the packing industry's procurement and pricing methods will continue to increase. With this change also comes greater opportunity for packers to engage in unfair, unjustly discriminatory, or deceptive practices to the detriment of livestock producers. The Agency must be able to commit the necessary resources to conduct the type of complex investigations that are required to ensure the integrity of the accounting and payment to producers.

The $750,000 increase for poultry compliance activities will allow GIPSA to better ensure that contract poultry growers are treated fairly when dealing with large, integrated poultry companies, and protect them from unfair and discriminatory practices, as recommended by the Advisory Committee on Agricultural Concentration. Specifically, the Committee recommended that the Secretary be provided the same administrative enforcement authority for poultry as currently exists for red meat to protect contract poultry growers from unfair and discriminatory practices. Additional funding for poultry compliance will allow GIPSA to operate on other than a complaint-driven basis and permit increased compliance investigations into the

poultry industry. More in-depth investigations will increase the Agency's ability to identify or address practices in the industry that may be unfair, unjustly discriminatory, or deceptive before practices escalate.

A one-time appropriation of $3,000,000 will allow GIPSA to take the steps needed to strengthen its overall ability to investigate anticompetitive practices, and to provide greater flexibility and efficiency in enforcing all of the trade practice and payment protection provisions of the Packers and Stockyards Act. Without restructuring the field operations to provide for fewer offices with larger staffs, it will not be possible to incorporate the level of expertise needed to address the increasingly complex competitive issues facing the livestock, meat, and poultry industries.

A request is included to provide for a statutory dealer trust to require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock. If the request is enacted, the cost of administering this provision would be recovered through license fees.

Finally, concerning our proposal for new user fees, we realize that in the past, the Congress has not approved these requests. However, please consider this in terms of a service being provided that primarily benefits an industry or individual. Should taxpayers as a whole pay or should those who benefit? As with the current fees for inspection and weighing services, we believe that those who primarily benefit should pay.

CONCLUSION

Mr. Chairman, this concludes my statement. I appreciate the opportunity to testify on behalf of the Grain Inspection, Packers and Stockyards Administration (GIPSA). I will be happy to answer any questions the Committee may have.

BIOGRAPHICAL SKETCH

ENRIQUE E. FIGUEROA

Dr. Enrique E. Figueroa comes to USDA from Cornell University where he was an associate professor in the Department of Agricultural, Resource and Managerial Economics since November 1992. His initial appointment began in November 1986 as an assistant professor. Throughout his stay at Cornell, Dr. Figueroa's work focused on horticultural product marketing issues. Prior to that he was a post-graduate research agricultural economist and a research assistant in the Department of Agricultural Economics at the University of California at Davis.

His experience also includes work as a staff assistant to the House Committee on Agriculture for the U.S. Congress in 1982 and 1984. He spent four years with the California Conservation Corps from 1976 to 1980. He has an M.S. and Ph.D. in agricultural economics from the University of California at Davis, along with a M.S. in horticulture. His B.S. degree in agricultural education is from California State University in Fresno.

Dr. Figueroa has extensive experience in both research, extension, and teaching. He has worked on a number of projects in many parts of the world and has trained a number of graduate students.

INSPECTION CHANGES DUE TO HACCP

Senator COCHRAN. With respect to the Food Safety and Inspection Service, I know that one of the centerpiece programs now is the HACCP Program, this Hazard Analysis and Critical Control Point Program. How about that? [Laughter.]

It was designed to be based on science, to be more efficient to find things that the old way of inspecting carcass by carcass with the naked eye could not possibly detect, and to provide information to those who were processing the carcasses so that problems could be corrected and the food products be safer.

My question is, What changes, if any, can you tell us have been made in these plants with the introduction of this new procedure? What has been discarded that used to be done? What is being done under the new program?

Dr. WOTEKI. Well, there are very substantial changes that have resulted as HACCP has been implemented over this last year plus. Our implementation began last year with sanitation standard operating procedures, as well as the beginning of testing for generic E. coli. Under that first step in implementation, our plants have essentially taken the responsibilities for having and following sanitation plans themselves. Our inspectors' role changed too. Instead of mandating the sanitation, they are overseeing the companies and the implementation of their standard operating procedures for sanitation.

Then in the 300 of the largest plants that began operations in January of this year under the HACCP rule, we have also seen companies taking additional responsibilities for the ultimate safety of the product that they are producing and meeting the performance standards that are required under the rule for Salmonella.

In addition, our inspectors' role has changed very substantially. The number of tasks have been reduced and systematized, and the role that they play within the plant in overseeing the companies' implementation of their HACCP plans has been another very substantial change.

It has been a cultural change as well as a change to meet the requirements of performance standards in this science-based inspection approach.

Senator COCHRAN. If you could for the record—I know this may be too difficult to do in an oral response to my question—list the tasks that were performed by the inspectors under the old system that are no longer being performed. That would be nice to see.

Dr. WOTEKI. Yes; we can very easily submit that for the record.

[The information follows:]

For the record, we are providing the Inspection System Guide contained in FSIS Directive 5400.1, which contains tasks that inspection program personnel are no longer required to perform in establishments that are subject to the HACCP system regulations. In addition, we are providing Inspection System Procedures contained in FSIS Directive 5400.5 that replace the Inspection System Guide.

FSIS DIRECTIVE 5400.5

INSPECTION SYSTEM ACTIVITIES

I. Purpose

FSIS is modernizing its approach to inspection to rely less on after-the-fact detection of problems and more on verifying the effectiveness of establishment processes and process controls. The Agency established the basic regulatory framework for this approach when it issued the Pathogen Reduction-Hazard Analysis and Critical Control Point (HACCP) Systems final rule (July 1996), which amended the regulations to require official establishments to take preventive and corrective measures at each stage of the food production process where food safety hazards occur.

A modernized approach to inspection requires changes in the performance-based inspection system (PBIS) and the activities FSIS has conducted under that system—in particular, the tasks in the Inspection System Guide (ISG). Therefore, for establishments that are subject to the HACCP system regulations, FSIS is replacing the ISG and portions of the PBIS directives with this directive and its attachments. Inspection program personnel are to follow the instructions in this directive in every establishment that is subject to the HACCP system regulations.

II. [Reserved]

III. Reason for Issuance

FSIS is issuing this directive to provide procedures, forms, and instructions that are appropriate for use in a modernized inspection system.

In an official establishment, inspection program personnel are to follow the instructions in this directive (along with its attachments) if the establishment is subject to the HACCP system regulations.

Senator COCHRAN. One of the suspicions out there, I will have to tell you, is that nothing has changed. We have got more and new things to be done under HACCP, but the old ways have not been abandoned and the activities of the inspectors are pretty much the same as they have been, except with new requirements on the part of the plan operators. That is a suspicion.

BRUCELLOSIS

On the other side of the table, let me get a status report on the brucellosis program. From what I hear, it has been a tremendous success and you have every right to be proud of the accomplishments there. Are we at a point where brucellosis is no longer a problem?

Mr. DUNN. At this time, Mr. Chairman, we have nine States yet to achieve brucellosis-free status. We intend to complete that operation by calendar year 1999.

Senator COCHRAN. Well, I congratulate you on a very successful program, and the States have been actively involved in helping make that a success too. I know in my State of Mississippi, former Commissioner of Agriculture Jim Buck Ross used to send me a letter up here every year telling me that status and where we were and what was needed in order to continue to make progress.

Mr. DUNN. Mr. Chairman, it has been a true partnership between the States, the Federal Government, but also the producers as well.

SANITARY/PHYTOSANITARY STANDARDS

Senator COCHRAN. There are a lot of inspection points now because of importing more fruits and vegetables and other food stuffs. Particularly under NAFTA, the freedom to import and export has increased the requirements for inspections and sites of inspections have increased, as I understand it.

With this added workload, how are you going to do all the things you have to do in this global economy and still assure the U.S. consumers that things that are being imported are safe, wholesome, and not contaminated?

Mr. DUNN. Mr. Chairman, we have been working very diligently with our trading partners to ensure that we can establish sanitary and phytosanitary procedures that are based on science and fact. APHIS, through its international services, has been working in country with these individual countries to ensure that we have equivalencies and verification of those equivalency programs for protection. I will ask the Administrator, Mr. Medley, to elaborate.

Mr. MEDLEY. Mr. Chairman, our 1999 budget requests increases in two areas. One is in our animal health monitoring and surveillance program. The other is in the pest detection program. These program increases are directly related to your question about the need to enhance our domestic infrastructure and to enhance our surveillance systems to certify the health status of American agricultural products.

We also conduct inspections at the first point of entry. Under our agricultural quarantine inspection program, we are increasing the number of detector dogs used to identify prohibited agricultural products. We are using more sophisticated x-ray technology in the identification process as well. We are also shifting to a more risk-based inspection approach. With the enhanced value of agricultural exports to our economy, these safeguard measures provide protection for our domestic agricultural producers from exotic pests and diseases.

SINGLE FOOD SAFETY AGENCY

Senator COCHRAN. The National Academy of Sciences, as I understand it, is coming out with a proposal that there be one agency in the Federal Government that would be the food safety agency. Now, the Food and Drug Administration has responsibilities under current law, and the Department of Agriculture has separate responsibilities under current law.

Dr. Woteki, what is your reaction to this proposal and how is the administration planning to respond to that proposal?

Dr. WOTEKI. Well, we are very interested in what the report is going to say. I think the committee is going to be holding its first meeting later this month and begin considering this question of how should the Federal Government be organized to improve the safety of the food that is made available to our public.

You may recall that the administration did consider this question early on during the National Performance Review, during the first year of that activity. They essentially came to the conclusion that we were going to better coordinate our activities. The President's food safety initiative and the budget request that we have submitted is a good example of how we have been working together to make the various parts of the Department of Health and Human Services, the EPA, as well as the various agencies within USDA that have a role to play in improving food safety, work better together.

IRRADIATION

Senator COCHRAN. One of the new technologies that some are arguing ought to be used more in the food industries to help protect the consuming public is irradiation as a way to kill bacteria and other contaminants in food.

What is the reaction of your office to this suggestion and what can be done by the administration to encourage more irradiation of foodstuffs, if this is a correct approach?

Dr. WOTEKI. Well, as you are probably well aware, the Food and Drug Administration considered the question of whether irradiation should be approved for use in red meat and decided the safety question with respect to red meat in December.

Senator COCHRAN. They decided that it was safe.

Dr. WOTEKI. That it was safe, exactly.

Our role now within the Food Safety and Inspection Service is to develop a proposed rule that we will put out for public comment later this summer about how that technology should be used and applied within meat slaughter and processing establishments and also how that product then should be labeled.

REDEPLOYMENT OF INSPECTORS

Senator COCHRAN. Let me ask you this. With the advent of the new technologies for analyzing food as it is being processed for sale in our country, is it necessary that we have the inspectors doing a carcass-by-carcass inspection any longer? Is that a waste of money?

Dr. WOTEKI. Well, we are definitely giving a lot of consideration to how, within a HACCP environment, our inspection resources should be used. We are working with industry to develop some pilot projects to consider how those inspection resources, the inspectors' time, can be better used to focus on food safety concerns and to free up their time so that it can be used and redeployed into other areas, again with the primary emphasis on improving the safety of the product.

Senator COCHRAN. As I mentioned when we started, we apologize again for the short period of time we have for oral questions. I have a number of questions that I intend to submit to you and I hope you will be able to respond to those in a timely fashion on a wide range of subjects. I do not want to leave anybody out. I hope you do not feel bad that I may not have asked you something that you wanted me to ask during this abbreviated hearing.

My good friend, the distinguished Senator from Arkansas, is here. As I pointed out, he was over in the full committee markup on the supplemental appropriation. I am going to have to leave for another commitment that I made, and I am going to do something to show you how we get along up here occasionally. I am going to turn the gavel over to a Democrat and let him ask whatever questions he wants to ask and then adjourn the hearing.

I do want to say that we will continue our hearings on the budget request for the Department of Agriculture on March 24 in this room. We will have witnesses from the Department's Farm and Foreign Agriculture Service programs.

I am going to yield the floor to my good friend and thank you again for your cooperation with our committee. Thanks very much. Senator Bumpers.

HACCP IMPLEMENTATION

Senator BUMPERS [presiding]. Thank you, Mr. Chairman. You could not have picked a worse time to turn the gavel over to me. I have been so busy with the supplemental appropriation, I really have not had a chance to prepare for this hearing, as I would like.

But there is one thing that is still a little bit of a thorn in my throat.

I wanted to ask you, Ms. Woteki, about the HACCP Program, first of all. How do you rate the effectiveness and success of that program?

Dr. WOTEKI. We have been at the full implementation of HACCP in about 300 plants just since January of this year. Our overall assessment of that first stage of implementation is good. It has gone relatively well. There have been some problems that have arisen of the type that we expected would occur with changes as large in magnitude as this is, both for the plants as well as for our inspectors.

When there have been problems that have arisen over this last month and a half, our analysis of the situation has been that plants have reacted very quickly and very positively. Our inspectors have at times required some additional clarification of their roles and responsibilities, which we have been swift in providing to them. So, I think for a change as big as this one has been, our assessment of implementation is it is going pretty well.

USER FEE PROPOSAL

Senator BUMPERS. How quickly could you start collecting these user fees that you are requesting?

Dr. WOTEKI. Well, we have included in our request approximately $100 million that will enable us to start up that program in the first quarter.

Senator BUMPERS. In 1998?

Dr. WOTEKI. In fiscal year 1999.

Senator BUMPERS. In 1999, $100 million?

Dr. WOTEKI. Correct.

Senator BUMPERS. And how much, say, in the year 2000?

Dr. WOTEKI. At that point the program would be in full implementation.

Senator BUMPERS. And would produce how much revenue?

Dr. WOTEKI. We anticipate that it would produce the revenue that would fully cover the cost of Federal inspection activities.

Senator BUMPERS. And how much would that be if it were in, say, 1998 or 1999?

Dr. WOTEKI. It will be approximately $570 million.

Senator BUMPERS. Do you think the meat and poultry processors would pass that cost on to their consumers?

Dr. WOTEKI. The economists that we have consulted in the development of this proposal have told us, yes, they believe the costs will be passed on to the consumers and those costs will amount to less than a penny per pound of product.

SEAFOOD INSPECTION

Senator BUMPERS. You also have jurisdiction over fish inspection, do you not?

Dr. WOTEKI. No.

Senator BUMPERS. Who does?

Dr. WOTEKI. The Food and Drug Administration and the Commerce Department.

Senator BUMPERS. Well, I am not going to burden you with the question I was going to ask, but do you know what percentage of the domestic fish is inspected? Does anybody on this panel have any idea?

Dr. WOTEKI. Mr. Billy previously worked on this issue.

Senator BUMPERS. Mr. Billy.

Mr. BILLY. I formerly was the Director of the Office of Seafood for the Food and Drug Administration. I may be a little out of date in terms of my statistics.

The basic regulation of seafood safety falls to the Food and Drug Administration, and they operate an inspection system that is of a surveillance type. So, they spot check plants and products at a fre-

quency appropriate to the hazards that are associated with the various types of seafood products.

In addition to the mandatory system that they have, the Commerce Department operates a voluntary program similar to the programs operated by the Agricultural Marketing Service for other commodities. As I recall, about 20 percent of the seafood produced in the United States is under that voluntary program. Under that system, there are inspectors present daily and it operates more closely aligned to the way you would think meat and poultry inspection is done, although tailored to seafood.

FRUIT AND VEGETABLE INSPECTION

Senator BUMPERS. The President is now proposing to inspect all fruits and vegetables coming into the country from abroad. Is that correct?

Mr. BILLY. As I understand it, under the food safety initiative, the proposal is to strengthen the inspection activity of both domestic and imported fresh fruits and vegetables.

Senator BUMPERS. Is that also Commerce's responsibility?

Mr. BILLY. It is primarily a Food and Drug Administration responsibility, but Assistant Secretary Dunn may want to comment in terms of the role that the Agricultural Marketing Service will play.

Senator BUMPERS. I would be glad to hear it, Secretary Dunn.

Mr. DUNN. Mr. Chairman, what we have requested in our budget is $6.3 million to begin microbiological testing for fruits and vegetables as part of the President's food safety initiative. We are going to be able to minimize that cost by putting it in with our pesticide data program that we currently have where we work through 10 different States to do testing for pesticide data residue. That will allow us to begin to have some inkling of how much microbiological problems there are in fruits and vegetables that come in, and we will have that information that we will turn over then to the Food and Drug Administration for action.

Senator BUMPERS. I want you to know I am hot for that program, and I was amazed, when the President offered that, that that was not already in effect. Most of the people in the country, when they buy—and in the winter months, you know that virtually everything you are eating is imported, and I think most people assume that it has been inspected and that there are no pesticide or herbicide residues on any of fruits and vegetables that have been imported. I would like to see that go forward, of course, and implemented at the earliest possible time.

Ms. Woteki, how many poultry and meat plants were closed down totally in 1997 under the HACCP Program? Do you know the answer to that?

PLANT CLOSURES UNDER HACCP

Dr. WOTEKI. The numbers that I have with me are for 1997 and year to date so far in 1998. It includes January, February, and March of this year.

Senator BUMPERS. Say that again. I am sorry.

Dr. WOTEKI. The numbers that I have with me that I can report to you today include calendar year 1997 as well as 3 months of calendar year 1998.

Senator BUMPERS. Fine.

Dr. WOTEKI. We have withheld inspection in 28 plants for failure to implement their sanitation standard operating procedures.

Senator BUMPERS. Let me interrupt you for just a moment. How many plants are we talking about total? How many do you inspect, meat and poultry?

Dr. WOTEKI. Over 6,000.

Senator BUMPERS. How many of those are poultry?

Dr. WOTEKI. FSIS inspects 428 plants that produce only poultry products, and 3,464 plants that produce both meat and poultry products.

Senator BUMPERS. Go ahead.

Dr. WOTEKI. There have been 50 actions to withhold inspection which include 28 plants from whom we have withheld inspection because of repetitive SSOP deficiencies, in 11 plants because of basic E. coli failures, in 10 plants because of HACCP system failures—and in this case, there are about 300 plants since January of this year that have come under HACCP-based inspection. Inspection has been withheld in one non-HACCP plant for zero tolerance failures.

IMPORT INSPECTION

Senator BUMPERS. You also inspect imported meat and poultry, do you not?

Dr. WOTEKI. Correct.

Senator BUMPERS. Do we import any poultry into this country?

Dr. WOTEKI. A small amount.

Senator BUMPERS. Pardon?

Dr. WOTEKI. A small amount.

Senator BUMPERS. What kind of inspection do you perform on imported poultry and meats? Mostly in meat I assume. A lot of it comes from South America, does it not? Argentina?

Dr. WOTEKI. Yes; we do a twofold inspection. One is that we evaluate countries that are exporting to us to determine whether they have a system that is equivalent to our own inspection system, and then as product enters the country, we do a random inspection of all of that product that comes in.

Senator BUMPERS. Are you telling me that we would not let a carcass of beef into this country that came from Argentina that was not subjected to as rigid an inspection in Argentina as it would be as if it were produced here?

Dr. WOTEKI. That is correct, sir.

Senator BUMPERS. Do you have any way of verifying that, validating that?

Dr. WOTEKI. Yes; we do.

Senator BUMPERS. How do you do it?

Dr. WOTEKI. Well, I would like Mr. Billy to give you the details on how we go about doing that.

Mr. BILLY. Only 37 countries are authorized to export to us out of all the countries that presumably could.

As Dr. Woteki described, we do a thorough evaluation of a country's inspection system to ensure that it is equivalent to ours before we will even approve them to export. That includes not only reviewing all their laws and regulations, but going on site and making sure that what they have on paper actually is being done in the plants and that their pesticide monitoring program, et cetera are being followed.

Then once we allow shipping to start, as Dr. Woteki described, we randomly pick shipments and inspect them based on past performance and the risks associated with the product in question. This is done by our inspectors at what are called inspection houses, and we keep records of the performance of plants and countries.

Then also as an additional step, we send auditors over to these countries. Our policy is to do that once a year. We review their program and we audit some percentage of the plants to make sure that they are continuing to follow the same procedures that we had reviewed previously. If they do not, we will delist the plants, have the country delist plants, or we will delist the country. We have done that on many occasions.

It is a very strict system.

Senator BUMPERS. Mr. Billy, how about canned meats?

Mr. BILLY. Same thing, same procedure.

Senator BUMPERS. You inspect the plants where the meat is canned?

Mr. BILLY. Yes, sir. Yes; we do.

Senator BUMPERS. Do you have authority on that or is that an FDA——

Mr. BILLY. No; we have specific authority in the Meat Act and the Poultry Products Act.

HUDSON FOODS RECALL

Senator BUMPERS. Dr. Woteki, let me ask you this. Hudson Foods bought beef from 15 different beef plants where the cattle were processed and the beef cut and maybe even ground. I am not sure. I think it was ground in the Hudson plant. But, for example, they took the carcass, cut all the meat off of it, transported it, 15 different packing plants, every one of them USDA inspected, FSIS inspected.

Now, when the so-called outbreak in the Hudson plant in Iowa occurred—or in Nebraska, rather. Was it Nebraska? It was, was it not?

Dr. WOTEKI. The plant was located in Nebraska. The outbreak was in Colorado.

Senator BUMPERS. Yes.

But in any event, the last I heard FSIS had reduced the possibilities of where that beef came from. It did not originate in the Hudson plant. It originated in another plant that was FSIS inspected and transported there.

Now, Hudson bore the brunt of the entire thing, and he was innocent as a newly ordained nun.

So, my question to you is, have you ever identified which of the two plants that it had been narrowed to shipped the beef to the Hudson plant?

And if I have misstated any thing of fact, do not hesitate to question it.

Dr. WOTEKI. No, sir; we have not identified the source of the original contamination.

REWORKED PRODUCT

There is one clarification, though, that I think is worthwhile bringing about. I think Hudson did have a responsibility for maintaining practices that would prevent the further contamination of product they were processing within their plant, and they did have a practice they called return or rework where product—broken patties or other product—was put into the cooler overnight and brought back the next day and put into production. So, they had the possibility for recontaminating product every day they were producing.

Senator BUMPERS. Were you able to determine that that practice in that Hudson plant caused this outbreak?

Dr. WOTEKI. We were not able to determine that that was the cause, but it does bring up the possibility of recontamination from——

Senator BUMPERS. I understand the practice might not be the ultimate practice even though this was a brand new facility, state-of-the-art, and I assume that FDA had known for a long time—the FSIS had known for a long time that this was a practice in that plant.

Dr. WOTEKI. I know that this type of practice is common within the meat industry. I believe that based on the Hudson experience, many companies have reconsidered the use of this practice and discontinued it.

Senator BUMPERS. Have you issued an order to require no plant to use this practice?

Dr. WOTEKI. No; we have not done that.

Senator BUMPERS. Why have you not?

Dr. WOTEKI. We have held a public meeting on this issue and we are in the process of developing some guidance on this issue.

Senator BUMPERS. If this was a practice that you think could possibly have been a contributor to this problem, why have you not made every processing plant discontinue the practice?

Dr. WOTEKI. I would like Mr. Billy to comment on the actions that we have undertaken to address this practice.

GUIDELINES VERSUS COMMAND AND CONTROL

Mr. BILLY. We have held two meetings with the industry, all of the industry that has concerns about this particular area, the problem being the contamination of hamburger material with E. coli O15:H7. We have made it clear that these types of practices affect the risk of the organism, if it is, in fact, present in the raw material or if it somehow is introduced into the plant. This can contaminate more than the day's production.

We have encouraged changes in the procedures that plants follow. We have drafted and will be sharing an announcement, just about to go out, guidelines that explain in very straightforward language how these different types of practices affect the exposure of the plants in terms of this organism being present in their product.

Mr. Chairman, we are trying to move away from the traditional command and control approach. HACCP is about seeing plants take responsibility for how they produce their product, to use procedures that minimize the risk to the consumer. That is why we are working on guidelines. That is why we have had meetings, but we want the plants to take responsibility and have appropriate control measures in their HACCP programs. Many plants have already done so and we are going to encourage all plants that produce this type of product to do that.

I am very concerned about falling back into the traditional approach of telling plants specifically you can do this, you cannot do that, at 11 o'clock you must make this step; the practices of the past.

I believe the industry is committed. I believe they want to produce safe products. They have certainly shown to us with their HACCP programs that we have seen so far that they are taking good, positive steps to do that, and we are going to encourage more. I think that is the prudent strategy.

We have included the public in this process. They are aware of what we are doing and how we are approaching it. I think there is a reasonable degree of comfort that this is a sound approach that will net us a safer product for the future.

IMPACT OF RECALL

Senator BUMPERS. I raise this issue because I am familiar with all of these people in my State. I watched Hudson Foods from the time I was elected Governor, maybe doing a few million dollars a year, go to $1.7 billion. I have always thought that the people who have the greatest incentive to put out a pure product are the companies themselves.

In this particular case, I did not know quite what to think when this thing first burst on the scene, but as time went by and I found out that that contamination almost certainly originated in another USDA-inspected plant, not in a Hudson plant, and yet every press conference by the Department, every utterance by the Department placed the entire burden on Hudson Foods and made it so they had no choice but to either fold or to sell. And they sold for hundreds of millions of dollars less than that plant would have brought 1 day before this happened.

Until this very day, until this moment, you cannot—I am not being all that critical about the process. I am concerned about the public relations that occurred during that period of time. You cannot tell me with any degree of certainty that they were culpable in any way. You are telling me that the procedure they used was one that was used in virtually all these plants, and that while it might have lent itself to the possibility of Salmonella or E. coli breaking out, you cannot state at all that that is what caused this problem.

Yet, here is a family who worked themselves to death over the past 25 years to build that business and all of a sudden, they are out of business at a cost of several hundred million dollars to them.

REWORKED PRODUCT

Mr. BILLY. Mr. Chairman, we do have information that indicates product that was produced in late April or early May and associ-

ated with some of the illnesses in Colorado was subsequently put into use roughly 4 weeks later, and we can provide the specific information for the record. That introduction of the return material into that later production, in fact, may well have introduced the organism into that later day's production and caused the bulk of the outbreaks of illness in Colorado. So, to the extent we were able to glean information from the company records, we do have information to indicate that the plant took part in practices that appeared to have caused the organism to be spread from one day's production to another.

I would be happy to provide you with that information for the record.

Senator BUMPERS. Well, the information now is of not much benefit. I mean, the damage has already been done.

I have chastised myself in a way because I did not speak up in the beginning, but the reason I did not speak up is because I did not know. I thought maybe the contamination was going to be widespread. I thought that maybe Hudson was culpable in the whole thing. I had no way of knowing, and I was listening to these press conferences constantly about going from a few pounds of beef until we wound up with 25 million pounds and then the plant then shut down. It is a powerful thing.

I consider Secretary Glickman one of the best friends I have ever had. I have known him for years, long before he was Secretary, and I think he is a man of immense integrity, immense talent, and I think he does, by and large, an excellent job in the Department of Agriculture. So, I am reluctant to—I am not chastising him because none of us really knew in the beginning, but I am just saying the end result was catastrophic so far as I am concerned for innocent people.

This morning on the way to work—my chief of staff who lives in the neighborhood and I drive to work together. I was talking about a large gathering last night that I had spoken to, and I told her, I said, you know, when I started talking about how lucky we are to live in a nation where, when you eat food, you know it is pure, when you drink water, you know it is pure, and when you take a dose of medicine, you know it has been tested and tested and tested, when you are in an airplane, you feel relatively safe because you know you are on a radar that is handing you off from one to the next one, and on and on and on it goes.

But I saw two or three people in the audience. I could tell they did not like to hear that, and we were talking about that. I have been in this business a long time. I can watch an audience and I can tell who appreciates what I am saying and who does not. I could tell there was some anti-Government sentiment in that audience.

Sometimes anti-Government sentiment is irresponsible, reckless, and irrational, but I told her this morning, I said, but you have ever been on the receiving end of an autocratic bureaucrat enforcing a regulation that you are quite sure he is misinterpreting or using to abuse you, you do not ever get over that.

And that is the reason for the antipathy toward the Internal Revenue Service. They brought most of this on themselves. Now, I am not for abolishing the Internal Revenue Code or the Internal

Revenue Service. All I am saying is I understand the hostility people feel about it, and I certainly understand the Hudson family's attitude about the Federal Government, and I might say it is toward OSHA as much as it is FSIS.

But our job here is to try to make Government responsive, try to make it function. You will not ever make people like Government. You are not ever going to have a wholesale respect for Government. All I am saying is our job is to constantly day by day do the best we can and improve it as much as we possibly can.

Well, that is enough of that lecture.

I have just one other question, maybe a couple.

BOLL WEEVIL

Mr. Medley, I wanted to ask you about the boll weevil program because my State is going to get left on the starting blocks. We are just getting started on it and now you are cutting the budget by $12 million. Does that bring the boll weevil eradication program to a halt?

Mr. MEDLEY. Senator, the cut of $12 million in the boll weevil program budget request is the Department proposing to move out of those areas where we have been successful in eradication and also provide a way by which the producers can get the startup costs, which sometimes can be very high, through an FSA loan program.

It is an attempt to refocus our resources. Because of the success of the program and because of the high return for producers that have invested in the eradication program, we can move from providing direct support to providing technical assistance.

Senator BUMPERS. Mr. Medley, let me interrupt you just a moment. You are phasing out the grant program in favor of a loan program. Is that correct?

Mr. MEDLEY. Well, the appropriated funds in favor of a loan program; yes, sir.

Senator BUMPERS. Well, so my question is this. How about States like mine for example? This program has been going now, what, 5 or 6 years, a little longer?

Mr. MEDLEY. Yes; a very successful eradication program.

Senator BUMPERS. But everybody else had enjoyed the fruits of the grant program and now that you get down to Arkansas, you are converting it to a loan program, if I understand it. And I do not consider that fair for my cotton farmers.

Mr. MEDLEY. Senator, in the beginning, the eradication program was funded through a 70–30 cost share with 30 percent of the funding coming from the Government through appropriations. Over the last several years, there are more new eradication programs starting with growers paying more of the eradication costs because of the economic benefits. For instance, producers contribute over 85 percent for new eradication programs in Texas. As we demonstrate that the program can be successful, we have requested reduced appropriations for the eradication program. It is different from when the program first started.

Senator BUMPERS. I am enjoying this so much but we have got a vote on here. So, I will submit a few questions.

Jim, I am sorry I did not have anything for you this morning. [Laughter.]

Mr. BAKER. It does not bother me a bit, sir. [Laughter.]

Senator BUMPERS. I thought you were rather enjoying it.

Mr. BAKER. I was.

SUBMITTED QUESTIONS

Senator BUMPERS. We have a vote on, and so I am going to have to do that. I will submit a few questions in writing and ask that you at your earliest convenience answer those questions.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

FOOD SAFETY AND INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Question. The President's fiscal year 1999 budget proposes new language under the Food Safety Inspection Service's Salaries and Expenses account which would waive the requirement that "Federal funds for any year shall not exceed 50 per centum of the estimated total cost of the cooperative program", as required by the Federal Meat Inspection Act. What is the rationale for increasing federal support to the States for this program, especially when the Administration is requesting private funds to pay all costs for inspection of the private companies?

Answer. This waiver is needed to assist the States and ensure timely implementation of all HACCP requirements in the State inspection programs. The States will need assistance in developing infrastructure support for HACCP-based inspection in the areas of automation, laboratory pathogen testing, and inspection workforce training. This assistance will provide State programs with the same capability as FSIS in these critical areas so that State requirements will be "equal to" those at the Federal level, as required by the statutes.

The budget request will extend the current FAIM project initiative to the States, which would eliminate the need for each State to design, develop and implement automated systems that will support communication with FSIS automated systems. FSIS has already tested and proven the value of this infrastructure and the cost to FSIS would be less than paying 50 percent of the full cost for twenty-five individual State automation programs. This proposal will assist in moving toward a seamless food safety program through support of a uniform nationwide inspection system.

Question. How does the Administration propose to pay for this increase?

Answer. The Administration proposes a net appropriation of nearly $150 million that includes $7.8 million for this initiative.

Question. The President's budget proposes legislation to require user fees to recover the full costs of meat, poultry, and egg products inspection. How many inspectors are supported by the fiscal year 1998 budget?

Answer. The fiscal year 1998 budget supports a total of 7,628 permanent full-time inspectors and the full-time equivalent of 570 other than permanent full-time inspectors.

Question. Does the fiscal year 1999 budget propose an increase or decrease in the amount of funding for inspectors?

Answer. The fiscal year 1999 budget proposes increases totaling $19.8 million for mandatory pay, retirement, and non-salary costs, as well as assumption of the Florida State inspection program to support a constant level of inspection staffing. FSIS will continue the process of transforming the inspection process within the same overall staffing levels in 1999 that we have in 1998.

Question. Would all inspectors be supported by the user fee collections proposed?

Answer. Yes, the proposal would cover the full cost of inspection, including the salaries and benefits of all inspection personnel.

Question. How much will the consumer have to pay under the Administration user fee proposal?

Answer. We estimate the overall impact on costs as a result of these fees will be less than one cent per pound of meat, poultry, and egg products production.

Question. Why is a $100 million appropriation required to implement the user fees?

Answer. Under our user fee proposal, establishments will be billed on a monthly basis, with fees due by the end of the month following the billing period. Because no fees will be received in the first month of the fiscal year, start-up funding is requested to cover FSIS budget obligations that must be paid in the first month. In addition, a reserve is needed to maintain a stable Federal inspection program as the flow of user fee revenue may not match estimated costs. Of the total $100 million request, estimated costs include $48 million for fiscal year start-up, and $52 million for program reserves.

Question. What start-up costs would this amount support? Please be specific.

Answer. The obligations that must be paid before the receipt of user fees are primarily for the salaries and benefits of the FSIS workforce, which is estimated at 85 percent of the total cost of the Federal inspection program.

Question. When does the Administration plan to send to the Congress the legislation authorizing user fees?

Answer. The proposed user fee legislation is presently in clearance at the Office of Management and Budget (OMB) and will be submitted to Congress very soon.

Question. Did the Administration submit its user fee proposal to the Congress last year?

Answer. Yes, on June 26, 1997, Secretary Glickman transmitted to the President of the Senate, Albert Gore, and the Speaker of the House, Newt Gingrich, a draft bill, "To authorize the Secretary of Agriculture to impose user fees for the inspection of livestock, meat, poultry, and products thereof, and egg products."

Question. Dr. Woteki, you mention in your statement that you have been tapped as the coordinator of the President's Food Safety Initiative. Among other duties, one directive is to develop and carry out a plan to ensure the safety of domestic and imported fruits and vegetables. How does the agency's fiscal year 1999 budget address the President's initiative to enhance the safety of imported and domestic fruits and vegetables?

Answer. While FSIS does not inspect fruits and vegetables, $13 million of the $46 million included in the USDA fiscal year 1999 budget for the President's Interagency Food Safety Initiative has been specifically targeted for the President's Directive on the safety of domestic and imported fruits and vegetables: $4.0 million for the Cooperative State Research, Education, and Extension Service (CSREES) for research and producer education; $2.7 million for the Agricultural Research Service (ARS) for research on the development of new food safety technologies aimed at reducing and controlling pathogens on fruits and vegetables; and $6.3 million for the Agricultural Marketing Service (AMS) to establish a microbiological data program on fresh fruits and vegetables.

FLORIDA INSPECTION PROGRAM

Question. Florida terminated its funding for the Cooperative State Inspection Program on December 1, 1997. Why did the State of Florida terminate its funding for this program?

Answer. Governor Lawton Chiles informed Secretary Glickman, in his letter of July 23, 1997, that the State budget adopted by the Florida legislature for the fiscal year 1997–98 reduced funding for the State meat and poultry inspection program sufficiently to necessitate termination of the State program in December 1997 when funds would be depleted. Details were not provided for the rationale used by the legislature to prioritize funds.

Question. Does the law direct FSIS to fund these activities should a state choose not to participate in this program?

Answer. FSIS is mandated by law to assume responsibility, previously held by a State, for administering meat and poultry inspection programs with respect to operation and transactions within a State. In accordance with section 301(c)(3) of the Federal Meat Inspection Act and section 5(c)(3) of the Poultry Products Inspection Act, States that have terminated their inspection programs are designated to receive Federal inspection with respect to operations and transactions within the State.

Question. Does the FSIS anticipate any other of the participating 25 states terminating its participation in this program? If so, which ones?

Answer. FSIS has not received any notification that a State is planning to terminate its program.

Question. Should the Committee propose to not provide this needed increase, what are the consequences?

Answer. The requested increase in funding is needed to ensure full coverage of inspection assignments for which FSIS assumed responsibility when Florida terminated its program. Without this increase, FSIS will absorb the additional workload, making adjustments as needed in resource allocations based on inspection priorities.

PRESIDENT'S FOOD SAFETY INITIATIVE

Question. How much money in fiscal year 1998 did FSIS contribute to the "Fight BAC!" educational campaign?

Answer. FSIS is contributing $75,000 in fiscal year 1998 towards the "Fight BAC!" campaign. This includes $30,000 for printing "Fight BAC!" brochures and $45,000 for distribution of the brochures through the Consumer Information Center in Pueblo, Colorado. Additionally, FSIS is planning a multi-year education initiative that is part of the President's Food Safety Initiative. The Agency proposes an increase of $500,000 in the fiscal year 1999 budget request to develop new educational products and support distribution of existing products.

Question. What was FSIS' role in this campaign?

Answer. FSIS played a leading role in creating the Partnership for Food Safety Education, which brings together representatives from industry, government, public health, and consumer organizations. The Partnership developed the "Fight BAC!" campaign. FSIS is completely involved in all aspects of the Partnership, including selection of the public relations firm that created the "Fight BAC!" campaign, and review of all educational materials, the public service announcement, and Web site design and content. FSIS also played a major role in coordinating the "Fight BAC!" press conference held at USDA. FSIS continues to play an important role in recommending new promotional opportunities for the "Fight BAC!" campaign and planning the next phase of the campaign, which is to develop materials for the classroom.

Question. FSIS is planning a multi-year education initiative which is a part of the President's Food Safety Initiative. The agency proposes in the fiscal year 1999 budget request an increase of $500,000 to develop new educational products and support distribution of existing products. Are these additional funds to continue the "Fight BAC!" educational food safety campaign?

Answer. The four key safe food handling messages contained in the "Fight BAC!" campaign will continue to be the cornerstone of new materials developed by FSIS. The Agency proposes in the fiscal year 1999 budget request an increase of $500,000 to develop new educational products and support distribution of existing products in order to help food handlers change unsafe behaviors.

Within the President's Food Safety Initiative, there are many consumer education projects identified that require government funding. For example, FSIS is proposing to produce a safe food handling video for senior citizens at risk for developing foodborne illness. Reaching at risk audiences is one of the goals of the President's Initiative. FSIS is currently investigating how best to integrate food safety education into the school environment. Once that analysis is completed, plans will be developed and funded by the request.

Question. Do other USDA agencies develop and distribute informational products regarding food safety? If yes, which ones and how does this educational material differ from FSIS'?

Answer. There is no other agency within USDA that develops and distributes national food safety information materials to consumers. However, FSIS has worked very closely with the Cooperative State Research, Education, and Extension Service (CSREES) at the State level. FSIS believes that the programs complement each other. Most of the CSREES resource allocation is provided through grant funding to local extension offices in individual States or localities. Projects are developed on a smaller scale. FSIS conducts educational programs on a national level and provides local extension specialists with tools to expand the impact of the national programs at the grass-roots level. For example, FSIS, as a partner in the "Fight BAC!" campaign, contributed to the production of brochures, camera-ready art and action kits, which are supplied to extension specialists. FSIS is funding the brochure's distribution through the Consumer Information Center (CIC). Extension specialists can direct their constituents to that resource.

Question. The President's fiscal year 1999 budget request proposes an increase of $3 million for risk assessment and producer education. Of this increase, $1 million will be used to collaborate with animal production experts in identifying cost effective pathogen reduction strategies to reduce foodborne illness. The other $2 million will be used to educate producers, marketers, and transporters of meat and poultry products and to fund up to 25 State agriculture initiatives. Would you please elaborate on how these risk assessment and educational initiatives will be used by producers to reduce pathogen contamination.

Answer. Currently, there does not exist the scientific understanding of practical ways to reliably reduce the level of pathogens in animals prior to slaughter that would result in lower contamination levels on the carcasses. The $1 million will continue the focus of the fiscal year 1997 initiatives in risk factor analysis at the food

animal production stages for lamb, beef, poultry, and pork. The data collected from the pathogen reduction strategy pilot demonstration projects will provide information for quantitative and qualitative evaluation of production practices that producers may opt to use which have potential to lower the chemical, physical, and microbiological hazards associated with food animals presented for slaughter and processing.

The $2 million for educational efforts will foster State level initiatives among food animal producers, practicing veterinarians, animal and public health agencies, agricultural research and extension and other stakeholders to assist producers in developing practical, cost-effective methods of managing their flocks and herds in ways which enhance food safety. As HACCP implementation causes the marketplace to encourage adoption of HACCP-compatible production practices, food animal producers, including small producers, will be aware of the changing nature of the marketplace. They will have the ability to remain viable by using the option of adopting management practices that both meet the demands of the marketplace and result in production of animals, which are the basis of safe, high quality food.

Question. Does the agency plan to mandate these practices for producers in the future?

Answer. The Agency has no plans to seek statutory authority for animal production. FSIS supports the implementation of voluntary efforts to reduce chemical, physical and microbial hazards from the farm, through markets, transportation, feedlots and during pre-slaughter preparation of food animals. The Agency believes the Pathogen Reduction/HACCP systems rule will affect food animal suppliers when they sell to slaughter plants implementing these systems. Plants will need more information about the potential hazards in/on incoming animals, including birds, in order to address those hazards appropriately in their HACCP plan. This will drive market changes that will promote HACCP-compatible practices at the production level. These practices may include record keeping, following the FDA compliance guidelines for appropriate drug use, animal or premise identification, and other Quality Assurance Program and Good Production Practices standards.

Question. The fiscal year 1999 budget provides funds to train federal and state inspectors as the Hazard Analysis and Critical Control Point (HACCP) system is implemented in all sectors of the food industry. What areas are being emphasized in these training sessions? To date and by fiscal year, how many Federal inspectors and how much funding has been used?

Answer. The 1999 budget requests a $750,000 increase to develop and deliver HACCP training for State inspection personnel under the activity Special Assistance for State programs, which is a major part of the President's Food Safety Initiative. The proposed State training will be modeled on the Federal HACCP training already underway since fiscal year 1997. Federal HACCP training includes the following:

1. In fiscal year 1997, the first phase of the implementation of the pathogen reduction and HACCP rule took place. It dealt with Pre-HACCP requirements primarily consisting of the sanitation standard operating procedures (SSOP's), effective in all plants on January 27, 1997. Two separate training programs were delivered at the cost of $3.5 million, as follows:

a. 4,331 employees, including supervisors, completed a three-day training program that focused on how to (1) perform the inspection tasks for the regulatory oversight of the pre-HACCP requirements; and (2) understand and appreciate the changes being brought about by the new rule.

b. 1,200 supervisors completed a two-day training program to equip them to lead the changes brought about by the pathogen reduction and HACCP rule.

2. In fiscal year 1998, the second phase of the implementation of the pathogen reduction and HACCP rule occurred. It dealt with the implementation of the HACCP and Salmonella requirements in large plants, effective January 26, 1998. It cost approximately $2 million and included a training program for more than 2,000 field inspection and compliance personnel during a six-week period in December 1997 and January 1998. Preparatory to the implementation, some 112 facilitators completed a three-week Facilitator Training Program on the delivery of the HACCP Technical Training Program.

Included in the HACCP Technical Training Program was a module on Business Relations that focused on the concepts and practices that inspection personnel need to know to establish and maintain an effective business relationship with plant owners, operators and employees. It is centered on the following five relationship principles:

1. Maintain open, honest, and straightforward communications.
2. Have mutual respect.
3. Be issues-oriented, do not personalize.

4. Maintain a work environment that is absent of the fear of retaliation and intimidation.

5. Understand each other's roles and responsibilities.

On January 30, 1998, FSIS announced that Federally inspected meat and poultry plants may, upon request, implement and receive inspection under the pathogen reduction and HACCP rule prior to the mandatory implementation dates. Plants are not permitted to begin operating under the rule until FSIS has trained the assigned inspector(s). Upon receipt of a request, the HACCP Training Facilitators will schedule and deliver the training to the affected inspectors.

Question. When does the agency plan to complete all training for Federal and State inspectors, by fiscal year?

Answer. The training of Federal inspection personnel assigned to plants implementing the HACCP and Salmonella requirements will occur in subsequent fiscal years, as follows:

1. In fiscal year 1999, for employees assigned to small plants that are required to implement the HACCP rule on January 25, 1999; and

2. In fiscal year 2000, for employees assigned to very small plants that are required to implement the HACCP rule on January 25, 2000.

Training for State inspection program personnel will be developed during the first part of fiscal year 1999, with delivery of training to begin in late fiscal year 1999 and continue into fiscal year 2000 to complete mandatory HACCP implementation in all very small plants.

Question. Has the agency used any funding in providing joint training to the industry? If yes, how much?

Answer. No, the Agency has not used any funding to provide joint training to the industry. FSIS is providing information to the industry through briefings at many locations nationwide, and technical assistance for small and very small establishments. FSIS is making available to small and very small establishments various HACCP materials that should assist these establishments in conducting their hazard analyses and developing their HACCP plans. As stated in the HACCP final rule, each establishment is responsible for training its employees. FSIS training is limited to FSIS and State employees because of complex logistical and cost considerations.

Question. Dr. Woteki, you mention in your statement implementing the farm-to-table food safety strategy. What is the agency's strategy?

Answer. The consumer's risk of foodborne illness from meat or poultry is a composite of the microbial hazards introduced to the product throughout the farm to table continuum. The only way to provide the maximum reduction in risk to consumers, and to allocate the costs of ameliorating those risks fairly, is to promote, or where appropriate require, adoption of reasonable interventions at every step where a hazard is introduced.

While FSIS continues to focus much of its resources on oversight of slaughter and processing operations, the Agency is addressing other risk factors that contribute to foodborne illness and make consumers sick. FSIS officials recognize that the measures contained in the Pathogen Reduction and HACCP rule must be part of a comprehensive food safety strategy that addresses hazards at other points in the farm-to-table chain. To that end, FSIS is broadening the scope of its food safety activities beyond slaughter and processing plants, with particular emphasis on hazards that arise during production, transportation, distribution and retail sale.

Animal production food safety.—To improve food safety at the animal production and intermediate stages before the slaughter plant, FSIS is working with industry, academia, and other government agencies to develop and foster voluntary measures that can be taken on the farm and through distribution and marketing of animals to reduce food safety hazards associated with animals presented for slaughter. FSIS believes that the voluntary application of food safety assurance programs based on HACCP principles can be useful in establishing risk reduction practices on the farm and during intermediate marketing stages. The agency believes that continued public concern about foodborne pathogens and the adoption of HACCP and performance standards will increase incentives for producers to adopt food safety practices at the animal production level.

In the animal production area, the Agency strategy is two-fold. First, FSIS will continue efforts begun in fiscal year 1997 to identify and field-test production practices that will result in lower risk animals being presented for slaughter and processing. These efforts will be aimed at defining cost-effective, practical management adjustments that tend to contribute to food safety in all areas of chemical, physical, and microbial risks. They will address practices in the production of beef, lamb, poultry and pork, and the process will involve collaboration with numerous special-

ists in management, disease control, data collection, and risk analysis both inside and outside of USDA.

Second, we will promote and encourage the development at the State level of partnerships among producers, veterinarians, animal and public health agencies, marketers, transporters, and education and extension personnel. These partnerships will function to make producers aware of the food safety challenges in the production of food animals, and define locally feasible methods of addressing these challenges. Every effort will be made to encourage the blending of needed food safety practices into existing and developing industry quality assurance and total quality management programs. The food safety HACCP-compatible production practices will then be available to producers in form and language familiar to them, and as part of projects already supported by industry leaders.

Transportation, storage and distribution.—Other important links in the food safety chain are transportation, storage and distribution. In these areas, FSIS, FDA, and State and local governments share authority for oversight of food products. FSIS and FDA are working together to develop standards governing the safety of foods during transportation and storage, with particular emphasis on the importance of temperature control in minimizing the growth of pathogenic microorganisms. When raw product leaves the inspected facility, unsanitary conveyances can contaminate product and inadequate temperature controls during transportation to market can promote rapid and progressive growth of any bacteria present. For this reason, we are working with FDA and the food industry to develop procedures and practices that will ensure only clean and sanitary vehicles are used and appropriate temperature controls are maintained throughout transportation and distribution to retail.

Retail and food service.—In the retail area, FSIS and FDA are working with State officials to ensure the adoption of uniform, science-based standards and to foster the adoption of HACCP-type preventive approaches. State and local authorities have the primary responsibility for food safety oversight of retail stores and restaurants, but FSIS and FDA, working through the Conference for Food Protection, can provide expertise and leadership to support local authorities and foster the development of sound food safety standards and practices nationwide.

CDC outbreak data indicate that where a food source has been identified, mishandling of food at retail or in a food service establishment is, more often than not, cited as a contributing factor. Usually, one of the following factors is cited: (1) improper holding temperatures, (2) inadequate cooking temperatures, (3) contaminated equipment, (4) unsafe food sources, or (5) poor health or hygiene of personnel. There are about one million such establishments, employing about 12 million people. Close to half the consumer food dollar is spent on food prepared by others outside the home. These people represent not only a potential source of additional microbiological contamination, but also the last point at which interventions—such as cooking—can reduce or eliminate microbial risks. Improvements in food handling at retail promise to achieve the greatest reductions in the prevalence of foodborne illnesses.

FSIS intends to be aggressive in promoting higher food safety standards and more uniformity among State and local jurisdictions that have primary jurisdiction over these establishments and food at retail. We are joining with FDA on a number of projects to support State and local food regulatory officials. Most notably, the Food Code provides the best advice of the Federal agencies on State laws and procedures for oversight of the retail food industry. The Food Code is continuously updated in collaboration with State and local regulatory officials, industry representatives, academic experts, and consumers participating in the biannual Conference for Food Protection.

In addition, FSIS is providing training for State and local officials on meat and poultry processing, increasingly important as more and more retail establishments are processing products that, if they were produced in inspected establishments, would be subject to mandatory HACCP.

The Agency is also collaborating with FDA on other training initiatives that will promote more uniform and effective oversight by State and local food regulators. One initiative is train the trainer courses, together with training materials and ongoing support, to increase the ability of the States to reach those in subordinate jurisdictions that most need training. Another initiative involves adapting HACCP principles to the many various conditions confronted by establishments handling and preparing foods at retail.

Consumer education.—Even as progress is made in reducing contamination during these stages, it will remain critical that retail food handlers and consumers follow safe food handling practices. Proper storage, preparation, and cooking of meat, poultry, and egg products are essential to achieving the goal of reducing the risk of

foodborne illness to the maximum extent possible. FSIS intends to augment its food handler education efforts by expanding its collaboration with industry, other government agencies, consumer and public interest groups, educators and the media to foster the effective delivery of food safety education and information. FSIS is a key participant in the Public/Private Partnership consisting of industry, government and consumer groups that have developed a public education campaign, "Fight BAC!", which is focused on food handling and is a key part of our efforts to educate consumers. The campaign includes public service announcements, and highlights the need for increased safety in food preparation practices. The "Fight BAC!" campaign highlights four basic sanitation and food-handling strategies consumers should use in their homes through use of a graphic featuring these four steps to food safety. The steps are: (1) Clean: Wash hands and surfaces often, (2) Separate: Don't cross-contaminate, (3) Cook: Cook to proper temperatures, and (4) Chill: Refrigerate promptly. The graphic is designed for use in a variety of materials, including posters and refrigerator magnets. This campaign is the foundation for the multi-year food safety education initiative.

FIELD AUTOMATION AND INFORMATION MANAGEMENT[

Question. The fiscal year 1999 President's budget proposes an increase of $5.8 million for automation assistance to extend the Field Automation and Information Management (FAIM) project to the State inspection programs. How many States would be served by this proposed funding, and would the FAIM program be fully implemented in fiscal year 1999?

Answer. In January 1998, the National Association of State Meat and Food Inspection Directors polled each of the 25 States that maintain their own inspection programs. All twenty-five expressed their desire to participate in FAIM. Twelve of the States want FAIM to be implemented in fiscal year 1999; the remaining thirteen States have asked for fiscal year 2000 as an implementation date. The funding requested for fiscal year 1999 will be sufficient to implement FAIM in the twelve States requesting implementation in fiscal year 1999.

Implementing FAIM in the States will eliminate the need for each State to design, develop and implement automated systems that will support communication with FSIS automated systems. FSIS has already tested and proven the value of this infrastructure and the cost to FSIS would be less than paying 50 percent of the full cost for twenty-five individual State automation programs. This proposal will assist in moving toward a seamless food safety program through support of a uniform nationwide inspection system.

Question. Does the fiscal year 1999 budget request contain any funds earmarked for the FAIM program on the Federal level?

Answer. FAIM—for FSIS inspectors—is predicated on a phased five-year implementation. The Agency budget request includes $8.525 million in fiscal year 1999 for the fourth year of nationwide implementation. Implementation is on schedule and will be completed in fiscal year 2000.

Question. Please provide funds made available for FAIM in each fiscal year since the program was initiated to fiscal year 1999 and indicate the amount obligated for the program in each of these years.

Answer.

[The information follows:]

Fiscal year	Funding	Obligated
1996	$8,425,000	$7,230,000
1997	8,525,000	9,485,000
1998	8,525,000	8,760,000
1999	8,525,000	8,525,000

Notes:
1. Nearly $1.2 million was carried over as no-year funding from fiscal year 1996 to fiscal year 1997.
2. In fiscal year 1997, $1.0 of the $1.2 million carryover funds was expended.
3. Projected fiscal year 1998 obligations include the remaining $0.2 million carryover funds.
4. Fiscal year 1999 funding and obligated data reflect the current budget proposal.

SALARIES AND EXPENSES

Question. In fiscal year 1999 the budget proposal assumes a decrease in staff years for non-inplant personnel realizing a savings in salary and operating costs. What factors influence this reduction in staff years?

Answer. The 1999 budget proposes reductions of $1.75 million and 25 staff years in salary and benefits and operating costs. This includes $1.0 million and 10 staff years for field office streamlining as a result of continued implementation of the FAIM project. An additional savings of $750,000 for salaries and benefits associated with 15 staff years is projected to result from the elimination of the prior approval programs.

Question. How long does the agency expect these factors to affect staff reductions?

Answer. Implementation of the FAIM project is scheduled for completion by the end of fiscal year 2000 and the resulting field streamlining will also be completed in fiscal year 2000. Elimination of the prior approval programs will be completed by the beginning of fiscal year 2000.

HAZARD ANALYSIS AND CRITICAL CONTROL POINTS

Question. On January 26, 1998, the Hazard Analysis and Critical Control Point system (HACCP) was implemented in 312 of the largest meat and poultry plants in the nation. Some leading scientists involved in developing the model HACCP program have charged that FSIS is ignoring scientific data and forcing plants to incorporate the old organoleptic processing methods into HACCP plans. The Committee had serious concerns at the time the HACCP rule was being written about layering the new system on top of the old.

I am aware that complaints have been made that FSIS is in fact forcing plants to write regulations from the old system—such as time and temperature cooling requirements—into their HACCP plans. Mr. Billy, if this is true, how does this fulfill the commitment the department made to Congress to eliminate layering?

Answer. FSIS does have regulatory requirements that need to be updated and the Agency has acknowledged that it needs to remove its command and control requirements and replace them with performance standards, which provide the regulated industry with more flexibility. The Agency is developing a consolidated set of regulations that bring meat and poultry requirements together in a single place. We are committed to writing our regulations in plain and simple language so that they can be understood by not only the regulated industry, but also by the public, which expects that the government will hold industry accountable for meeting regulatory requirements.

However, we acknowledge it is taking us longer to meet our goals than originally intended. Until performance standards are implemented, there are a number of regulations containing command and control requirements that will continue to be enforced. One such regulation is the requirement that poultry be chilled to a specific temperature within a certain time frame, depending on the weight of the bird: 40 degrees within eight hours for turkey (9 C.F.R. 381.91). This requirement was based on the best available scientific knowledge about the lag phase for bacterial growth. FSIS would be negligent in its food safety mission if it dropped this requirement before implementing a performance standard.

Question. How does this enhance food safety?

Answer. To protect the public health, FSIS is enforcing current regulatory requirements that are based on the best science available at the time the requirements were developed. Chilling reduces the growth of bacteria.

Question. FSIS has eliminated pre-approval for equipment and blueprints. Does FSIS intend to remove any other outdated requirements that you could share with us today?

Answer. FSIS made a commitment to change its command and control regulations into performance standards as rapidly as it could, given current requirements for regulatory change.

We are providing the FSIS portion of USDA's Unified Agenda that will be published in the Federal Register in April 1998. The Agenda outlines the Agency's regulatory reform efforts, including Sanitation Requirements for Official Meat and Poultry Establishments, Rules of Practice, Performance Standards for Perishable, Ready-to-eat Products, and Elimination of Requirements for Partial Quality Control Programs.

[CLERK'S NOTE.—The information referred to does not appear in the hearing record, but can be reviewed in the April 1998 Federal Register.]

Question. Mr. Billy, in your statement you mention the proposed increase of $2.3 million for upgraded HACCP inspection technology for the implementation of HACCP in the Egg Products Inspection program, and equipment and increased travel for distribution compliance activities.

Why hasn't the agency promulgated the final rule requiring a 45 degrees Fahrenheit ambient air temperature for the transportation and storage of eggs as the Committee required in the fiscal year 1998 Appropriations Act?

Answer. We are moving as rapidly as possible to publish the regulation mandating a 45 degree ambient air temperature requirement and will comply with the 1998 Appropriations Act.

Question. Please elaborate on the need for this proposed increase of $2.3 million.

Answer. Under HACCP-based inspection, FSIS will redeploy inspection personnel within the plant and in distribution to implement the farm-to-table food safety strategy. While redeployment enables us to operate within existing staffing levels, increased operating support is needed to perform the new inspection tasks required to ensure the safety of meat, poultry, and egg products.

An enhanced compliance presence is needed to conduct increased inspection activity in distribution channels beyond the in-plant setting in order to ensure food safety from the farm to the table. An increase of $0.5 million is needed to provide travel, equipment, and supplies associated with these activities. The farm-to-table strategy for inspection will entail a great deal of out-of-plant activity requiring travel to multiple destinations. Specialized equipment, such as cameras and portable telephones, and supplies for taking samples are required to support these efforts.

Additionally, FSIS expects to complete amendments to the HACCP rule that will cover Egg Products Inspection in fiscal year 1999. Implementation of HACCP provisions will require training for all inspectors, relief personnel, and supervisory staff involved with Egg Products Inspection; and sampling of egg products from the plant environment for various microorganisms to establish baseline data. FSIS is requesting an additional $0.4 million to provide training for more than 120 inspection personnel and enable the agency to perform required baseline sampling. Prior year funding for HACCP training will not be available for this purpose as it is committed to meat and poultry inspection and will be needed for training in new slaughter inspection procedures.

Upgraded inspection technology is needed to assist inspection personnel in the fully implemented HACCP-based inspection program. The requested increase of $1.4 million will pay for technology not currently available to inspectors as well as improvements in current technology. Some examples include stethoscopes for veterinary medical officers to make a more thorough and complete determination of the health status of incoming animals for slaughter. In addition, improved thermometers are needed to perform verification tasks required by HACCP. Neither stethoscopes nor thermometers are currently available to FSIS inspectors. These instruments will be used in the HACCP inspection models project this year and will be needed by the full inspection workforce in fiscal year 1999. They are also necessary in order for inspection results to be fully accepted as accurate. Additionally, software packages are being developed, which inspection personnel will use in determining the adequacy of critical limits and other technical information related to HACCP.

Question. What do you think about organizing an independent, scientific organization to come in and see if HACCP implementation has strayed from science-based HACCP?

Answer. FSIS appreciates the importance of an independent, scientific evaluation of HACCP implementation. The Agency's evaluation strategy for HACCP is two-fold: conduct formative evaluations to gain information at each phase to facilitate the overall implementation of HACCP; and obtain scientific evaluation expertise from beyond the Agency to conduct a summative evaluation that will assess the impact of the final rule on inspection, industry, consumers, and foodborne illness.

The first formative evaluation effort, Results of the SSOP Implementation Follow-Up Study, has been completed. Six months after the initial implementation date of sanitation standard operating procedures (SSOP's), this study was conducted to determine the extent to which the new system was implemented and where additional effort was needed to assure that the new system would continue to work as intended.

The second formative evaluation, Evaluation of Inspection Activities During Phase One of HACCP Implementation is just starting. This in-house evaluation of FSIS inspection activities during HACCP implementation in large plants is designed to identify areas that might need modification before small plants begin implementation in January 1999. The plan is to design the study, collect the data, analyze it and write the final report by July 1998. This tight timeline will enable FSIS Field Operations to review the findings and as necessary modify aspects of its delivery of inspection in time for small plant implementation in January 1999. Evaluation efforts of this type are planned at each phase of HACCP implementation.

Concurrent with these evaluation efforts, the Agency is already planning an evaluation of the HACCP final rule. This evaluation will require expertise from beyond the Agency. The study is expected to address whether or not HACCP process control systems: (1) control production safety hazards, (2) reduce foodborne illness, (3) make

inspection more effective, (4) increase consumer confidence, and (5) provide an opportunity for increased productivity.

Question. When do you suggest this should be carried out?

Answer. Based on the tentative timeline, the evaluation reports will be due in fiscal year 2000, fiscal year 2001 and fiscal year 2002. This would allow adequate time to fully assess the implementation of HACCP in all meat and poultry plants.

Question. Please provide the Committee with the multi-year HAACP plan for staffing levels in the plant (in-plant inspections and others).

Answer. Under HACCP implementation, FSIS is currently designing pilot projects to determine the best ways of conducting inspection of establishments and areas of in-distribution. FSIS has the opportunity to focus its inspection staffing resources on food safety both in plants and in distribution to achieve its Strategic Goal of enhanced public health. These projects will help the Agency determine what are optimum staffing levels and configurations to ensure the safety of meat, poultry, and egg products along the food safety continuum.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The mission of FSIS is to ensure that meat, poultry, and egg products moving in interstate commerce or exported to other countries are safe, wholesome, and accurately labeled. In 1996, FSIS issued the HACCP final rule, which serves as a blueprint for changes in meat, poultry, and egg products' inspection for the future.

The FSIS Strategic Plan goes beyond HACCP to develop the Agency's strategy for achieving enhanced public health. The Plan contains one goal: to enhance the public health by minimizing foodborne illness from meat, poultry, and egg products, which is supported by six corresponding strategic objectives that are necessary to accomplish the goal.

The Strategic Plan and the Annual Performance Plan are closely linked in that the annual performance goals are based on the strategic objectives. All of the program activities in the 1999 budget request support the Agency's strategic goal. The "Means and Strategies" section under each performance goal identifies specific budget initiatives that will enable FSIS to achieve its annual performance goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. The Agency recognized the importance early on of linking the performance goals and the budget activities through the Agency mission. The goals represent our mission objectives, while the budget activities represent our mission activities. On a preliminary basis, the Agency evaluated the relationship between the budget activities and the performance goals to determine whether or not changes were needed in budget activities, and found that the complementary linkage of performance goals and budget activities to the Agency mission indicated no immediate need for change.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. FSIS is undergoing a transformation in its inspection program from traditional organoleptic inspection to HACCP-based inspection. The performance goals are specific to achieving a reduction in foodborne illness through HACCP and other inspection changes, and primarily focus on new and anticipated food safety developments. The budget activities capture all costs for both the traditional inspection program and the new HACCP-based inspection system now being implemented. We learned that the linkage of performance goals and budget activities will evolve through many stages as transformation of the inspection program takes place, and we should not make further changes in our budget activities at this time.

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. FSIS used both its Strategic Plan and preliminary 1999 budget information to design the Annual Performance Plan. The performance goals are specific to achieving a reduction in foodborne illness, and the measures in the Plan indicate progress in achieving these goals. The performance measures are linked to the budget activities that compose the budget as indicated by the description of the measure. For example, the first goal—to reduce pathogens on raw products by continuing implementation of the Pathogen Reduction/HACCP rule—includes as one performance measure, the percentage of large and medium meat and poultry slaughter and processing facilities in compliance with the HACCP rule. This measure is linked to Fed-

eral food inspection, the budget activity through which FSIS will obtain the data to measure the industry's compliance with the HACCP rule.

Question. Does each account have performance measures?

Answer. FSIS has one major appropriated salaries and expenses account, and the Agency designed performance measures for that account. Many of the performance measures do not apply to the Agency's Trust Fund account because voluntary inspection is not included under the HACCP final rule. FSIS has not designed separate performance measures for the Trust Fund account.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The FSIS performance planning structure is built around specific steps that must be carried out to achieve the strategic goal of minimizing foodborne illness in meat, poultry, and egg products. The account and activity structure presented in the budget justification is organized along program activity lines that capture the range of infrastructure and support activities necessary to carry out a total inspection program.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. At this point in time, it is too early to discuss with any certainty the likelihood of changes to the account structure. In the 1998 budget, FSIS proposed a new, streamlined program activity structure that would reduce the number of activities from eight to five. The new structure of Federal Food Inspection, Import/Export Inspection, Laboratory Services, FAIM, and Grants to States replaced the old structure of Slaughter Inspection, Processing Inspection, Egg Products Inspection, Import/Export Inspection, Pathogen Reduction Program, FAIM, and Grants to States. FAIM and Grants to States were preserved because of unique funding arrangements: no year funding for FAIM and earmarked funding for States. In the 1999 budget, FSIS included an additional activity, Special Assistance for State Programs, to reflect proposed enhanced Federal funding of 75 percent, rather than the authorized 50 percent matching funds. The proposed program activity structure is broad and flexible enough to permit linkage with strategic and annual performance goals, especially as these are fine-tuned or change over time.

Question. How were performance measures chosen?

Answer. As part of the performance goals, the performance measures were chosen as indicators of progress toward achieving goals. The annual performance goals are written in measurable, performance-oriented terms so that annual program evaluations can more easily gauge progress for each performance goal. Maintaining a common set of objectives and performance goals provides a strong linkage between the long-range strategic plan objectives and the more output-oriented performance goals in the Annual Performance Plan.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. When designing its performance indicators, FSIS tried to rely on information that was readily available within the Agency. Therefore, the data collected for activities contained in the Strategic Plan will be consistent and comparable with other activity data collected over time, ensuring a stream of reliable and valid performance data for the Plan's goals and objectives. Data quality should continue to be high since the Agency will rely on the same data sources (inplant records, for example) from which it has published data in the past.

With some exceptions, there should be little increased cost due to the collection of data to meet the GPRA requirements. What will be needed is a review of the methodology the Agency uses to collect and verify the data and a strengthening of record keeping technology. FSIS has also established a performance measure to track the number of automation processes improved to determine how well information technology is supporting strategic and program goals. Management is committed to institutionalizing an integrated IRM system throughout FSIS and this commitment to better data collection and evaluation will permit more accurate data available for performance measurement of activities detailed in the FSIS Strategic Plan and Annual Performance Plan.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. During the performance measure design process, FSIS created measures that would utilize information that is both available and reliable. The Agency does not anticipate performance-reporting difficulties in preparing the March 2000 report.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. FSIS recommends that the subcommittee use performance goals one, two, three, and four to track FSIS program results. They are as follows:

—Reduce pathogens on raw products by continuing the implementation of the Pathogen Reduction/HACCP rule.

—Collaborate with other public health agencies and stakeholders to implement the near term program objectives contained in the President's National Food Safety Initiative.

—Develop a comprehensive strategy for promoting food safety from farm-to-table.

—Continue the necessary cultural change to support HACCP and related food safety initiatives by training the workforce to carry out the re-defined regulatory tasks and procedures and by ensuring industry and State programs understand their new roles and responsibilities.

The Agency believes that HACCP, along with microbiological testing, will improve food safety and reduce foodborne illness. Agency management also believes that applying HACCP or HACCP-compatible procedures in both the Federal and State programs throughout the farm-to-table food safety continuum will reduce foodborne illness. The Agency's performance measures for fiscal year 1999 were specifically selected to track progress in achieving this goal.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The FSIS strategic goal is to enhance the public health by minimizing foodborne illness from meat, poultry, and egg products. The Annual Performance Plan establishes performance goals and measures to achieve the strategic goal. The long-term outcome for both the Strategic Plan and the Annual Performance Plan that FSIS is working toward is a 25 percent reduction in foodborne illnesses associated with meat, poultry, and egg products, which will be a major benefit for the consumer. Reducing pathogen contamination of these products is the major focus of FSIS initiatives.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The Agency has conducted training for its managers over the last three years in preparation for meeting the requirements of GPRA. Substantial progress has been made. However, continued training is needed as GPRA concepts and requirements are integrated into ongoing program operations.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Customer satisfaction measures will be based, in part, on feedback from stakeholders, including our own employee groups, representatives from the regulated industry, consumer groups, academia, State and local governments, and foreign governments. Stakeholders have participated in the development of the HACCP regulation for achieving greater food safety through numerous meetings that FSIS has conducted over the past several years. In addition, we expect to solicit feedback from the general public through a planned food safety consumer survey in cooperation with the Department of Health and Human Services as partners in the President's Food Safety Initiative.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The measurable goals of the fiscal year 1999 Annual Performance Plan enabled the Agency to evaluate and prioritize program needs in determining where budget initiatives were needed to help achieve performance goals.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. FSIS would be able to indicate the likely impact on program performance goals if budget numbers are changed up or down by the committee. What would be more difficult is measuring the precise impact on the FSIS strategic goal of enhancing the public health by minimizing foodborne illness from meat, poultry, and egg products, and the corresponding outcome of this goal. The Agency will be able to indicate the impact in a more definitive way after implementing the annual reporting requirement and completing a full GPRA cycle.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. FSIS is currently able to measure and report performance on a regular basis for its performance goals. However, in preparing for the future the Agency contracted with a consulting firm to help managers internally evaluate data collection and measurement. The Administrator has created the FSIS Process and Data Analysis Project in conjunction with the Leads Corporation to develop systematic evaluation of Agency data systems as an ongoing process. In fact, FSIS has identified evaluation as one of its six core business processes. Data evaluation will be systematized using the Integrated Computer Aided Manufacturing (ICAM) methodology and the ICAM definitional language modeling technique (IDEF). The Agency is committed to institutionalizing an integrated information resources management (IRM) system throughout FSIS and this commitment to better data collection and evaluation will produce more accurate data for performance measurement of activities in the FSIS Strategic Plan and Annual Performance Plan.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Many of the FSIS results are based on outcomes related to HACCP implementation, which will be completed in fiscal year 2000, while the budget account structure covers both traditional and HACCP inspection activity. Therefore, the linkage between performance results and budget activities is not complete.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. The activities included in the budget account structure are sufficiently broad to cover the use of all budgetary resources and are also specific enough to account for the Agency's use of particular resources, such as Grants-to-States and FAIM. At this time, FSIS does not think it is necessary to modify the budget account structure.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. While FSIS does not think modification is necessary at this time, the feedback received as we continue to transform the inspection program and complete the entire GPRA cycle will be evaluated to revisit this question.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. No modification is proposed at this time.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The achievement of Agency goals is largely dependent on the success of multiple partnerships FSIS has with both internal and external stakeholders. The 1999 Annual Performance Plan identifies a number of external factors that influence goal achievement, including but not limited to cooperation of other Federal agencies and State and local governments, industry compliance with regulatory requirements, and the food handling behavior of consumers.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. Recognizing the importance of partnerships, FSIS continues working proactively with our partners to identify needs, meet education/information and infrastructure needs, and invest budgetary resources to ensure we are moving toward goal achievement. In developing the HACCP regulation FSIS conducted extensive meetings with the industry to address their needs, and as a result, is providing technical assistance, especially to small businesses to assure successful implementation of regulatory requirements. The 1999 budget proposes an increase for food safety education for consumers, building on the Public/Private Partnership's "Fight BAC!" campaign to promote safer food handling by consumers. In addition, the 1999 proposed special assistance for State programs reflects the Agency's effort to ensure successful State implementation of HACCP requirements based on infrastructure needs identified in the State inspection programs.

Question. What impact might external factors have on your resource estimates?

Answer. External factors influence the allocation of existing resources and generate new resource requirements. In the 1998 budget, FSIS requested and Congress approved funding for two activities that were part of the President's Food Safety Initiative, and both activities are associated with external factors. FSIS learned from CDC that Campylobacter is the most common foodborne pathogen, so the Agency

requested an increase of $0.5 million for CDC to provide baseline data on the incidence of foodborne illness resulting from this pathogen. In addition, FSIS requested $0.6 million to provide HACCP training to State and local food regulatory officers who have jurisdiction over the packaging and processing of food in restaurants and retail establishments.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. The Agency did not identify any function or program overlap or duplication internally or with other USDA agencies while developing its performance plan. The recently implemented FSIS reorganization is based on a thorough evaluation of functions and programs that resulted in streamlining to eliminate overlap and duplication. The FSIS public health mission is broad in scope, however, and the Agency has participated with other agencies on food safety issues, such as HHS and EPA with the President's National Food Safety Initiative. Although such interagency activities are limited, FSIS considers them beneficial because they provide different Federal agencies with similar food safety interests an opportunity to share information and experiences in food safety protection.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The Agency's performance measures are designed to measure performance in areas where performance has never been measured before. This is clearly a learning period for the Agency and adjustments will be made as lessons are learned.

FSIS has established performance measures that it believes relate to each performance goal in question. That is, the measures used correlate directly to the targeted performance. However, the Agency believes that it needs more experience before it is able to confidently predict future budget requirements based on projected performance.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The performance goals are specific to achieving a reduction in foodborne illness and do not capture full inspection program costs at this time. The resource estimates are accurate, based on what actually took place in the prior year, and current and budget year projections. Estimates reflect employment trends and projections, as well as the estimated cost of specific budget initiatives for which funding has been requested.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No, the Agency does not foresee any need to make substantive revisions in its strategic plan submitted on September 30, 1997.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

USER FEES

Question. You state that protection of public health is your mandate. What other federal program charged with protecting public health seeks to impose user fees in order to pay for its entire inspection costs?

Answer. There is no other Federal program that imposes or seeks to impose user fees for its entire inspection costs; however, other countries that have meat inspection programs completely financed by user fees include Argentina, Australia, Canada, Denmark, Germany, Great Britain and New Zealand. All of these countries have inspection programs that FSIS has determined are equivalent to ours and all of these countries are exporting product to the U.S.

Question. Other than to achieve savings, is there any public health and safety policy reason to impose user fees?

Answer. Yes, user fees will provide the required funds to maintain a strong public health protection for meat, poultry, and egg products.

Question. If you state that your mandate is to protect public health, then why do you further state that "cost burdens must be shifted from taxpayers to those who benefit directly from the provided services?"

Answer. Both the public and industry benefit from our inspection services. However, industry is the direct beneficiary of Federal inspection, which enables businesses to engage in commerce and earn profits. Industry also directly benefits from the consumer confidence in inspected meat, poultry, and egg products.

Question. Are not the direct beneficiaries of your mission the consuming public?

Answer. Industry receives the direct benefit of Federal inspection, which is permission to operate businesses and earn profits. The consuming public also benefits by receiving strong public health protection from Federal inspection.

Question. Are not the taxpayers directly benefited from the protections you provide? If not, why mandate an inspection program at all?

Answer. Taxpayers who purchase meat, poultry, and egg products benefit from the public health protections that Federal inspection provides.

Question. Is it the Department's view that the FSIS inspection service benefits the industry more than the consumer?

Answer. Both industry and the consumer benefit from Federal inspection, but they do so in different ways. The consumer benefits by eating meat, poultry, and egg products that are safe, wholesome, and accurately labeled. Industry benefits from Federal inspection financially because inspection enables establishments to operate and helps to assure the public confidence in the safety and wholesomeness of their products. Federal inspection also benefits industry by providing the level of inspection commensurate with production so as not to limit production.

Question. If enacted, the user fee proposal would result in FSIS inspectors remaining under the direction of the agency, but their livelihood tied to the financial health of the companies. Since there would be no appropriated funds for the salaries of FSIS inspectors, the inspectors would have a direct interest in the well-being of the companies. How does USDA plan to counter the questions in consumer confidence that will result from this plan?

Answer. FSIS has and will continue to work at all levels of the Agency and with employee groups to ensure that an inspector's livelihood remains tied to his or her competence in performing regulatory inspection duties rather than the financial health of an individual company. FSIS is recommending that user fees be based on volume of production rather than an hourly inspection rate to avoid providing an opportunity for any external pressure to modify the application of inspection standards or inspection intensity. While the total number of inspection personnel is related to the overall size and growth of the industry, FSIS will perform inspection, including HACCP verification tasks, in a manner that will assure consumers and industry that the inspection program operates in accordance with regulatory requirements. Consumer confidence will grow, maintaining strong markets for industry as establishments produce product under HACCP programs that are fully compliant with regulatory requirements. Further, by basing user fees on objective, verifiable data, the Agency will be able to assure an equitable distribution of inspection costs.

To maintain consumer confidence in the inspection program, FSIS will provide public information about the impact of user fee legislation. A key element in the public information effort would be public meetings with key Department and Agency officials, similar to those conducted for the HACCP regulation, to solicit input on issues concerning the implementation of user fees.

Question. What are the views of most consumer organizations to this proposal?

Answer. We are aware that many groups—consumer and industry—have expressed concern about user fees. Rather than attempting to speak for them, you may wish to contact them directly to ensure their full views are adequately conveyed. However, as I stated earlier, we will continue to work with all of our stakeholders on this very important issue. I believe that all of these groups want inspection personnel to maintain high inspection and enforcement standards and requirements in order to maintain consumer confidence and provide strong markets for meat, poultry, and egg products.

HAZARD ANALYSIS AND CRITICAL CONTROL POINTS

Question. One of the early concerns about moving to HACCP was that the old organoleptic system would be left in place creating a "layered" system containing features of both. We had been assured that as the new HACCP program became established, the old "command and control" methods would be removed. Now that HACCP is in place in the large plants, what parts of the old system have been eliminated?

Answer. We are providing the Inspection System Guide contained in FSIS Directive 5400.1, which contains a number of tasks that inspection program personnel are no longer required to perform in establishments that are subject to the HACCP system regulations. In addition, we are providing Inspection System Procedures contained in FSIS Directive 5400.5 that replace the Inspection System Guide.

Question. What is the timetable for eliminating the remaining elements of the old system?

Answer. FSIS made a commitment to change its command and control regulations into performance standards as rapidly as it could, given current requirements for regulatory change. We believe we have made significant progress to fulfill our commitment as evidenced by the FSIS portion of USDA's Unified Agenda that will be published in the Federal Register in April 1998. The Agenda provides a timetable for the Agency's regulatory reform efforts, including Sanitation Requirements for Official Meat and Poultry Establishments, Rules of Practice, Performance Standards for Perishable, Ready-to-eat Products, and Elimination of Requirements for Partial Quality Control Programs.

[CLERK'S NOTE.—The information referred to does not appear in the hearing record, but can be reviewed in the April 1998 Federal Register.]

Question. There have been complaints that confusion on the implementation of HACCP in certain plants could have been avoided if inspectors and other personnel had received HACCP training earlier. In fact, some FSIS inspector training was conducted just prior to the implementation date in January of this year. What were the reasons for the delay in HACCP training?

Answer. You can be assured that the Agency is concerned about the way inspection personnel carry out their regulatory responsibilities. The HACCP Technical Training Program provides inspection personnel with the (1) required information and background on HACCP and its principles and (2) knowledge, understanding, and techniques to apply the inspection procedures established to determine a plant's compliance/noncompliance with Pathogen Reduction and HACCP requirements. The "just-in-time" approach allows the agency to:

1. Link the training to the four-phase implementation schedule contained in the Pathogen Reduction and HACCP rule spanning a period of 6 to 42 months;
2. Make the best use of scarce human resources;
3. Minimize the disruption of program services; and
4. Have employees immediately apply their newfound knowledge and skills thus eliminating the need to establish and maintain costly re-training or refresher programs.

Further, we have established multiple means for employees to become more familiar and comfortable with the new Pathogen Reduction and HACCP inspection procedures as follows:

1. Computer Based Training programs;
2. Issuance of a Reference Guide on the HACCP-based inspection;
3. Around the clock availability of technical assistance from the Technical Service Center through the use of e-mail and a 800 number; and
4. Day-to-day guidance, support and coaching by supervisors.

Question. It is my understanding that some meat and poultry plants have been shutdown due to HACCP violations already. How many plants have been shutdown since the implementation of HACCP?

Answer. We inspect over 6,000 plants and from the pre-HACCP implementation in January 1997 through mid-March of this year, there have been 50 actions to withhold inspection.

Question. What were the causes for the shutdowns?

Answer. Of those 50 actions, 28 plants had Federal inspection withheld because of repetitive SSOP deficiencies, 11 plants because of basic E. coli failures, 10 plants because of HACCP system failures, and one non-HACCP plant for zero tolerance failures.

Question. Is there a formal administrative appeal process a company may use to avoid a shutdown or other adverse agency action regarding a HACCP violation? If not, why?

Answer. If the Inspector-in-Charge (IIC) determines that there may be a HACCP system inadequacy because an establishment has multiple, recurring noncompliances, as specified in 9 CFR 417.6, and has failed to adequately implement immediate and further planned actions as documented on the Noncompliance Record (NR) (FSIS Form 5400–4), the IIC should discuss this developing trend at the weekly meetings held with establishment management. If the IIC subsequently determines that the trend of multiple, recurring noncompliances without successful interventions has led to a HACCP system inadequacy and that the marks of inspection should be withheld, he or she shall contact the District Office (DO) and provide all the relevant information for the DO to prepare a Notice of Intent to Suspend Inspection. The Notice shall:

1. Inform the establishment that the nature and scope of the noncompliances indicate that the HACCP system is inadequate as specified in 417.6 of the regulations;
2. State that, because of the trend, FSIS intends to withhold the marks of inspection and suspend inspection;
3. Explain the reason for the determination;

4. Reference each pertinent NR by number;
5. Inform the establishment that it is being afforded the opportunity to demonstrate why a HACCP system inadequacy determination should not be made or that it has achieved regulatory compliance; and
6. Provide the establishment three business days from the date of the letter to provide its response to the DO.

Based on the establishment's response, FSIS will determine further actions.

If at any time inspection personnel determine that adulterated product was shipped, FSIS will immediately enact enforcement actions.

Prior to appealing, the establishment may request that the program employee or IIC reconsider his or her finding or decision. The program employee or IIC who made the finding or decision should evaluate and consider any factual information the establishment provides. Program employees should encourage establishment management officials who indicate that they may appeal a decision or finding to do so as soon as possible. Timely appeals will help ensure that the relevant information is provided to subsequent decision makers promptly and that facts and observations can be verified. Timely appeals also avoid the implication that the establishment does not contest the inspection finding or decision.

FSIS regulations provide establishments with the opportunity to appeal, orally or in writing, an inspection finding or decision made by any program employee. Such appeals should be directed to the employee's immediate supervisor. The following outlines the chain-of-command for inspection decisions:

1. Program employee, including the Inspector-in-Charge (IIC), who made the determination;
2. Circuit Supervisor;
3. District Manager;
4. Assistant Deputy Administrator for District Inspection Operations; and
5. Deputy Administrator for Office of Field Operations.

[The information (9 C.F.R. 417.6) follows:]

§ 417.6 Inadequate HACCP Systems

A HACCP system may be found to be inadequate if:

(a) The HACCP plan in operation does not meet the requirements set forth in this part;

(b) Establishment personnel are not performing tasks specified in the HACCP plan;

(c) The establishment fails to take corrective actions, as required by § 417.3 of this part;

(d) HACCP records are not being maintained as required in § 417.5 of this part; or

(e) Adulterated product is produced or shipped.

FSIS AND TRADE

Question. The U.S. poultry industry has been fighting a ruling by the European Union that product sprayed with chlorine as an anti-microbial will not be allowed in any EU country. Is the use of chlorine as an anti-microbial not an FSIS approved method to assure product safety?

Answer. Chlorine is permitted as an antimicrobial treatment in the U.S.

Question. Is there any evidence that any EU nation is using chlorine or is importing product from countries other than the U.S. that use chlorine as an anti-microbial?

Answer. It was reported that the United Kingdom was using chlorine as an antimicrobial in their poultry plants. The EU Commission indicated that they would take legal action to assure that the United Kingdom was in compliance with EU requirements.

Question. Has FSIS been involved in discussions with the EU on this subject and if so, what have they accomplished?

Answer. The use of chlorine was the most contentious issue concerning poultry during the negotiation of the U.S.-EU veterinary equivalency agreement. The end result of the talks was that the agreement calls for the EU to conduct a scientific review of the use of antimicrobial techniques regarding poultry meat.

Question. FSIS conducts inspections of meat and poultry imported into this country at 124 locations. Are there other locations that imports may cross in which there are no inspectors?

Answer. Imported product can enter the United States at other locations, but must move under Customs bond to one of the FSIS inspection locations for import inspection.

Question. How can you be certain that product is not coming into the country at undetected locations?

Answer. U.S. Customs controls all products that enter the United States. Customs refers the importer to the appropriate government agency responsible for the specific imported product. In addition, FSIS Field Operations personnel would detect uninspected meat or poultry products during their routine inspections both in Federal plants and in commerce.

Question. What safeguards can be put in place?

Answer. U.S. Customs control at the Nation's borders and the continued vigilance of FSIS inspection personnel provide the safeguards necessary to ensure that foreign product is not entering U.S. commercial distribution channels illegally.

QUESTIONS SUBMITTED BY SENATOR KOHL

Question. Some leading scientists involved in developing the model HACCP program have charged that FSIS is ignoring scientific data and forcing plants to incorporate old organoleptic processing methods into HACCP plans. If this charge is true, this is very serious. If this is happening, then how is food safety being enhanced?

Answer. To protect public health, FSIS is enforcing current regulatory requirements that are based on the best science available at the time the requirements were developed. The process of replacing command and control regulatory requirements with performance standards is not one that can be accomplished quickly; therefore, it has taken the Agency longer to meet its goals than it had originally intended. Until performance standards are implemented, there are a number of command and control requirements that will continue to be enforced in order to protect public health.

Question. When do you think would be a good time to have an independent, scientific organization to come in and see if HACCP implementation has strayed from science-based HACCP?

Answer. FSIS appreciates the importance of an independent, scientific evaluation of HACCP implementation. The Agency's evaluation strategy for HACCP is two-fold: conduct formative evaluations to gain information at each phase to facilitate the overall implementation of HACCP; and obtain scientific evaluation expertise from beyond the Agency to conduct a summative evaluation that will assess the impact of the final rule on inspection, industry, consumers, and foodborne illness.

The first formative evaluation effort, Results of the SSOP Implementation Follow-Up Study, has been completed. Six months after the initial implementation date of sanitation standard operating procedures (SSOP's), this study was conducted to determine the extent to which the new system was implemented and where additional effort was needed to assure that the new system would continue to work as intended.

The second formative evaluation, Evaluation of Inspection Activities During Phase One of HACCP Implementation is just starting. This in-house evaluation of FSIS inspection activities during HACCP implementation in large plants is designed to identify areas that might need modification before small plants begin implementation in January 1999. The plan is to design the study, collect the data, analyze it and write the final report by July 1998. This tight timeline will enable FSIS Field Operations to review the findings and as necessary modify aspects of its delivery of inspection in time for small plant implementation in January 1999. Evaluation efforts of this type are planned at each phase of HACCP implementation.

Concurrent with these evaluation efforts, the Agency is already planning an evaluation of the HACCP final rule. This evaluation will require expertise from beyond the Agency. The study is expected to address whether or not HACCP process control systems: (1) control production safety hazards, (2) reduce foodborne illness, (3) make inspection more effective, (4) increase consumer confidence, and (5) provide an opportunity for increased productivity.

Based on the tentative timeline, the evaluation reports will be due in fiscal year 2000, fiscal year 2001, and fiscal year 2002. This would allow adequate time to fully assess the implementation of HACCP in all meat and poultry plants.

Question. There have been complaints that inspectors in the field have had varying interpretations of what a HACCP plan should contain and how a HACCP plant should operate. Some feel this situation has bordered on disastrous and that it was caused by a lack of inspector training, yet we understand FSIS still believes "Just-in-Time" training is the best approach to preparing inspectors for HACCP. How can you explain your rational?

Answer. You can be assured that the Agency is concerned about the way inspection personnel carry out their regulatory responsibilities. The HACCP Technical

Training Program provides inspection personnel with the (1) required information and background on HACCP and its principles and (2) knowledge, understanding, and techniques to apply the inspection procedures established to determine a plant's compliance/noncompliance with Pathogen Reduction and HACCP requirements. The "just-in-time" approach allows the agency to:

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Further, we have established multiple means for employees to become more familiar and comfortable with the new Pathogen Reduction and HACCP inspection procedures as follows:

1. Computer Based Training programs;
2. Issuance of a Reference Guide on the HACCP-based inspection;
3. Around the clock availability of technical assistance from the Technical Service Center through the use of e-mail and a 800 number; and
4. Day-to-day guidance, support and coaching by supervisors.

Question. This subcommittee had serious concerns at the time the HACCP rule was being written about layering the new system on top of the old. To this point, FSIS has eliminated preapproval for equipment and blue prints. Is this all FSIS intends to do toward removing outdated requirements, or do you have more activities planned?

Answer. FSIS made a commitment to change its command and control regulations into performance standards as rapidly as it could, given current requirements for regulatory change.

We are providing the FSIS portion of USDA's Unified Agenda that will be published in the Federal Register in April 1998. The Agenda outlines the Agency's regulatory reform efforts, including Sanitation Requirements for Official Meat and Poultry Establishments, Rules of Practice, Performance Standards for Perishable, ready-to-eat Products, and Elimination of Requirements for Partial Quality Control Programs.

[CLERK'S NOTE.—The information referred to does not appear in the hearing record but can be reviewed in the April 1998 Federal Register]

Question. There have been complaints that FSIS is in fact forcing plants to write regulations from the old system—such as time and temperature cooling requirements—into their HACCP plans. How does this fulfill the commitment the Department made to Congress to eliminate layering?

Answer. FSIS does have regulatory requirements that need to be updated and the Agency has acknowledged that it needs to remove its command and control requirements and replace them with performance standards, which provide the regulated industry with more flexibility. The Agency is developing a consolidated set of regulations that bring meat and poultry requirements together in a single place. We are committed to writing our regulations in plain and simple language so that they can be understood by not only the regulated industry, but also by the public, which expects that the government will hold industry accountable for meeting regulatory requirements.

However, we acknowledge it is taking us longer to meet our goals than originally intended. Until performance standards are implemented, there are a number of regulations containing command and control requirements that will continue to be enforced. One such regulation is the requirement that poultry be chilled to a specific temperature within a certain time frame, depending on the weight of the bird: 40 degrees within eight hours for turkey (9 C.F.R. 381.91). This requirement was based on the best available scientific knowledge about the lag phase for bacterial growth. FSIS would be negligent in its food safety mission if it dropped this requirement before implementing a performance standard.

Question. The subcommittee understands there have been a few plant shutdowns so far. When FSIS makes a serious finding against a plant, what opportunity does the plant have to demonstrate compliance or dispute the findings before the plant is shut down? Is there a formal dispute resolution process in place? If not, why not?

Answer. If the Inspector-in-Charge (IIC) determines that there may be a HACCP system inadequacy because an establishment has multiple, recurring noncompliances, as specified in 9 C.F.R. 417.6, and has failed to adequately implement immediate and further planned actions as documented on the Noncompliance Record (NR) (FSIS Form 5400–4), the IIC should discuss this developing trend at the weekly meetings held with establishment management. If the IIC subsequently determines

that the trend of multiple, recurring noncompliances without successful interventions has led to a HACCP system inadequacy and that the marks of inspection should be withheld, he or she shall contact the District Office (DO) and provide all the relevant information for the DO to prepare a Notice of Intent to Suspend Inspection. The Notice shall:

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[The information (9 C.F.R. 417.6) follows:]

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(d) HACCP records are not being maintained as required in § 417.5 of this part; or

(e) Adulterated product is produced or shipped.

Agricultural Marketing Service

Questions Submitted by Senator Cochran

MARKET NEWS REPORTING

Question. A $320,000 increase is requested for fiscal year 1999 to expand reporting in foreign markets to include South and Central America and the Pacific Rim countries. What international markets does AMS report on currently? How do you decide which markets to cover within available resources?

Answer. AMS currently reports selected markets in Canada, Mexico, England, France, Japan, Germany, New Zealand, the Netherlands, Colombia, and Bulgaria. The markets covered are chosen on the basis of their significance or importance to United States interests either as suppliers, competitors, or markets of opportunity. Our reports only include limited data on the important markets in those countries.

Our requested increase would allow us to expand coverage in these and other markets in response to U.S. requests for information.

PESTICIDE DATA PROGRAM

Question. The fiscal year 1999 budget proposes to increase funding for the Pesticide Data Program from $13,616,000 to $23,730,000, an increase of $10,114,000. Of the increase requested, $2,480,000 is for continuation of the current Pesticide Data Program; $1,716,000 is to create a rapid response capability to support increased EPA demands for pesticide residue data to conduct dietary risk assessments; and $6,257,000 is to initiate a microbiological surveillance program on domestic and imported fruits and vegetables. Why is an 18.2 percent funding increase needed to maintain current Pesticide Data Program activities?

Answer. The increase of $10,114,000 mentioned in your question is the increase request for the entire Market Protection and Promotion activity. The combined budget net increase for the Pesticide Data Program, or PDP, is $10.453 million. The increase of $2.48 million for current Pesticide Data Program activities is needed to maintain statistically reliable data for use by EPA and other government and private entities in their decision-making. If the requested funding is not provided, we would have to reduce sampling levels and eliminate certain types of testing.

We would also be unable to update our technical capabilities. Since 1991, a new generation of instrumentation has become available, especially in chromatography and mass spectrometry. Furthermore, the computer systems for the laboratory instrumentation purchased in the early 1990's are not year 2000 compliant. The program needs to invest in replacement instruments or upgrade present instrumentation to make them compatible with present advancements in technology and year 2000 compliant.

Question. The budget indicates that if the requested increase of $2.48 million is not provided for current Pesticide Data Program sampling and testing, sampling in Colorado, Maryland, and Wisconsin would be eliminated, and either one other major state would be dropped or funding to the remaining participating states would be reduced by 13 percent. Why have you determined that Colorado, Maryland and Wisconsin would be dropped from the program instead of reducing funding across-the-board if the requested funding increase is not provided?

Answer. Reducing funding to the states across the board is not an option since the sampling in Colorado, Maryland and Wisconsin is at a minimum level now and those states cannot maintain viable programs if reduced further. Even with the three states leaving the program, the remaining states will still have to absorb a 13 percent decrease in funding which will mean reduced staffing and withdrawal of services in those states. Alternatively, having one of the seven remaining states leave the program would have the least impact on program effectiveness while still retaining regional balance. Ohio or Michigan would be one of the likely candidates.

Question. Which states are currently participating in the Pesticide Data Program? How many State employees in each of these states are currently being supported with federal funds through this program?

Answer. The 10 States in the 1998 Program and number of employees expressed as staff years are: California—23, Colorado—2.5, Florida—12, Maryland—3, Michigan—12, New York—17, Ohio—7.5, Texas—15, Washington—12.5, and Wisconsin—1.5. The total number of State staff years is 106.

Question. Which fruits and vegetables are currently being tested and sampled through the Pesticide Data Program in each of the participating states?

Answer.

[The information follows:]

PDP COMMODITY SAMPLING AND TESTING LOCATIONS

State collecting samples (No. for F&V) (No. milk)	Apple juice (AJ)	Green beans (GB)	Whole milk (MK)	Orange juice (OJ)	Fresh straw-berries (ST)	Sweet pota-toes (SW)	Fresh pears (PE)	Canned spin-ach (SP)	Fresh toma-toes (TO)	Winter squash (WS)	Grape juice (GJ)
California (14) (milk, 14)	CA1	CA1 US1	CA1	CA1	CA1 US1	CA1	CA1 US2 WA1	CA1	CA1	CA1	CA1
Colorado (2) (milk, 2)	MI1	MI1 US1	CA1	WA1	WA1 US1	MI1	US1 WA1 US2	WA1	MI1	MI1	MI1
Florida (7) (milk, 5)	TX1	TX1 US1	FL2-WH	FL1	FL2 US1	TX1	TX1 US1 WA1 US2	FL1	FL1	TX1	TX1
Maryland (4) (milk, 5)	CA1	CA1 US1	CA1	CA1	CA1 US1	CA1	CA1 WA1 US2	CA1	CA1	CA1	CA1
Michigan (6) (milk, 6)	MI1	MI1	FL2-	WA1	WA1	MI1	US1 WA1 US2	WA1	MI1	MI1	MI1
New York (9) (milk, 10)	NY1	NY1 US1	NY1	NY1	NY1 US1	NY1	NY1 US1 WA1 US2	NY1	NY1	NY1	NY1
Ohio (6) (milk, 5)	OH1	OH1 US1	NY1	OH1	NY1 US1	OH1	OH1 US1 WA1 US2	OH1	OH1	OH1	OH1
Texas (8) (milk, 6)	TX1	TX1 US1	FL2-WH	FL1	FL2 US1	TX1	TX1 US1 WA1 US2	FL1	FL1	TX1	TX1
Washington (4) (milk, 4)	MI1	MI1 US1	FL2-WH	WA1	WA1 US1	MI1	US1 WA1 US2	WA1	MI1	MI1	MI1
Wisconsin (2) (milk, 8)	OH1	OH1 US1	NY1	OH1	NY1 US1	OH1	OH1 US1 WA1 US2	OH1	OH1	OH1	OH1

LAB CODES: Gulfport (NMRAL)—US1; California, Sacramento—CA1; Colorado (Sampling Only); Florida, Tallahassee—FL1; Florida, Winter Haven—FL2; Maryland (Sampling Only); Michigan, East Lansing—MI1; Gastonia, NC—US2; New York, Albany—NY1; Ohio, Reynoldsburg—OH1; Texas, Brenham—TX1; Washington, Yakima—WA1; and Wisconsin (Sampling Only)

Question. How much of the current Pesticide Data program currently supports equipment costs? Of the $2.48 million increase requested, how much is for equipment?

Answer. The present PDP equipment budget is essentially zero. If states can realize savings through reduced indirect costs or economies in staffing, they can apply the funds toward equipment purchases. Such savings would be insufficient to maintain or implement new and more efficient technologies. Since PDP's inception in 1991 an entire new generation of instrumentation has become available, especially in the area of chromatography and mass spectrometry. Most computer systems for laboratory instrumentation are not Year 2000 compliant. However upgrades for certain instrumentation software are available to correct this situation. Of the $2.48 million requested, a minimum of $600,000 is needed to invest in replacement instruments or upgrades for year 2000 compliance.

Question. Please describe the $1.7 million rapid response capability which you say you need to support increased EPA demands for pesticide residue data. What additional data does the EPA need and specifically what will this data be used for?

Answer. The EPA is required to review over 9,000 tolerances over the next ten years to meet the requirements of the Food Quality Protection Act, or FQPA. EPA's initial plan is to reevaluate tolerances for pesticides with a common mechanism of action such as organophosphates and N-methylcarbamates. Also, when factoring in EPA's Dietary Risk Assessment System criteria, more pesticides will fall under the acute rather than chronic classification. The acute pesticides will require single serving size studies in order to meet the criteria of "no health concern" for infants and children.

EPA needs data for most commodities for which a pesticide is registered in order to conduct effective dietary risk assessments under FQPA guidelines and assure compliance with the new stringent standards. The first part of PDP rapid response would conduct modified residue studies for these commodities, for example, 100 to 300 data points over a one to two year period rather than 600 samples or more over two or more years. These rapid response situations will require minimal method development investment and can be done with minimal method validation with no need to assess laboratory capability to test new pesticides. Some commodities which may be considered under this arrangement are lemons, selected berries, nectarines and so forth.

The second part of this response is single serving size studies for specific acute exceeder pesticides or group of pesticides, based on a composite sample analysis exceeding predetermined target level. Crops considered for these studies would already have been studied previously in the testing program. PDP already has experience in designing these studies. One such study was for aldicarb/potatoes in 1997, using a multi-residue method, therefore, the data were also applied to carbofuran at a later date.

Question. You are requesting a $6.2 million increase for the Pesticide Data Program to initiate a microbiological testing program. Please tell us why this new program is needed, whether any testing of this type is done currently and who is doing it, and how this program will work.

Answer. Although the U.S. domestic food supply is unmatched in both quantity and quality, sporadic cases of microbiological and viral contamination and parasitic infestation accounted for 90 percent of the confirmed food borne disease outbreaks nationwide. Apparently, microorganisms once thought under control are adapting to their environments, developing resistance to conventional food processing operations, and are re-emerging with increased pathogenicity. The risk of contracting food borne illness may increase with questionable practices in food production, the mass preparation of meals, the trend to consume a greater proportion of meals away from home, the emphasis to increase fresh fruits and vegetables in the diet and product distribution logistics. This could be especially true where produce is imported from sources which may have less rigorous sanitation standards.

The President mandated a Food Safety Initiative and a Produce and Imported Foods Safety Initiative. Under these initiatives, FDA and USDA share the responsibility for developing a research program aimed at reducing disease caused by food borne microbes and their natural products. The President also directed FDA and USDA to issue guidance on good agricultural practices and good manufacturing practices for fruits and vegetables. It is generally agreed that there are a number of missing pieces of information in the scientific basis for reducing or eliminating pathogens in the agricultural setting. One of those missing pieces is valid statistical information on the present day level of fecal contamination and pathogenic contamination of the nation's fresh fruit and vegetable supply. Without this information, it is very difficult to determine if recommended changes in the production and handling of these commodities are effective. This program is designed to provide this

piece of the missing information. It is also hoped that once this statistical data is available to both government and the public, innovative minds in other disciplines will make use of it in research areas that have not yet been considered.

Statistically valid testing of pathogenic and fecal contamination in produce available in this country is not being performed. The current work being done by the Centers for Disease Control and Prevention, or CDC, FDA, and the States supports regulatory mandates and outbreak episodes. CDC has the primary responsibility for surveillance and tracking of both communicable and food borne illness. FDA provides support to this effort by funding surveys and notifying CDC of findings related to regulatory and laboratory investigations. CDC also relies on reports from State and local health departments to estimate the number of food borne illness cases occurring across the country. These reports are based on outbreak information from one or more individuals experiencing a similar illness, depending on the source. Local and State health departments conduct an investigation to identify the source of contamination and the specific food, if possible, before notifying CDC. Reports are limited by the ability of State and local authorities to follow up leads and report investigations to CDC. For example, outbreaks involving restaurants or institutions are more likely to be recognized than those involving foods prepared in the home or processed foods. In addition, the information reported can also differ widely by State, with some States having no surveillance staff specifically assigned to monitor for the presence of key pathogens and spoilage organisms in food and water.

The Microbiology Data Program, or MDP, would use the infrastructure of PDP. All the elements that make PDP scientifically-sound will be incorporated into MDP. The same States performing work for PDP will perform work for MDP. The same samplers that obtain samples for PDP will be trained to gather the samples for MDP. A rigorous laboratory quality control program will be initiated to ensure that the results from various laboratories are comparable. The number of samples taken at each site will be statistically determined by NASS and the electronic transfer of data from the laboratories to AMS will mirror the data transfer for PDP. The data will be analyzed for accuracy and published in an annual summary. Commodities will be chosen based on per capita consumption and seasonality, and the organisms for testing will be chosen by USDA officials with recommendations from the scientific community.

It is expected that seven staff years will be required for this program. It is anticipated that the ARS, FDA, and CDC will provide expert scientific advice and will make use of the resulting data, but will not receive any funds from the program. Some funding for statistical work will go to NASS, but at least 75 percent of the funds will go to the States performing the sampling and analysis.

Question. How will AMS work with the Agricultural Research Service, the Centers for Disease Control, the Food and Drug Administration, and participating States on the requested microbiological testing program initiative?

Answer. AMS scientists will confer with scientists in the ARS, CDC, FDA, and academia to obtain the best scientific advice on technical aspects of the program through surveys and informal consultations with experts. The ARS, CDC, and FDA would also have access to any pathogenic organisms isolated in the Microbiological Data Program, or MDP, for use in ongoing research projects. ARS is interested in examining any isolates obtained to expand their collection of organisms and to be able to correlate antibiotic resistance to areas of the country and perhaps production practices. The FDA is interested in determining the genetic relationships of pathogens isolated from various commodities from various parts of the country. This information might reveal the pathways of dissemination of pathogens. In addition, FDA would be able to use the data generated to determine whether recommended production modifications are having a positive effect on the microbial level of fresh fruits and vegetables and to determine the risk to the food supply relative to the microbial load. Using genetic fingerprinting, the CDC hopes to use the information generated in the MDP to help trace the source of food infection outbreaks. The Economic Research Service of USDA is very interested in obtaining statistically valid information for use in its projections regarding the economic impact of food borne outbreaks. Any additional data developed by these agencies that is not confidential, would be transmitted back to the MDP program for inclusion in the published data.

To implement MDP, AMS will initiate agreements with the States currently participating in PDP—California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin. States will collect samples at terminal markets and distribution centers. Those States without adequate microbiology laboratory capability will serve as collection centers with the analyses performed in other state laboratories or in an AMS laboratory. Those States with appropriate laboratory capabilities will perform the required analyses and electronically transfer the resulting data to AMS. We estimate that the States will receive at least 75 per-

cent of the available funds. All participating State and AMS laboratories will participate in a stringent quality assurance program which will include analysis of check samples and on-site laboratory reviews. Those States currently in PDP have informally expressed interest in participating in MDP.

Question. Please prioritize the increases requested for the Pesticide Data Program.

Answer. The priority is as follows: First, $2,480,000 for continuation of the current Pesticide Data Program. Second, $6,257,000 to establish the Microbiology Data Program. Third, $1,716,000 to create a rapid response capability to support increased EPA demands for pesticide residue data to conduct dietary risk assessments.

SECTION 32 COMMODITY PURCHASES

Question. Please list the commodity purchases made under the emergency surplus removal program in each of fiscal years 1996 and 1997 and in fiscal year 1998 to date, and the reason for each removal action

[The information follows:]

The emergency surplus removal program is a mechanism used to stabilize market conditions. Commodities that are determined to be in overabundant supply are acquired to accomplish the purpose of clause (2) of Section 32. The goal also is to encourage the domestic consumption of commodities by diverting them from normal channels of trade and commerce and donating them to schools, institutions, and other domestic feeding programs.

Emergency surplus removal

Fiscal year 1996

Item	*Dollars (millions)*
Beef roast	$6.4
Blueberries, frozen	10.1
Date pieces	1.9
Dried figs	2.4
Fig nuggets.	0.4
Orange juice, canned	13.3
Potatoes, fresh	1.5
Prunes, dried	6.4
Prunes, puree	1.6
Salmon, canned	10.0
Salmon nuggets	2.2
Total	56.2

Fiscal year 1997

Apricots, canned	$2.1
Apricots, frozen	1.5
Beef, boneless	6.4
Beef roast	2.1
Beef, ground	19.1
Cheese	5.0
Cherries, canned	3.0
Cherries, frozen	2.8
Date pieces	1.6
Fig nuggets	1.3
Figs, dried	2.6
Grapefruit Juice	2.3
Orange juice	5.5
Peaches, canned	2.9
Peaches, frozen	0.7
Pork rib patty	8.8
Potato flakes	1.5
Potato granules	4.1
Potato oven fries	1.1
Potato rounds, frozen	3.3
Potato slices, dehydrated	6.3
Potato wedges, frozen	3.1
Potato slices, canned	4.0
Salmon, pouched	1.3

Turkey	8.5
Total	100.9

Fiscal year 1998 through 3/20/98

Salmon	$7.1
Turkey	26.4
Navy beans	1.6
Prunes, dried	5.8
Peaches, frozen	4.5
Prune puree	0.6
Unused authorization	62.0
Total	108.0

MARKET DEVELOPMENT AND ASSISTANCE

Question. Funding of $1 million was provided in fiscal year 1998 for AMS to assist Alaska in marketing salmon. The fiscal year 1999 budget indicates this assistance is complete. Please describe the marketing efforts supported with this funding.

Answer. Of the $1 million provided for marketing assistance to Alaska, $50,000 was designated for the promotion of agricultural commodities by the Alaska Division of Markets, or ADM. The Alaska Fisheries Development Foundation, Inc., or AFDF, will receive $880,000 for marketing Arctic-Yakor-Kuskokwin salmon. Based on a review of ADM's and AFDF's marketing plans, AMS has submitted grant agreements to both groups. Funds will be distributed as soon as AMS receives the signed agreements from ADM and AFDF.

Question. What agricultural marketing problems and opportunities have been addressed through projects funded through the Federal-State Marketing Improvement Program?

Answer. Federal-State Marketing Improvement Program, or FSMIP, funds are allocated competitively among State departments of agriculture or other appropriate State agencies, for a wide range of research and service projects aimed at improving the marketing, distribution, and utilization of agricultural products. Federal grants, which must be matched by non-federal funds or in-kind resources, have averaged about $50,000 each in recent years, resulting in approximately 25 proposals funded per year. I will provide some examples of the marketing problems and opportunities addressed for the record.

[The information follows:]

The Global Marketing Support Service at the University of Arkansas is providing information and other assistance to small- or mid-sized producers of specialty food and wood products to further their efforts to enter and compete effectively in targeted international markets.

FSMIP provided assistance to the Missouri Department of Agriculture in developing a prototype market reporting system which more accurately reflects prices paid by packers and processors for slaughter hogs by accounting for premiums and discounts associated with carcass leanness. After operating on a pilot basis in Missouri during the past year, this system now is being extended to other areas under the Federal-State Market News Service.

Funds provided to the Illinois Department of Agriculture, in cooperation with the University of Illinois, have been used to identify market opportunities for specific varieties and grades of soybeans used in food products in South Korea and other Asian markets. A second project, with the same cooperators, is aimed at improving farmers' and country elevator managers' access to information about the value of soybeans based on differences in oil and protein content as measured by Near Infra-Red technology.

Kansas University, in cooperation with the agricultural marketing division of the State Department of Commerce, is identifying consumer demand and transaction costs for locally-grown produce through alternative market channels or marketing organizations, including producer cooperatives.

ORGANIC CERTIFICATION PROGRAM

Question. An increase of $505,000 is requested for fiscal year 1999 to continue implementation of the Organic Certification Program. What is the fiscal year 1998 level of funding for this program?

Answer. A total of $490,000 was made available in the 1998 appropriation for the Organic Certification Program. AMS estimates that an additional $362,000, for a

total of $852,000 from its Marketing Services account, will be needed in fiscal year 1998. A reprogramming proposal is under review within the Department.

Question. What is the current staffing (FTE) level for the Organic Certification Program? What staffing (FTE) level is proposed for the program for fiscal year 1999?

Answer. The current staffing level for the National Organic Program is 10 staff years. AMS proposes 12 staff years for fiscal year 1999.

Question. Once the Organic Certification Program is fully established, growers and handlers and certifying agents are to be assessed fees to recover program costs. The user fees collected will be deposited in the Treasury under current law. Please provide the statutory language that would need to be included in the appropriations Act to allow these fees to be credited to the Appropriations account to cover program costs.

Answer. A technical amendment to the Organic Foods Production Act of 1990, or 7 U.S.C. 6506, was adopted by conferees as section 601 of the Agricultural Research, Extension, and Education Reform Act of 1997, S. 1150. S. 1150 is pending final action by the Congress. The language, which authorizes the retention and use of the fees, is added at the end of section 2107 of the Organic Foods Production Act of 1990.

[The language follows:]

"(d) Availability of Fees.—

"(1) Account.—Fees collected under subsection (a) (10) (including late payment penalties and interest earned from investment of the fees) shall be credited to the account that incurs the cost of the services provided under this title.

"(2) Use.—The collected fees shall be available to the Secretary, without further appropriation or fiscal year limitation, to pay the expenses of the Secretary incurred in providing accreditation services under this title."

Question. When do you expect a final rule to be published?

Answer. The current plan is to publish a final rule by the end of calendar year 1998.

Question. When do you expect the program to be fully established and user fees to be charged?

Answer. The proposed rule lays out an 18-month implementation schedule following publication of the final rule. During the first 6 months, applicants seeking accreditation for certification status will pay an application fee and an administrative fee. Operations wishing to be certified organic will then have 12 months to be certified, and will pay fees into the program. Site visits to the certifying agents will take place during this 18-month period and will generate fees. After the 18-month period, AMS anticipates the program will be self-supporting.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. AMS' annual performance goals are directly linked to its mission and strategic goals. The agency's program activities are grouped according to the agency's two strategic goals; the performance goals are listed by program activity. I will provide a table that shows the linkage between each activity and goal.

[The information follows:]

SUMMARY OF AMS PERFORMANCE GOAL LINKAGES, FISCAL YEAR 1999

Fund	Goal 1	Goal 2
Marketing services:		
Market news, appropriation	X	.....
Standardization, appropriation	X	.....
Shell egg surveillance, appropriation	.....	X
Federal Seed Act Program, appropriation	.....	X
Organic Certification Program, appropriation	X	.....
Pesticide Recordkeeping Program, appropriation	.....	X
Pesticide Data Program, appropriation	X	.....
Market development and assistance, appropriation	X	.....
Wholesale market development, appropriation	X	.....
Transportation services, appropriation	X	.....
Payments to States and possessions: Federal-State Marketing Improvement Program, appropriation	X	.....

SUMMARY OF AMS PERFORMANCE GOAL LINKAGES, FISCAL YEAR 1999—Continued

Fund	Goal 1	Goal 2
Section 32:		
Commodity purchase services, appropriation	X	.....
Marketing agreements and orders, appropriation	.....	X
User funded:		
Grading and certification, user funded	X	.....
Plant Variety Protection Act Program, user funded	.....	X
Commodity research and promotion acts, user funded	X	.....
Perishable Agricultural Commodities Act Program, user funded	.....	X

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. AMS developed a performance goal for each budget activity. Since we used the budget activities as the framework, we did not encounter any difficulties.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, the agency's performance plan links performance measures to budget activities. AMS budget accounts include multiple activities; each AMS activity has a performance measure.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. AMS' performance planning structure does not differ from the budget structure. The activities in the annual performance plan are the same as the activities in the budget justification. The budget justification lists AMS activities by account, whereas the performance planning structure lists the activities by goal.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. No, AMS does not plan to propose any changes in its account structure.

Question. How were performance measures chosen?

Answer. Performance measures were developed through a consensus of program personnel and agency managers. As part of its strategic plan development, AMS established committees of agency program personnel for each activity. These committees were responsible for developing performance measures for their activities based on the strategic plan. AMS also formed a Strategic Planning Action Team at the Associate Deputy Administrator level. This team monitors the performance goals in the annual plan, gathers actual performance data semiannually, and prepares a report to the Administrator.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Since we were already collecting data on a budget activity basis, there was no significant increase in costs.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. At this point, we do not believe there will be a problem, but since the performance goals are new, we cannot be sure.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results.

Answer. Since the AMS performance goals track the budget activities, we believe that the Subcommittee would be interested in all of them.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. We attempted, where possible, to provide outcome measures for each program area.

Question. Do you believe your program managers understand the differences between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes, we believe AMS program managers understand the differences. The problem, in some instances, was that measuring outcome was not possible and we had to use surrogate measures instead.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Some examples of customer satisfaction measures for external customers include the performance goal for market news services that is based on timeliness and the measures for wholesale market development and transportation services that are based on customer satisfaction survey results. None of our measures are specifically oriented toward internal customers.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. We developed the budget based on the agency's mission and strategic plan, then adjusted the performance goals as needed.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals.

Answer. Yes, we change the goal estimates based on the budget proposals. If the proposed budget number is changed, AMS program personnel can estimate the likely impact of the change on program performance. The performance goals and indicators reflect the requested budget levels.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. AMS has systems in place to measure and report program performance on a semiannual basis for management use.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

—Have you faced such difficulty?

—Would the linkages be clearer if your budget account structure were modified?

—If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

—How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We have not faced any difficulty in linking dollars and results since we are using an activity basis under both the annual performance plan and the budget structure. Therefore, there is no need to change the budget account structure for AMS to improve the linkages.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

—If so, what steps have you identified to prepare, anticipate and plan for such influences?

—What impact might external factors have on your resource estimates?

Answer. We included a discussion of external factors in the strategic plan. The discussion of performance goals in the performance plan briefly mentions external factors that could influence goal achievement for some of the agency's activities. AMS programs try to anticipate and prepare for uncontrollable external factors such as weather, economics, production levels, and consumer preference by closely monitoring the agricultural industry and its environment.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. No, rather the plan process has helped us to understand the complementary nature of our activities with others within and outside the Department.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

—To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

—Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. We believe our performance measures are the best that are currently available to reflect the accomplishment of our mission. We have not experienced any difficulty, but we plan to periodically reassess our performance measures to assure that they effectively measure AMS performance.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No, we do not see the need for any substantive revisions.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

ORGANIC STANDARDS

Question. The Department finally published proposed rules to establish national organic standards after many years of requests by the organic farming community. However, the proposed rule appears to have raised concerns by many about various practices that may be included in the standards. You suggest the final rule may be published by early in fiscal year 1999. Given all the past problems in publishing a proposed rule and the problems that have surfaced since, do you think early fiscal year 1999 is a realistic target?

Answer. Secretary Glickman has stated that the final rule will be in place by the end of the year. We are committed to meeting that deadline. We are proposing to reprogram $362,000 for Organic Certification in fiscal year 1998.[1] With those additional funds and the funding increase requested for fiscal year 1999, we should have the resources and personnel we need to meet our goal.

Question. When the organic movement began, many thought of it as a passing fad. What do you see as the long-term outlook for this method of production and marketing?

Answer. The size of the organic industry has risen dramatically in recent years. In 1996, total domestic retail sales of organically-grown food products reached $3.5 billion, up from $78 million in 1980. Sales of organically-grown food have grown at approximately 20 per cent per year since 1990. From 1992 to 1994, certified organic cropland production in the U.S. expanded from 473,000 acres to 667,000 acres, and is expected to reach 2 million acres by the year 2000.

U.S. exports of organically-grown products totaled $203 million in 1994, or about nine percent of the organic output. Export markets may become more substantial and offer price premiums for organic products, with increased world-wide consumption of organically produced food. The organic market share in the European Union, or EU, has been projected to reach 2.5 percent of total food consumption expenditures in 1998. Austria expects its organic market share to equal one third of all food sales by the year 2000. In 1994, France and Germany combined had total retail sales of organic foods equal to that of the United States in the same year, approximately $2 billion. Japan's retail sales for that year were estimated to be $688 million. Other EU countries report growth rates equal to or greater than the current growth rate in the United States, which is about 20 percent per year.

Question. AMS recently completed a study on the Little Rock River Market. Can you provide an overview of the finding and recommendations of that study?

Answer. In September 1996, AMS initiated a cooperative agreement with the city of Little Rock to conduct an operational management analysis of the River Market, a public market that had recently opened in downtown Little Rock. A goal of the study was to develop a strategy for River Market to position itself as a preferred fresh food shopping destination, providing quality products built on farmer and grocery trade. A preliminary report was presented to market management and the City outlining a series of recommendations for improving operating procedures and management practices at the market.

Included among the recommendations were:

—Institute a monthly advertising fee to conduct ongoing and long-term promotional and marketing campaigns.

—Hire a committed, strong, focused, visionary manager and give that person the authority to make decisions and orchestrate the market's success.

—Reduce the number of days the market is operating to coincide with consumer shopping preferences.

—Enhance security, particularly at night, to ensure a safe environment for the market.

—Enforce terms of lease agreements, particularly as they relate to Use Clause, Stall Design, and Rental Rates. Excesses and abuses should be curtailed.

—Consider implementing a validation system that would provide free parking for shoppers.

Question. When will the study be available?

Answer. A final draft is currently being prepared which further describes market data, demographics, and structural features of the market. This draft is scheduled for completion by May, 1998.

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[1] A reprogramming request is under review within the Department.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

AGRICULTURAL QUARANTINE INSPECTION

Question. The fiscal year 1999 President's budget request proposes an increase of $12,000,000 for the agricultural quarantine inspection (AQI) user fee program. Does APHIS expect to use any of its operating reserves in fiscal year 1998? If yes, how much and for what purposes?

Answer. Yes, in fiscal year 1998 APHIS will need to access $12 million from the AQI Reserve Account to fund the operating shortfall that exists between the $100 million Federal Agriculture Improvement and Reform (FAIR) Act of 1996 threshold and the $88 million in appropriated funds. The FAIR Act changed the way funding is made available for most AQI activities and provided a mechanism to meet increased demands for AQI services. The FAIR act was designed to transition the AQI User Fee program into a true demand-driven user fee program in fiscal year (FY) 2003 based on the assumption that the program would receive $100 million in annual appropriated funds through fiscal year 2002 and finance additional costs with user fee collections that exceed $100 million. However, if less than $100 million is appropriated, the shortfall must be funded from the AQI Reserve Account. In both fiscal year 1997 and 1998 the AQI User Fee program was appropriated less than $100 million, $98 million and $88 million, respectively. We began fiscal year 1998 with a reserve account balance of $17.8 million on a cash accounting basis. However, after using the reserve account to finance the fiscal year 1998 appropriations shortfall, only $5.8 million is projected to remain available in the AQI Reserve Account for fiscal year 1999. This is a critically low reserve balance for a large-scale program such as AQI. Continued annual appropriations of less than $100 million will gravely threaten the program's ability to perform its mission. The proposed fiscal year 1999 $12 million program increase will help APHIS avoid further depleting the AQI Reserve Account to finance user fee inspection services.

PEST AND DISEASE EXCLUSION ACTIVITIES

Question. A recent General Accounting Office (GAO) report advised APHIS to improve its point-of-entry inspection program. What actions are being taken by APHIS to address this report? How much money has been earmarked in the proposed fiscal year 1999 budget request to address these concerns?

Answer. APHIS proposes to address these concerns by providing additional inspectors at new ports of entry; expanding facilities at the Mexican and Canadian borders, and Hawaii; and further expanding the detector dog program along the Mexican border. An increase of $2.6 million is included in the fiscal year 1999 budget to fund these improvements.

Question. To address the GAO report, APHIS has stated that it will hire additional staff for inspections in Hawaii, Canada, and Mexico. How many additional staff will be devoted to conduct predeparture inspections in Hawaii, and preclearance inspections in Canada and Mexico? How many staff does Hawaii need to be considered fully staffed for all AQI programs?

Answer. The fiscal year 1999 increase of $2.6 million for AQI appropriated activities supports nineteen additional staff years for predeparture inspections in Hawaii; 3 additional staff years for preclearance inspections in Canada; and 18 additional staff years for preclearance inspections along the U.S./Mexican border. Two additional inspectors above the increase level would provide optimal AQI staffing in Hawaii.

Question. With the increase in world trade and global competitiveness, many responsibilities have been created to comply with the new World Trade Organization (WTO) obligations. Which responsibilities fall under the responsibility of APHIS?

Answer. APHIS personnel have made and continue to make major contributions in resolving issues related to the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures. Several USDA agencies, including FAS, ARS, FSIS and all three Marketing and Regulatory Programs mission area agencies (AMS, APHIS, and GIPSA), spend considerable time and resources in resolving the many animal and plant health issues that arise due to increasing world trade and global competitiveness. In fiscal year 1996, APHIS and USDA SPS accomplishments included the resolution of 38 trade barrier issues worth nearly $7 billion in exports of U.S. agricultural commodities, representing about 12 percent of the $60 billion in U.S. agricultural exports that year. In 1997, SPS accomplishments included the resolution of over 70 issues worth over $1 billion.

APHIS provides critical technical input for protecting American agriculture while facilitating trade. APHIS must maintain monitoring and surveillance activities in countries that have a trade relationship with the United States while, at the same time, ensuring that domestic agricultural products have access to emerging markets.

Question. How does the proposed fiscal year 1999 budget request address the financial obligations placed on the agency?

Answer. The demands facing APHIS have shifted substantially as a result of agricultural trade liberalization achieved during the GATT Uruguay round. The workload associated with regulating imports and certifying exports is increasing. As traditional barriers such as tariffs and quotas are eliminated under the WTO and other trade agreements, the temptation has increased for countries to adopt health-related requirements as disguised trade barriers.

This reality increases the need for APHIS to assertively execute its role as a leader in the SPS area. First, APHIS conducts risk analyses to monitor epidemiological pest and disease trends and conduct or participate in risk analysis for specific plant and animal commodities and pathways of introduction. Second, APHIS is continuing to assess and make regulatory decisions on an increasing number of import requests. These regulatory decisions must be in accordance with WTO rules which require greater documentation, scientific analysis, and transparency than in the past. Third, an increasing portion of our resources is being used to support U.S. agricultural exporters who encounter foreign technical trade barriers. Our scientific staffs play a critical role in the negotiation and resolution of these SPS issues. Fourth, APHIS spends an increasing amount of time and resources working with its foreign regulatory counterparts to develop international standards and address a variety of pest and disease issues which affect trade. Increasingly, APHIS must also gather technical information in foreign countries on surveillance and monitoring procedures and certify these systems. These international activities and relationships are becoming increasingly vital for promoting harmonized regulatory approaches which allow U.S. products to compete on a level playing field.

This expanding function presents certain challenges for APHIS as it seeks to reassess priorities and existing processes for managing sanitary and phytosanitary issues. APHIS is realigning its work processes to fit these changing needs, but increasing demands place a strain on current resources and the ability to update the skills of the workforce. Accordingly, we have requested increases in several line items to help us address sanitary and phytosanitary issues. Specifically, we request increases of $4.6 million for our animal health monitoring and surveillance program and $374,000 for our pest detection program. These program increases would enhance our domestic infrastructure and surveillance systems to certify the health status of American agricultural products. To specifically address SPS issues, we request an additional $694,000 for international programs, $173,000 for import/export inspection, and $2.6 million for our agricultural quarantine inspection appropriated program.

Question. Under the import/export program, does APHIS' workload address the President's Food Safety Initiative? If yes, where and how much does the fiscal year 1999 proposed budget request contain?

Answer. Because APHIS is not directly involved in the President's Food Safety Initiative, the fiscal year 1999 workload projections for the import/export program do not address the initiative. However, APHIS has technical expertise in the area related to animal and plant health and is well-suited to advise the Food and Drug Administration and other participating agencies within the USDA as they address the Food Safety Initiative.

KARNAL BUNT

Question. How much does the agency plan to spend on Karnal Bunt in fiscal years 1998 and 1999?

Answer. In fiscal year 1998, we plan to spend approximately $4.3 million on operating costs, which will fund surveys, testing, regulatory, and laboratory work. We expect the funding need for these activities to decrease by fiscal year 1999. However, we will not have an accurate cost estimate for fiscal year 1999 until at least July 1, 1998. At that point, enough fields will have been harvested to give us some indication of the level of activities needed for fiscal year 1999. So far through our Karnal Bunt (KB) Emergency Program, we have been able to prevent the presence of KB in the United States from crippling the $5.9 billion wheat export market. Preserving this market is highly dependent on our successful continuation of the regulatory program and ongoing national survey to document that major wheat-producing areas of the U.S. are free of KB.

Question. Has the private sector agreed to finance this program?

Answer. There is no consensus among the private sector about financing this program. Although industry groups within the major wheat-producing areas of the country are generally supportive of the KB National Survey, grain handlers in some regions are resistant. By fiscal year 1999, there will be a decreasing need for extensive survey. This is because our intensive National Survey of 1996–97 has provided ample evidence that KB is not present at detectable levels in unregulated U.S. wheat production regions and is not a production or quality problem in our system.

Currently, we know that at least some of the sample collection element could be transferred if industry is willing to accept such a transfer. We believe we could also effectively transfer parts of the sample analysis element to private laboratories under accreditation processes. Also, we are working with the private sector to determine how parts of the data analysis and data management elements of the National Survey could be transferred. As long as our trade partners regard KB as a phytosanitary issue, the private grain sector should be willing to accept such a transfer and should want to take whatever measures may be necessary to assure trade partners that U.S. wheat meets import requirements. However, private sector acceptance of this transfer will depend on our ability to ensure that the private sector system would yield an official sample to meet WT Organization requirements.

SILVERLEAF WHITEFLY PROGRAM

Question. In the fiscal year 1999 President's budget, APHIS proposes to incorporate all components of the silverleaf whitefly program into the Biocontrol line item at the fiscal year 1998 funding level. Why is the agency proposing this?

Answer. Although we are proposing to incorporate the silverleaf whitefly (SLW) program into the Biocontrol line item, we plan to continue SLW activities in fiscal year 1999 at approximately the same level as in fiscal year 1997 and 1998. However, this transfer could provide greater flexibility in future years in allocating resources related to biological control methods for the SLW.

Question. Does the agency know if the industry agrees with this transfer?

Answer. The industry is concerned about this transfer. They believe that it may signal decreased funding for SLW activities in fiscal year 1999, but this is not the case. We plan to spend the same amount for SLW activities from the biocontrol line item in fiscal year 1999 as in fiscal years 1997 and 1998.

BOLL WEEVIL ERADICATION PROGRAM AND LOAN

Question. In your statement, Mr. Secretary, you indicated that a redirection of $12 million from the Animal and Plant Health Inspection Service (APHIS) appropriations to the boll weevil loan program has been proposed. However, the budget shows the loan program level would decline from $40 million in fiscal year 1997 to $30 million in fiscal year 1999. Why is this?

Answer. The boll weevil program, stays in the same areas for a few years, then rapidly expands into new zones. We understand that program leaders in Texas are considering a loan request of as much as $78 million. We also have indications of requests that will be made from other States. At the time the budget was developed, our assessment of the need for loans was $30 million. We have not had an opportunity to review the current thinking behind the requests and cannot determine at this time, whether there will be a need for funding of the magnitude indicated.

Question. APHIS plans to discontinue all cost-sharing program activities where the boll weevil no longer exists in the fiscal year 1999 budget. In which areas does the boll weevil no longer exist?

Answer. The boll weevil no longer exists in Virginia, North Carolina, South Carolina, Georgia, Florida, California, Arizona, most of Alabama, middle Tennessee, and northwestern Mexico.

Question. The boll weevil loan program was created to enhance the appropriated funds for the boll weevil eradication program. The fiscal year 1999 President's budget proposes to decrease the eradication program by $12.2 million. Last fiscal year, the President's budget proposed to decrease the program by $9.8 million.

Why does the agency continue to propose reductions in this program even though it knows the loan program is not capable of covering the costs of the program? Please explain how USDA proposes to utilize the $4 million proposed for the Boll Weevil Program in fiscal year 1999? How much of the APHIS funds go directly to the field and how much are attributed to administrative overhead? Since the program is continuing to expand, please provide the Committee with an analysis of whether the program can succeed without significant funding for federal cost sharing and for the FSA loan program—particularly while cotton prices are low and acreage is in decline.

Answer. Since boll weevil eradication has proven to be successful and profitable for cotton growers, program beneficiaries will assume a greater financial responsibility for program costs. Additionally, growers had expressed a desire to have primary control over the daily operations of their program.

In an effort to mitigate the impact of reduced Federal grants to the boll weevil eradication foundations, the USDA provided a loan program with very favorable terms which supplements funds raised through grower assessments and eases cashflow problems. In fact, the FSA loan program makes more total funds available for boll weevil program expansion than have been available under the traditional appropriations and grants approach. Because of the tremendous benefits cotton growers can gain from boll weevil eradication, we believe that they will choose to take advantage of the loan program. It provides a reasonable alternative that is cost beneficial.

The Agency proposes to use approximately $2 million to fund direct and indirect costs for the ten technical coordinators APHIS has placed throughout the active eradication area. The remaining $2 million would be allocated as cost-sharing funds among the active program areas.

Approximately 86.1 percent of APHIS' funding is allocated to the field for program delivery costs while 13.9 percent is allocated for agency and program-level support costs.

We believe the boll weevil eradication program can succeed with fewer federal cost-share funds and a flexible loan program. Cotton acreage has fluctuated significantly over the last two years, largely due to recent changes in farm legislation. These swings in acreage make it more difficult to provide the cash flow for the eradication program in each new area. High acreage during the expensive few years of eradication will result in high overall program costs. If acreage then declines in the post-eradication phase as loans are being repaid, grower assessments may not be sufficient to retire existing debt on schedule. Loans, therefore, must be flexible and the acreage accurately reported each year through FSA.

Question. What is the status of the memorandum of understanding (MOU) between APHIS and FSA which would provide for collection and sharing of crop acreage data in Boll Weevil Eradication zones which would facilitate administration of the program and collection of producer assessments? Is this consistent with report language which accompanied the fiscal year 1997 appropriations bill?

Answer. Both agencies agree that an MOU is not needed. Coordination of data is proceeding adequately to facilitate administration of the program and collection of producer assessments.

Yes, I believe that the Department is administering the program consistent with the Committee recommendations contained in Senate Report on the 1997 Act. In particular, we have developed working relationships with the foundations that actually carry out the boll weevil eradication program. Efforts by both FSA staff responsible for the loan program and APHIS staff responsible for the USDA's eradication program are closely coordinated, and we are making every effort possible to ensure that loan terms and conditions meet the needs of borrowers.

Question. Please provide the Committee with an explanation of how the Department is currently collecting crop acreage data. Is there concern about gaps and inaccuracies in crop acreage data figures under the Department's new collection procedures?

Answer. In most areas involved in eradication, FSA offices are involved, to varying degree, in collecting acreage information from producers. This information is provided by growers in accordance with State boll weevil eradication laws. It is critical that grower Foundations involved in the eradication program receive accurate and timely acreage reports from FSA. This information is used to bill growers for the assessments they voted to pay when they joined the program. Some States are very aggressive in enforcing their laws, while others are not.

Question. Does USDA have authority to allow producers to report their planted acreage? Does USDA have authority to share planted acreage data with private organizations who need such data?

Answer. Yes, the statutory authority to collect information such as reports on planted acreage is contained in Section 374 of the Agricultural Adjustment Act of 1938. No, the Department does not have authority to share the data with private organizations. Planted acreage reports are subject to a Privacy Act system of records and are exempt from Freedom of Information Act requests for sharing with private organizations.

YELLOWSTONE BISON

In fiscal year 1998, the Committee appropriated $1 million to plan, design, and construct a quarantine facility in Montana to hold and test bison leaving the confines of the Yellowstone National Park.

Question. What is the status of this project?

Answer. Discussions with the State of Montana are currently taking place to determine the best location for this facility and the roles and responsibilities of both APHIS and the State. Although a location has not been determined, APHIS has consulted with an engineering firm to put together a preliminary generic plan for construction. Upon selection of a site, a specific design plan for the facility will be developed. Once the design phase is complete, construction will begin. Due to the mild winter thus far in Montana, the need for such a facility has not been critical. APHIS expects that the facility will be operational by the winter of 1999/2000.

Question. How has the project contributed to the agency's strides in reaching a long-term solution?

Answer. The facility, when completed, will be consistent with the long-term solution to manage brucellosis in the Yellowstone bison population announced in June 1997 by State and Federal officials. The long-term solution includes capturing animals and sending them to quarantine facilities; providing the disease free animals to Native American Indian tribes; hunting bison in certain situations; and vaccinating the bison when a vaccine is approved.

Question. Has the agency spent any of the fiscal year 1998 appropriation of $1 million?

Answer. To date, APHIS has not spent any of the $1 million appropriated in fiscal year 1998 for this project.

Question. What is the next phase of this project and how much money will be needed in fiscal year 1999? Is this amount included in your fiscal year 1999 request? If not, why?

Answer. Upon completion of the construction phase, the operational phase of the facility will begin. Presently, discussions are taking place to identify the roles and responsibilities of APHIS and the State of Montana. Funds were not included in the fiscal year 1999 budget for this activity because at the time the budget was developed, funds had not yet been included in the fiscal year 1998 Appropriations Act to construct the facility. For this reason, APHIS did not anticipate a need for operating and maintenance funds in fiscal year 1999.

GOLDEN NEMATODE

Question. In 1997, APHIS, the National Plant Board, the potato growers' industry, and the Agricultural Research Service conducted an extensive review of the golden nematode program. Why has the plan not been implemented?

Answer. After a panel representing these groups conducted the review, they made several recommendations concerning the golden nematode program. In fiscal year 1997, we established an implementation team to review this panel's report, to determine which of the recommendations could be implemented, to establish a timetable for implementation, and to address the operational details associated with implementation. This implementation team consists of representatives from APHIS, ARS, New York State, Cornell University, New York State potato grower groups, the National Potato Council, and the American Association of Nurserymen. The recommendations and the actions we have taken on each follow:

(1) that the feasibility of eradication be tested in accordance with the parameters presented by the Panel, and that the USDA, the New York State Department of Agriculture (NYSDA), and Cornell University continue to conduct a joint golden nematode (GN) management program.

Since total eradication is not possible, the team advocated that some type of GN program must continue to prevent the pest from becoming more widely distributed.

(2) that the program should explore the possibility of developing other effective control methodologies.

We developed a steam heat treatment for farm equipment that we hope can replace methyl bromide by 2000. Also, we developed the "hatching factor," which uses a chemical that would cause GN to hatch prematurely. In addition, the team supported the idea that biotechnology may have some application in the long term to accelerate the development of new GN-resistant potato varieties.

(3) that the USDA or the New York State Department of Agriculture (NYSDA) work with potato growers to obtain a special local needs or general registration for Basamid.

The team advocated the registration of Basamid, although it would probably require a third-party registrant. The availability of Basamid would not significantly affect program operations.

(4) that the national GN detection surveys now in progress be completed.

The team favored the continuation of the golden nematode program and Federal quarantine. Also, it advocated the need for additional national surveys that would enable the program to identify and regulate infested properties in time to prevent further spread.

(5) that the program continue to intensely manage the GN in New York State.

The team will be appointing a subcommittee to determine to what extent Long Island should be regulated. Currently, only individual properties are regulated on Long Island. Also in New York State, we initiated and implemented GN-resistant potato variety crop rotation on exposed lands (those that are at risk of becoming infested) which will control GN populations and prevent further spread. This would reduce workload because we would not need to survey the lands that are in rotation as often or as intensely as other lands.

(6) that the GN management program be restructured to reduce workload.

The program could be restructured and workload reduced if New York State would be willing take a greater role in activities concerning the intrastate movement of farm equipment.

(7) that the federal-domestic quarantine be revised and the NYSDA evaluate the New York State parallel quarantine.

The team supported the idea that the Federal quarantine not be revised until it is determined what type of program funding would allow. Also, the team believes that the current quarantine is an effective mechanism for preventing GN spread.

(8) that ARS and Cornell University continue research and development efforts, that funds now provided to these efforts from APHIS and NYSDA be redirected to the regulatory and management program, and that federal funding for regulatory and management activities continue.

ARS and Cornell University will continue research and development efforts to develop GN-resistant potato varieties and a heat treatment technique for farm equipment since the availability of new resistant varieties is essential to the program's success. But most of the team favored ARS and/or Cornell University funding this work. In fiscal year 1997, APHIS funded these activities at $50,000.

Also, the team endorsed the idea that APHIS conduct a cost-benefit analysis of the GN program in an attempt to justify requests for additional funding.

(9) that potato commissions be consulted in developing research to identify other detection and control methods.

The National Potato Council and the American Association of Nurserymen were represented at the most recent implementation team meeting in February.

Question. Have other areas of the country become infested by the golden nematode?

Answer. No, there are no areas outside of New York State that are infested with GN.

Question. Under the circumstances, why is the fiscal year 1999 President's budget request proposing a decrease of $36,000?

Answer. We can achieve savings through the closing of our golden nematode facility in West Hampton Beach, Long Island, without impacting program operations. The employee now working in that office would be re-located to another office, but would still conduct most of the activities she is currently conducting. These activities include maintaining compliance agreements with growers and treating used farm equipment. The savings would be realized primarily through utility and maintenance costs.

WILDLIFE SERVICE OPERATIONS

Question. The agency has proposed changes to the Wildlife Services Operations program to reduce the disparities between the States cooperators who are receiving assistance from the Federal Government. Please provide the Committee with a list of all States participating in the program currently, the amounts the States contribute currently, and those States identified which would be affected by these proposed changes.

Answer. The following table contains the amount of net Federal appropriated funds and cooperator contributed funds by State for fiscal year 1997. Federal funds used for Congressional Directives, human health and safety work, protection of endangered species, migratory bird work, and basic program infrastructure costs are excluded from the Federal amounts listed. The balance reflects the Federal amounts which are directly contributed toward cooperative agreement activities.

[The information follows:]

State	Fiscal year 1997—	
	Appropriated	Cooperative
Alabama	.....	$142,116
Alaska	.....	347,407
Arizona	$306,793	323,608
Arkansas	18,890	.....
California	338,453	2,513,179
Colorado	534,997	236,519
Connecticut	.....	1,392
Delaware	.....	.....
District of Columbia	.....	.....
Florida	.....	88,710
Georgia	.....	118,343
Hawaii	.....	640,938
Idaho	672,186	488,089
Illinois	.....	280,275
Indiana	.....	20,703
Iowa	16,325	15,475
Kansas	25,500	65,267
Kentucky	.....	227,000
Louisiana	61,725	288,119
Maine	.....	135,157
Maryland	.....	50,340
Massachusetts	.....	53,490
Michigan	.....	31,915
Minnesota	.....	631
Mississippi	319,072	821,463
Missouri	.....	104,998
Montana	562,055	816,258
Nebraska	223,001	285,754
Nevada	593,659	637,232
New Hampshire	11,969	162,818
New Jersey	29,630	318,240
New Mexico	839,896	1,001,291
New York	.....	48,494
North Carolina	61,623	691,320
North Dakota	143,625	436,229
Ohio	.....	88,736
Oklahoma	551,429	1,099,536
Oregon	735,311	897,095
Pennsylvania	.....	13,993
Rhode Island	.....	2,075
South Carolina	28,312	311,024
South Dakota	231,458	1,032,867
Tennessee	19,952	404,848
Texas	1,574,520	5,383,783
Utah	853,825	1,035,008
Vermont	9,594	36,105
Virginia	30,700	258,917
Washington/Guam	95,031	2,929,073
West Virginia	.....	209,938
Wisconsin	357,540	1,036,177
Wyoming	701,924	571,845
Total	9,948,995	26,703,790

The following chart shows disparity amounts by state, based on the same formula used in developing the fiscal year 1999 budget proposal, but is based on fiscal year

1997 rather than fiscal year 1996 data. The formula used for determining disparity amounts involves totaling both Federal and cooperative funding, and then determining the amount below 50 percent of the total, which is then the disparity amount.

[The information follows:]

State	Fiscal year 1997—		Total program	Disparity
	Appropriation	Cooperator		
Arkansas	$18,890	.....	$18,890	$9,445
Colorado	534,997	$236,519	771,516	149,239
Idaho	672,186	488,089	1,160,275	92,048
Iowa	16,325	15,475	31,800	425
Wyoming	701,924	571,845	1,273,769	65,039
Total	1,944,322	1,311,928	3,256,250	316,196

Mr. Medley, you mention in your testimony that a survey was done of catfish farmers and that "68 percent of the respondents indicated they had spent some effort to avoid wildlife caused losses to their catfish crops."

Question. What does "spent some effort" mean?

Answer. In January 1997, the National Agricultural Statistics Service conducted a survey of catfish farmers regarding wildlife-caused losses in 1996. The results of the survey indicated that 69 percent of aquacultural producers suffered some type of damage from wildlife. Wildlife cost catfish producers about $17 million in 1996. Preventative measures most frequently cited by producers included shooting, vehicle patrol, scare tactics, and roost dispersal.

Question. What is the agency doing to avoid these losses?

Answer. Assistance is provided nationwide, with intense efforts concentrated in Alabama, Florida, and Mississippi, where three wildlife biologists are stationed. Wildlife biologists conduct onsite evaluations to assess damage and identify the species of bird or mammal causing the damage, and make control equipment available to producers. If exclusionary and scaring techniques fail to reduce losses, producers may now take a limited number of birds by lethal means, as a result of a cormorant depredation order recently issued by the U.S. Fish and Wildlife Services (FWS). In addition, APHIS' field research station in Starkville, Mississippi, conducts research and field studies to improve current control methods, and to develop new ones.

In addition, APHIS cooperates with the FWS in the development and implementation of a management plan to control damage caused by fish-eating birds to aquaculture resources in the mid-south. APHIS is also continuing to work with FWS to study the ecology, behavior, food habits, and migratory patterns of various fish-eating birds.

Question. How does the fiscal year 1999 budget request address the agency's preventive actions?

Answer. Funding to continue all current aquacultural assistance and research activities would continue at the current level, if cooperators increased contribution levels as proposed in the fiscal year 1999 request.

Question. Through the agency's actions in fiscal year 1997 and 1998, oral vaccines for the canine strain of rabies have been successful in stopping the spread of disease in Texas. Does the fiscal year 1999 budget request propose any spending for continued actions in Texas? If yes, how much?

Answer. The fiscal year 1999 request does not propose any funding for support of the Oral Rabies Vaccination Project in Texas. However, APHIS will support the Texas program with in-kind services totaling about $25,000.

Question. Oral rabies vaccine bait distributions, monitoring and surveillance activities in Vermont, Ohio and New York have helped to stop the spread of the Mid-Atlantic strain of rabies in the raccoon population in those States. How much money is requested for the continuation of these activities in the fiscal year 1999 budget request?

Answer. The fiscal year 1999 request includes approximately $30,000 to provide continued support of a Rabies Hotline which is maintained in the APHIS Wildlife Services Vermont office. No funds are included for oral rabies vaccination program activities in New York, Ohio, or Vermont.

Question. During 1997 APHIS was able to reduce a backlog of Animal Welfare Act cases to about 25 percent. What is the current estimate of the reduction of backlog in the fiscal year 1999 budget request, and how much money is proposed to be used for these activities?

Answer. We believe this problem is close to being resolved. Where in the past there were several hundred cases open awaiting formal administrative prosecution, the number has now been reduced to fewer than 100, most of which are recent. The main factor in our success has been an emphasis on settling cases at the agency level through stipulations, where the party agrees to improve their operation and pays in most cases a nominal fine, rather than issuing a formal complaint which may necessitate a lengthy hearing and appeals process. In addition there has been an intensive effort by APHIS and the Office of the General Counsel to eliminate the backlog of cases and reduce the time it takes to formally adjudicate an Animal Welfare case.

We did not include a request for additional funds in the fiscal year 1999 budget to reduce the current backlog of cases.

Question. In the fiscal year 1998 Appropriations Act, the Committee provided funding to enforce the Commercial Transportation Equine for Slaughter Act. What actions has the agency taken to date, and has the entire amount provided in fiscal year 1998 been used for enforcement activities? How much does the fiscal year 1999 budget request contain for the continuation of these activities?

Answer. APHIS is in the process of implementing a program which focuses on regulating and educating the trucking and slaughter industries and conducting research on issues related to the humane treatment of horses from shipment to slaughter. Presently, APHIS is gathering information to draft regulations to enforce the Act. Information is being gathered from the horse industry including the American Horse Protection Association, the Humane Society of the United States, and the American Horse Council (AHC). APHIS expects to begin developing the regulations in the third quarter of fiscal year 1998. For fiscal year 1998, APHIS is funding two research studies which focus on the stress and well-being of slaughter horses during transport and examine health problems such as dehydration. The budget request includes approximately $400,000 to continue these activities in fiscal year 1999.

PANAMA FACILITY

Question. The fiscal year 1999 budget request proposes $1.4 million reduction for the screwworm program. Planning for the new Panama facility is to begin in fiscal year 1999 with an architectural and engineering study. How much money is ear marked in the proposed fiscal year 1999 budget for the planning of this facility?

Answer. Recent Appropriations Acts have granted APHIS authority to carry over up to 10 percent of the annual screwworm appropriation, to remain available until expended. At the beginning of fiscal year 1998, APHIS had $5.4 million available from prior years in the screwworm program to plan and conduct an architectural and engineering study and another $.5 million available in Buildings and Facilities to update the master plan for the facility. These funds were accumulated gradually from program savings over the past 4 years. No money in the proposed fiscal year 1999 budget is ear marked for planning the Panama facility.

Question. What is the projected total cost of this building, and when does the agency plan to finish it?

Answer. We expect to begin operations at the new facility by 2002. Current projections estimate costs for the construction of the sterile screwworm facility to be up to $80 million for three modules plus another $8 million for an architectural and engineering study and environmental studies. APHIS has the authority to make a grant to the Commission which could then construct, lease, or make loan payments for the facility.

ANIMAL WELFARE ACT

The Animal Welfare Act is administered by APHIS and regulates groups under the Act which include "dealers" in dogs and cats. The Animal Welfare Act specifically excludes "retail pet stores" from the definition of "dealers" and regulations have excluded persons from the definition of "dealer" who sells dogs and cats at retail. I understand that APHIS is now considering to expand the definition of "dealer" to include some persons who sell dogs and cats at retail, specifically persons who sell dogs and cats at retail in their own residence.

Question. Is APHIS considering such a proposal, and if so, do you have any idea how many additional entities would be defined as "dealers" and subjected to regulation under the Animal Welfare Act as a result of this regulatory expansion?

Answer. APHIS is considering a proposed rulemaking that would require licensing and inspecting of both wholesale and retail outlets of dogs—including dogs intended for hunting, security, and breeding purpose—while still excluding true retail pet stores. The licensing determination would be based on the number of adult breeding females on the premises. Currently premises with less than four are not required

to be licensed. We will propose to modify the threshold of breeding females based on recommendations received during a comment period after publication in the Federal Register. By soliciting this input from interested parties such as animal protectionist organizations as well as current and potential licensees, we can better determine the appropriate number and expect better compliance with any new regulation.

According to my information, the number of residential breeders who sell dogs and cats at retail could number as many as 300,000 to 500,000. I have no idea how many additional persons may sell dogs and cats for breeding, hunting, or security purposes. I understand from APHIS' recent Animal Welfare Enforcement reports that the Animal Care unit currently has fewer than 8,000 licensees and registrants, and only inspects about 10,000 sites annually. That is an inspection rate of about 1.4 inspections per year. The proposal to expand regulations to retail sellers, if it is carried out, seems like it would greatly expand the number of entities regulated by APHIS' animal care unit.

Question. Will the Animal Care unit require additional funds to carry out this expansion?

Answer. The number of additional facilities to be regulated has not been determined. An Animal Care survey showed that possibly another 10,000 facilities might need to be regulated whereas, other estimates from industry has been as high as 270,000. It is estimated that to inspect an additional 10,000 facilities, 58 more inspectors and an additional $4.8 to $5 million would allow APHIS to service these facilities as in the past. APHIS is considering raising the current threshold of breeding females to a level where the additional facilities picked up would be offset by not inspecting those facilities below the threshold. Until the final rule is published, we will not know the full impact of this proposed regulation. Also, using a newly developed Risk-based Inspection System, APHIS will reallocate resources to those facilities most needing inspection services. Those facilities having a good history of Animal Welfare Act compliance may only be inspected once every 3 years; those facilities with a history of noncompliance may be inspected 2 to 4 times per year. However, using risk-based inspection will free up an estimated 3 to 10 percent of Animal Care resources that can be used to cover these additional facilities.

Question. Is APHIS considering a request for an increase in its appropriation to regulate residential breeders or persons who sell hunting, breeding or security dogs at retail?

Answer. In fiscal year 1999, APHIS did not request funding to carry out these activities. The Agency will consider requesting additional funds for these activities at a later time.

Question. Has APHIS made any estimates of the additional funds that would be required to carry out this expansion?

Answer. It is estimated that it will cost approximately $4.8 to $5 million to cover the expenses associated with inspecting an additional 10,000 facilities.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. They are directly linked. The five general goals of the APHIS strategic plan correspond to the five functional components of the agency's budget structure (Pest and Disease Exclusion, Plant and Animal Health Monitoring, Pest and Disease Management, Animal Care, and Scientific and Technical Services). Similarly, the objectives listed under each goal correspond directly to funded line programs under each functional component. In the annual performance plan, APHIS has developed a set of annual performance targets for each goal of its strategic plan.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Development of performance goals and supporting budgets in APHIS occurs through a formal process we call the Multiyear Program Planning and Budgeting process. Personnel involved in budget development receive formats requesting that they develop budgets and measures for performance goals. Each program has its own set of ongoing, or formative, evaluation activities in place to identify strengths and weaknesses, and these evaluations are used by the program managers to develop new performance goals and strategies that are tied to funding levels.

For many of our pest and disease eradication goals and objectives, the annual performance targets describe a progression leading to the long-term eradication objectives of the strategic plan. For other, more difficult-to-measure goals, further efforts

are underway to quantify performance baselines. Once the performance baselines have been established, it will be possible for us to set targets for the goals of the strategic plan and then link them more fully to the performance plans.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. The annual performance plan identifies selected program performance measures to reflect progress toward achieving the general goal. Each general goal has selected annual performance measures, but not every objective in the general goal is represented in the performance plan.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The annual performance plan identifies progress toward general goals. However, it does not contain specific measures for each objective under the general goals.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. At present, there has been no decision to change our account structure for fiscal year 2000, although final agency decisions on the fiscal year 2000 proposal will not be completed until June of this year when budgets are due to the Department.

Question. How were performance measures chosen?

Answer. Performance measures were chosen as part of the Agency's cycle of long- and short-range planning, budgeting, and program evaluation. Each program has its own set of ongoing, or formative, evaluation activities in place to identify strengths and weaknesses, and these evaluations are used by the program managers to develop new performance goals and strategies. These evaluations include station reviews, port reviews, program reviews, customer and stakeholder needs assessments, and the results of public hearings, meetings, and symposia on current scientific issues. In addition, as part of its annual performance planning cycle, APHIS is developing performance monitoring systems which will be refined over the next several years, so that program managers can routinely evaluate program effectiveness.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The need for reliable and valid performance data is considered a high priority within the agency's information technology needs. Cost may affect how quickly we can reach our goal of having reliable and valid performance data for all our programs, especially given the resources devoted to the Year 2000 problem, but we are committed to eventually reaching the goal.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. There will likely be some performance measures for which reliable data will not be available in time for our first performance report in March 2000.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. We believe that none of the performance goals should be overlooked in tracking program results.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Ever since the passage of the Government Performance and Results Act, APHIS planning, budget, and program staffs have been engaged in efforts to change the mind set within the agency toward outcomes versus outputs. Initially, this work was done in small groups focusing on selected pilot line items, then broadened to encompass all of the agency's funded activities.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. We believe that most of our program managers do recognize the distinction, although there may still be a few who don't. We are making every effort to promote awareness, through a number of avenues including training sessions, redesigned data collection formats, and interaction between program, policy, and budget staffs.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. In our Wildlife Services program, we will measure "customer satisfaction with Wildlife Services livestock protection." For Horse Protection, the following

measure has been developed: "level of customer satisfaction with the Horse Protection program expressed by a random sample of customers in a mail survey." For Veterinary Biologics, we will measure "public confidence in the safety and efficacy of biological products." These are but a few of many customer satisfaction measures that have been developed.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The fiscal year 1999 budget was developed last Spring, before the fiscal year 1999 Annual Performance Plan was completed. However, each program in APHIS has its own set of ongoing, or formative, evaluation activities in place to identify strengths and weaknesses, and these evaluations are used by the program managers to develop new performance goals and strategies and prioritize activities in their budgets. In addition, as part of its annual performance planning cycle, APHIS is developing performance monitoring systems which will be refined over the next several years, so that program managers can routinely evaluate program effectiveness. We will continue to work in the coming years toward integrating these processes so that program goals can translate into resource needs.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, we would be able to estimate the likely impact.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. We have made some progress in this area, but the work is not finished. Our field and headquarters personnel are working together to develop the necessary technological capabilities to meet reporting requirements.

The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

Question. Have you faced such difficulty?

Answer. We have not experienced any difficulty from the standpoint of having a compatible budget structure. The five general goals of the APHIS strategic plan correspond to the five functional components of our budget (Pest and Disease Exclusion, Plant and Animal Health Monitoring, Pest and Disease Management, Animal Care, and Scientific and Technical Services). Similarly, the objectives listed under each goal correspond directly to funded line programs under each functional component. In our annual performance plan, we developed a set of annual performance targets for each goal of the strategic plan. For many of our pest and disease eradication goals and objectives, the annual performance targets describe a progression leading to the long-term eradication objectives of the strategic plan. For other, more difficult-to-measure goals, further efforts are underway to quantify performance baselines. Once the performance baselines have been established, it will be possible for APHIS to set targets for the goals of the strategic plan and then link them more fully to the performance plans.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. We do not believe modifying the budget account structure would significantly improve our ability to measure program performance.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure? How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We do not see a need to modify the budget structure at this time.

Question. Does your fiscal year 1999 performance plan-briefly or by reference to your strategic plan-identify any external factors that could influence goal achievement?

Answer. The performance plan does not specifically mention or identify external factors that could influence goal achievement. Those factors are enumerated and discussed in the Agency's strategic plan.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. APHIS takes into account a wide range of external factors in developing its overall strategy for accomplishing its mission. As the risk of pest and disease entry increases due to emerging animal and plant health issues, increases in global trade and passenger movement, and improved transportation technologies, APHIS

is increasingly challenged to update prevention strategies, monitoring systems, and response actions that ensure effective management of those risks and preserve our markets. We must also continue to update strategies and methods to ensure that solutions are practical and environmentally sound.

Question. What impact might external factors have on your resource estimates?

Answer. External factors may have a significant impact on our resource estimates, as emergency outbreaks of fruit flies, citrus canker, and Karnal bunt have shown in recent years. Our aim, however, is to find solutions and adjust priorities so that we can accomplish our mission within resource estimates.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No, we have not.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. We have not identified overlapping functions or program duplication.

Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

Question. To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. For many of our programs we are still in the process of establishing baselines and shifting measures from outputs to outcomes. We are also working to identify those external factors which could impact on our ability to achieve our targets. However, in certain eradication programs such as brucellosis and screwworm, the performance measures are as mature as possible and may be suitable for such uses.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Both factors exist to some degree and would affect the accuracy of resource estimates. Another factor which interferes with accurate resource estimates is the occurrence of unexpected outbreaks of emerging pests and diseases.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No. We see the need for some small adjustments, but none that we would consider substantive.

BOLL WEEVIL

Question. Is it accurate that USDA and Land-Grant University analyses have concluded that the boll weevil program has generated significant economic and environmental benefits in the Southeastern states?

Answer. A report written by USDA and University of Georgia researchers entitled—Cotton Production and the Boll Weevil in Georgia: History, Cost of Control, and Benefits of Eradication—summarizes the tremendous economic and environmental benefits of boll weevil eradication in Georgia. According to the study, cotton production has increased dramatically each year since the program was completed in 1990. Average yield has increased from 482 pounds per acre in the pre-eradication period (1971 to 1986) to 733 pounds per acre in the post eradication period (1991 to 1995). Acreage has increased from an average of 288,000 to 770,000, and average gross crop revenues have increased from $70 million to $400 million per year. In addition, net crop revenues (gross revenues less insect pest management costs and amount of damage) have increased from $187 to $451 per acre.

The report also identifies environmental advantages to growers and residents of the State due to a significant decrease in insecticide use in Georgia cotton. The average number of insecticide treatments have decreased from 14.4 per acre in the pre-eradication period to 5.4 per acre in the post-eradication period. In most cases, the materials used are more specific, and the amount of active ingredient applied during each treatment has been reduced from pounds per acre to a few ounces per acre.

QUESTIONS SUBMITTED BY SENATOR BURNS

BISON QUARANTINE FACILITY

Question. Mr. Secretary, last year this committee provided the Animal Plant Health Inspection Service (APHIS) with $1 million to construct a bison quarantine facility in the state of Montana outside the boundaries of Yellowstone National Park. Could you provide the Committee with an update on the current status of those funds?

Answer. APHIS has not yet obligated the $1 million for the bison quarantine facility. Presently, APHIS is in discussion with the State of Montana to determine a lo-

cation for the facility and to identify roles and responsibilities for both APHIS and the State. Although a location has not been determined, APHIS has consulted with an engineering firm in Utah to put together a preliminary generic plan for construction. Upon selection of a site, a specific design plan for the facility will be developed. Once the design phase is complete, construction will begin. Due to the mild winter thus far in Montana, the need for such a facility has not been critical. APHIS expects that the facility will be operational by the winter of 1999/2000.

Question. Would you also provide the Committee a breakdown of the negotiations that have occurred between APHIS and the State of Montana on this particular facility?

Answer. Negotiations with the State of Montana are underway. Since January 1998, contacts have been made with the newly hired State Veterinarian in Montana to meet and discuss the facility. Items for discussion include operations management, authority issues, and a site location.

Question. Could you also provide us with a status report on the agency's involvement in the Environmental Impact Statement being designed to address the bison/brucellosis problems in Yellowstone National Park?

Answer. The National Park Service (NPS) is the lead Agency for the Environmental Impact Statement (EIS). APHIS is a cooperator. In our role as cooperator, APHIS has participated in the preparation, review, and evaluation of the alternatives of the EIS. APHIS has also provided assistance with assessing the economic impacts of actions on ranchers in the area. As a cooperator, APHIS is committed to providing input concerning brucellosis pathogenesis, epidemiology, and disease management methods.

BRUCELLOSIS

Question. What is the current count of herds in the United States currently infected with brucellosis?

Answer. As of February 28, 1998, there were 12 cattle herds under quarantine in the United States for brucellosis. These 12 herds were located in Texas. In addition, one privately owned bison herd in South Dakota was under quarantine.

Question. What is APHIS' assessment of the science and research currently available with respect to brucellosis in livestock, captive wildlife and free ranging wildlife?

Answer. Several research projects are ongoing and others have been conducted that provide or will provide critical information towards resolving the brucellosis problem in the Greater Yellowstone Area. These projects address disease transmission, pathogenesis, epidemiology, and vaccine safety and efficacy. However, additional information is needed including vaccine delivery systems, the effect of the vaccine on non-target animals, and management methods. Many of these studies require a statistically significant number of animals to validate study results and facilities which can handle large numbers of animals.

Question. What are the principal centers and facilities for research on disease transmission between captive and free ranging bison and wildlife?

Answer. The principal centers known to APHIS for research on transmission between captive and free ranging bison and wildlife are (1) Yellowstone National Park, (2) the Agricultural Research Service's facility in Ames, Iowa, (3) Texas A&M University, and (4) the Idaho Wildlife Laboratory/Caine Veterinary Teaching Center, Caldwell Idaho. Other facilities work on various aspects of brucella research but they do not have facilities to house bison for transmission studies.

Question. What does APHIS see as the principal scientific, health, and research issues involving captive and free ranging bison and wildlife?

Answer. APHIS feels that current brucellosis control and eradication methods are adequate to eradicate the disease from the Greater Yellowstone Area (GYA). However, implementing these standard procedures could potentially have a significant negative impact on the number of bison in the Yellowstone National Park (YNP) herd. Therefore, additional information is needed to address management procedures that could be used in YNP to eliminate infection and limit the impact on the herd populations. Issues that APHIS considers principal to implementing a brucellosis control plan in the GYA include evaluating vaccine safety and efficacy in a significant number of bison and elk; developing a variety of vaccine delivery systems that can be used in a variety of situations in YNP and surrounding elk feedgrounds; and evaluating newer vaccines with more potential for efficacy. Additional information that would be very useful includes improving elk habitats to prevent commingling on elk feedgrounds; additional studies in transmission, epidemiology, and pathogenesis in bison and elk (especially in males); and latency in bison and elk calves.

Question. The Northwest Pilot Project is not working. The Canadians set protocols so unfriendly toward feedlots in the country that at this point in time only three have signed onto the program. The United States/Montana protocols are not applicable because USDA-APHIS approved the Regionalization Docket. I have several questions here so, first what can APHIS do to get Ag Canada to address the issues of rewriting the Northwest Protocol, and to expedite the development of a Canadian Regionalization document?

Answer. The Canadian Cattlemen's Association (CCA) has already approached the Canadian Food Inspection Agency (CFIA) about adjusting the protocol. Their concerns reflect the issues that Montana producers have raised. CFIA is willing to address these issues on a scientific basis and continues to work with CCA to do so. Therefore, at this time, the process has been started. We have urged the industries on both sides of the border to cooperate with this process.

Question. The producers in Montana are not very happy about the current situation. Canada got all it was asking for and the United States, particularly those states in the northwest got almost nothing. Could you explain to me what happened here?

Answer. This project was developed over several years at the urging of both the National Cattlemen's Beef Association (NCBA) and the Canadian Cattlemen's Association (CCA). Both groups were involved with drafting the specifics of the project. Canada, which has a notice and comment regulatory procedure similar to the U.S. Federal Register process, published the proposed changes, including the requirements that feedlots must meet, for public comment. Neither the NCBA nor the CCA submitted any negative comments on this proposal. The regulatory changes were finalized and published. These changes allowed Canada to accept untested feeder cattle from any state that met the provisions.

The U.S. commitment to this project addressed brucellosis and tuberculosis testing requirements for cattle from Canada. APHIS has the authority to waive federal requirements when it is determined that a risk is not present to the domestic livestock population. Using this authority, we evaluated Canada's animal health status for these diseases and decided to waive the testing requirements. At the same time, we were in the rule-making process with our regionalization document, which proposed many changes to the United States' animal health import requirements. The agreement to waive the Canadian requirements was made with the understanding that any final changes as decided in the rulemaking process would supersede any waivers. Final changes from the regionalization regulations were made in fall 1997 and took effect in November 1997.

Question. Why didn't we ask for some sort of reciprocal regionalization document?

Answer. This pilot was an industry driven project. The industry wanted to ship untested feeder cattle into Canada. The Agency pursued this request with Canada. Canada is primarily concerned with bluetongue and anaplasmosis. Currently, there is not enough available data on the status of these diseases in Montana to support any type of a regionalization request. We are working with Montana to obtain this data.

WILDLIFE SERVICES

Question. Mr. Dunn, the Wildlife Services program is obviously important to a broad range of the American public. It is involved with livestock protection, reintroduction of the wolf, public health and keeping wildlife away from airports. In four of the past five years the Department's budget has proposed large decreases in the operational budget. Can you explain to the Committee why this is happening with a program that is so important to the public safety and to wildlife conservation?

Answer. Recently proposed decreases, including the fiscal year 1999 request, have been based upon a cost sharing proposal which constitutes an effort to reduce Federal Costs by encouraging increased cooperative contributions to the program. This approach maintains total cooperative funding and cooperative program efforts at the current level, provided cooperators meet 50 percent of total program costs. If, however, affected cooperators did not increase their contributions, the Federal amount would be reduced and program activity would be reduced accordingly.

Question. Is this a decision by the Office of Management and Budget (OMB)?

Answer. WS has maintained a policy for several years in which cooperators must provide a minimum of 50 percent of total funding in all new agreements. In addition, WS has made and continues to make every effort to increase cooperative funding in all agreements, old and new. This is evidenced by the dramatic increase in total cooperative contributions, increasing from $13,957,909 in fiscal year 1990, to $26,703,790 in fiscal year 1997.

Question. If so, has the Secretary done anything to point out to OMB the importance of this program?

Answer. We met with representatives of OMB to discuss the cost sharing proposal. We believe that OMB understands the importance of the program.

This Committee, in response to the public need, has restored funds in each of the years when decreases have been proposed.

Question. Can we expect that the Department's budget will continue to propose such cuts in the coming years that the Committee will have to restore?

Answer. Constantly changing program demands and budgetary circumstances may dictate a future need to propose a reduction for the program, but APHIS currently has no specific plan to request further reductions for Wildlife Services.

Question. On the east coast we hear a lot about the methods used to control wildlife and predators that are causing damage. With this type of criticism, why is the Department proposing to cut the budget for research on new methods of animal control?

Answer. In fiscal year 1996, the National Wildlife Research Center (NWRC) conducted a survey of wildlife damage management experts to determine highest priority advanced research needs. The survey resulted in the identification of priority needs for which additional emphasis is required. The new NWRC was established to meet such advanced needs and had anticipated taking advantage of new facilities to implement these expanded/enhanced priority areas in fiscal year 1999. However, the animal research building support wing and the outdoor animal holding and testing pens must be constructed before identified priority research can be fully supported. This will impact APHIS' ability to develop, improve, and maintain Environmental Protection Agency and Federal Drug Administration approved chemicals, vaccines, and drugs used for wildlife damage management.

NATIONAL WILDLIFE RESEARCH CENTER

Question. Mr. Dunn please describe for the Committee what your plans are for completing the new research facility in Fort Collins, Colorado.

Answer. On August 4, 1997, the Denver Wildlife Research Center in Lakewood, Colorado, was officially closed, and the National Wildlife Research Center (NWRC) in Fort Collins, Colorado, was opened. As of that date, all NWRC headquarters personnel began working from the NWRC Animal Research Building and GSA leased facilities in Fort Collins. Construction of the 82,000 sq ft office/laboratory/headquarters building began in late 1997, and is expected to be ready for occupancy in late 1998. At that time all NWRC headquarters personnel again will be located at one site.

The remaining unfunded components of the 43 acre Master Plan as approved in 1989, include the outdoor animal pens and several associated support buildings, including a warehouse, bulk chemical storage facility, and a garage/maintenance/shop building, collectively known as the Outdoor Pen Project. Another essential component in NWRC construction, and one which is crucial for research scientists in the development of alternative control methods is the Animal Research Building (ARB) support wing. In addition, the completion of the full complement of animal holding and testing rooms in the ARB, and associated design and bid documents for this and for a pump house, irrigation piping, landscaping/visual barriers, fencing, etc., remain to be constructed.

Additionally, a one-time investment is required for equipment and technology for the NWRC to fully utilize the new research facilities. This will allow the Center to maintain its research capabilities in terms of modern technologies, such as analytical instrumentation, computing infrastructure, information transfer capability, etc.

Question. When do you propose to have it completed?

Answer. Until funding sources are identified and secured for the remaining $22.75 million in unfunded components of the NWRC Master Plan, a completion date for the Center cannot be projected.

Question. Why have you not requested funds to complete the facility?

Answer. Although APHIS understands the importance in completing the NWRC, because of budgetary constraints, funding for NWRC construction could not be included in the fiscal year 1999 request.

50/50 COST SHARING

Question. Mr. Dunn, I have noticed that you have once again proposed a 50/50 cost share arrangement for Wildlife Services, the same proposal rejected by Congress last year. Do you have more recent Federal/cooperative data available, and if so what is the disparity amount by State based on this data?

Answer. The following chart shows disparity amounts by state, based on the same formula used in developing the fiscal year 1999 budget proposal, but is based on fiscal year 1997 rather than fiscal year 1996 data. The formula used for determining disparity amounts involves totaling both Federal and cooperative funding, and then determining the amount below 50 percent of the total, which is then the disparity amount.

[The information follows:]

State	Fiscal year 1997—		Total program	Disparity
	Appropriation	Cooperator		
Arkansas	$18,890	.....	$18,890	$9,445
Colorado	534,997	$236,519	771,516	149,239
Idaho	672,186	488,089	1,160,275	92,048
Iowa	16,325	15,475	31,800	425
Wyoming	701,924	571,845	1,273,769	65,039
Total	1,944,322	1,311,928	3,256,250	316,196

Question. Was this something that the Department came up with or did this possibly come from OMB?

Answer. WS has maintained a policy for several years in which cooperators must provide a minimum of 50 percent of total funding in all new agreements. In addition, WS has and continues, to make every effort to increase cooperative funding in all agreements, old and new. This is evidenced by the dramatic increase in total cooperative contributions, increasing from $13,957,909 in fiscal year 1990, to $26,703,790 in fiscal year 1997.

Question. Wildlife Services' operational program is funded from a single line item, and I understand that overall, the program has more cooperative than Federal funding (probably more than any other Federal agency). Why does the Administration insist on micro-managing Wildlife Services down to the state level when cooperative funding objectives are being met nationally?

Answer. A state by State analysis and subsequent cost sharing proposal was initiated not only because of States in which cooperator contributions are minimal or nonexistent, but also because of the States in which cooperative contributions far exceed Federal funding. The cost sharing proposal is made in an effort to encourage cooperators to contribute a fair share of funding toward cooperative program activity in each State. This approach greatly enhances the value of Federal funds invested. By encouraging a minimum 50 percent cooperator contribution level, the Agency can accomplish a more equitable distribution of Federal funds, can accomplish the same level of program activity with less Federal funding, and can consider future needs and new cooperative agreement proposals on a more programmatic and equal basis.

Question. You are seeking to eliminate cost sharing disparity in each state, and you are requesting a reduction in funding because of this, yet at the same time, I understand you are projecting funding shortfalls for activities such as wolf control. Efforts to increase cooperative funding and to reduce Federal costs are commendable, but shouldn't program shortfalls be addressed before requesting reduced funding?

Answer. The purpose in the fiscal year 1999 proposal was to facilitate a more equitable distribution of Federal WS funds among States, and to encourage cooperators to increase contributions for activities such as wolf control.

It is true that there is a projected shortfall of approximately $70,000 in fiscal year 1998 for wolf management efforts in Montana, Idaho, and Wyoming, and a projected shortfall of about $235,000 in fiscal year 1999. In Minnesota, wolf control work is currently conducted solely with APHIS funding of about $250,000 per year with a projected shortage in fiscal year 1998 of about $30,000, and a projected shortfall in fiscal year 1999, of $100,000. These figures exclude inevitable wolf damage control costs relating to reintroduction of the Mexican wolf in Arizona, which will result in an additional need of about $100,000 in fiscal year 1999. Although the Agency must seek alternative means for funding these shortages in the short term, APHIS hopes that current efforts to reduce Federal program costs where possible, may permit shifting some funds to wolf damage control efforts.

Question. Mr. Dunn, the livestock industry in Montana and other western states objected to the reintroduction of wolves. With this 50/50 cost share proposal are you proposing that they now have to share in the cost of controlling the wolves which they did not agree with in the first place?

Answer. The cost sharing proposal would only affect those States which do not currently contribute a minimum of 50 percent of total funding toward cooperative program activities. As Montana is one of those States in which cooperative contributions totaling $816,258, far exceed Federal contributions of $562,055, the State would not be affected by this proposal.

Question. Are there any exceptions to the cost share arrangement as it is now proposed?

Answer. The cost sharing proposal would be applied to all States equally, without exception. To do otherwise, would defeat one of the proposal's goals of eliminating inequities in the State by State distribution of Federal funds as much as possible.

WOLF CONTROL

Question. I understand that Wildlife Services is responding to an increasing number of requests for wolf control assistance in the Rocky Mountains and in Minnesota. How much of this increase is due to Fish and Wildlife Service wolf reintroduction efforts?

Answer. APHIS responded to 76 requests for assistance due to suspected wolf predation in Idaho, Montana, and Wyoming, in fiscal year 1997. Approximately two thirds of these were due to reintroduced wolves. Minnesota has no wolf reintroduction, but is experiencing a great increase in the natural wolf population.

Gray wolves began naturally moving back into northwestern Montana from Canada in the mid-1980s. This naturally occurring population of wolves is increasing and now occupies northern Idaho as well as northwestern Montana and consists of about 70 adults and yearlings and possibly 30 pups. To speed wolf recovery in the region, the U.S. Fish and Wildlife Service (FWS) captured 29 wolves in Canada in 1995, and 37 wolves in 1996 with the assistance of WS personnel. These animals were released into Yellowstone National Park and central Idaho and are increasing in number. Naturally occurring populations from Canada and the reintroduced animals in Idaho and Yellowstone National Park now total estimated 235 adult wolves with an additional 134 pups produced this year.

In August 1974, the eastern gray wolf was classified as an endangered species. At the time, the Minnesota wolf population was estimated at 500 to 1,000 animals and occupied a range of approximately 19,000 square miles. The Minnesota wolf population is increasing at an annual rate of 3 to 5 percent and expanding its range considerably. By 1996, the population had reached an estimated 2,200 to 2,300 wolves which had expanded their range to more than 39,000 square miles. APHIS verified 195 incidents of wolf predation on domestic animals in Minnesota in fiscal year 1997 and captured 226 wolves.

After the wolf was classified as endangered, livestock producers became dependent on the Federal Government for protection from wolf depredations on their livestock in Minnesota. In Idaho, Montana, and Wyoming, wolf recovery and reintroduction have caused restrictions on the use of traditional methods of control where wolves may exist. The endangered status in Minnesota and the restriction on control methods due to reintroduction in Idaho, Montana and Wyoming, in addition to increasing populations of natural and reintroduced animals, have all contributed to great increases in the number of requests for assistance.

Question. How much funding is Fish and Wildlife Services currently providing to APHIS for this work?

Answer. In fiscal year 1997, the FWS and APHIS each agreed to contribute $100,000 to provide assistance at current wolf population levels, in dealing with wolf predation on livestock in Idaho and Montana. In Minnesota, wolf control work is accomplished solely with APHIS funding.

Question. What are these efforts costing APHIS in fiscal year 98 and projected to cost in fiscal year 99, and can you provide the same level of response with an increasing volume of work?

Answer. In addition to the total of $200,000 provided under cooperative agreement equally from APHIS and FWS, there is a projected shortfall of approximately $70,000 in fiscal year 1998 for wolf management efforts in Montana, Idaho, and Wyoming. APHIS is projecting costs in these States to total $435,000 in fiscal year 1999, creating a shortfall of about $235,000. Also, reintroduction of the Mexican wolf in Arizona, initiated in January of this year, will result in an additional need of about $100,000 in both fiscal year 1998 and fiscal year 1999. FWS has agreed to provide $100,000 to deal with initial wolf predation problems in Arizona in fiscal year 1998. In Minnesota, where wolf control work is conducted solely with APHIS funding of about $250,000 per year, a $30,000 shortage is expected in fiscal year 1998, and total costs in this State are expected to be $380,000 in fiscal year 1999. In addition, wolf expansion into Wisconsin is projected to cost approximately

$10,000 in fiscal year 1999. APHIS will have to adjust response levels to match available funding.

INTRODUCTION OF EXOTIC PLANT AND ANIMAL DISEASE

Question. A national news broadcast last week portrayed the risk of deadly disease originating in livestock all around the world, sometimes in a matter of days or hours. In some cases, such as the Hong Kong Chicken Flu, these diseases can be transmitted to humans.

What steps has the agency taken to provide a proper defense against unintentional or intentional introduction of exotic plant and animal diseases into this country?

Answer. APHIS delivers a number of programs that protect the health of U.S. plant and animal resources, such as preclearance inspection, permit regulations, port of entry inspection, quarantine treatment, detection survey, and pest and disease eradication. However, dramatic increases in international travel and trade, and containerization of cargo make total reliance on traditional inspection techniques and procedures impractical. Therefore, APHIS is developing a comprehensive safeguarding system to augment these activities and improve our pest and disease exclusion efforts.

The cornerstone of the safeguarding model is traditional point-of-entry inspection, but the model expands the use of foreign source intervention, increased point-of-entry inspection, smuggling intervention, exotic plant pest detection, and management of exotic pest incursions. A strong scientific base is fundamental to all parts of the system. The safeguarding model is still under development.

BOLL WEEVIL/BRUCELLOSIS ERADICATION

Question. The boll weevil eradication program has been successfully completed in some states and producers there are enjoying lower production costs, higher land values, and other benefits. Other states, such as Arkansas, are just now beginning the eradication process (pursuant to a timetable earlier agreed upon by the cotton industry) but are being told the budget is being reduced by $12 million.

Does the Agency feel it would not harm the entire program to stop the eradication effort before it is complete?

While the FSA boll weevil loan program allows the program to accelerate, is the intention of the agency to now phase out the grant program in lieu of the loan program? If so, does that not give an unfair advantage to those regions of the country where eradication was complete before this shift in policy?

Would it not be better for all producers, the environment, and your agency mission to proceed with the eradication program as quickly as scientifically appropriate?

Answer. We believe that areas where the boll weevil no longer exists—Virginia, North Carolina, South Carolina, Georgia, Florida, California, Arizona, most of Alabama, middle Tennessee, and northwestern Mexico—as well as current active zones would suffer if the eradication program were to stop expanding and moving toward completion.

Since boll weevil eradication has proven to be successful and profitable for cotton growers, program beneficiaries will assume a greater financial responsibility for program costs. Additionally, growers had expressed a desire to have primary control over the daily operations of their program.

Earlier program areas assumed a greater degree of risk in joining the eradication effort since the efficacy of the technology was still unproven. Now that the boll weevil has been effectively eradicated from over 4 million acres, the technology is generally accepted and the risks to growers has been dramatically reduced. It is reasonable that the early "pioneers" of eradication received more significant assistance. In an effort to mitigate the impact of reduced Federal grants to the boll weevil eradication foundations, the USDA provides a loan program with very favorable terms to supplement funds raised through grower assessments and eases cash flow problems. In fact, the FSA loan program makes more total funds available for boll weevil program expansion than have been available under the traditional appropriations and grants approach. Because of the tremendous benefits cotton growers can gain from boll weevil eradication, we believe that they will choose to take advantage of the loan program. It provides a reasonable alternative that is cost beneficial.

It would be very beneficial for the entire cotton industry and the environment if the eradication program moved quickly to completion since unnecessary delays usually result in higher program costs and additional program constraints.

IMPORTED FIRE ANT

Question. The imported fire ant continues to be a growing problem all across the South affecting property, health, and safety. The budget proposal again zeros out the appropriation for the fire ant stating, in part, that since there is no real control, there is little you can do. However, you also state that the fire ant program at the University of Arkansas at Monticello along with the University of Florida has been working on the introduction of a natural enemy of the fire ant that might be a successful control tool. Would you provide an update on the University of Arkansas at Monticello program?

Answer. APHIS has a cooperative agreement with the University of Arkansas at Monticello to conduct research on imported fire ants. The three areas funded by this agreement are a self-supporting community abatement program, an economic impact assessment, and an Agricultural Research Service (ARS) biological control project.

The abatement program uses several public information tools to help area residents better manage fire ants using existing control methods. The economic assessment has concluded that pesticides alone will not provide a long-term solution to the problem and that the focus for IFA control should turn to non-pesticide strategies, such as biological controls. In the biological control project, ARS has identified three organisms for potential impact on the imported fire ant (IFA). These organisms include a microsporidium disease (*Thelohania*), a species complex of phorid flies (Phoridae), and a social parasitic ant (*Solenopsis dagarri*). Currently, ARS scientists are studying several colonies of these agents at their quarantine facility in Gainesville, Florida. These studies, which will likely continue until 2001, are aimed at introducing these organisms into the U.S. from South America. Once they are introduced, APHIS would mass produce and distribute the biological control agents. We began field release of one Phoridae in fiscal year 1997 and will begin field release of the parasitic ant by the Fall of 1999. None of the identified organisms by themselves would be enough to eradicate IFA from the United States because the pest is so widespread. We hope, however, that some combination of these methods will eventually enable native ants to compete effectively with the IFA to reduce economic losses and public health risks associated with IFA.

Question. What efforts are you making to ensure that the ant does not further spread by interstate movement of nursery plants or other hosts of the ant?

Answer. We are working to prevent further spread of the imported fire ant (IFA) by enforcing the Federal quarantine and cooperating with infested States to regulate articles like nursery stock and soil moving equipment. Also, we will continue evaluating the efficacy of regulatory treatments for preventing further spread of the IFA and revise our regulations and procedures as necessary. Even if the IFA line item were eliminated, the States could maintain a strong regulatory program with the Federal quarantine guidelines and industry cooperation. In addition, States have, in many cases, proven themselves able to eradicate small isolated infestations outside the regulated area.

EL NIÑO AND OTHER WEATHER PHENOMENA

Question. The El Niño and similar events are credited with erratic weather patterns this year. Notably, the Mid-Atlantic region has had a very mild winter that suggests there may have been little winter-kill of insect pests. The storms in the Dakotas last year were predicted to cause an increase in grasshopper problems. It appears shifting weather patterns all across the nation are likely to have some affect on insect and other life.

Has APHIS made or is APHIS aware of any forecasts of unusual insect or pest problems this year resulting from erratic weather or other conditions?

Answer. We expect higher than normal boll weevil numbers in all weevil-infested areas this spring due to the unusually mild winter experienced across much of the Cotton Belt. In addition, we expect to lose some ground in the leafy spurge program since the mild winter eliminated the insulating effect of snow causing an increase in the mortality of flea beetles. The Agency anticipates high grasshopper populations this summer if, as in the past, a drought follows the end of the El Niño weather pattern.

WILDLIFE SERVICES AND FISH EATING BIRDS

Question. For years, the growing aquaculture industry in the Mid South has been plagued by fish-eating birds, most notably, the Double Crested Cormorant. I understand agreements have recently been reached with the U.S. Fish and Wildlife Serv-

ice which has issued a depredation order to reduce the economic losses to this industry?

Answer. A double-crested cormorant depredation order was published in the Federal Register on March 4, 1998. This allows aquaculture producers to take action against cormorants without applying for individual permits from the U.S. Fish and Wildlife Service (FWS).

Question. What effect will this order have on your program?

Answer. With the publication of this order, APHIS has begun assisting producers in implementing the certification and reporting criteria required by the FWS in the depredation order. The depredation order requires APHIS to "certify" that an aquaculture facility has a cormorant depredation problem and has implemented nonlethal actions to reduce cormorant impacts before the producer can take depredating cormorants by lethal means. The order also requires producers to keep a record of numbers taken so that the FWS can asses the impact of these "takes" and evaluate the success of the depredation order. APHIS is currently developing policies to assist producers in implementing consistent certification and reporting procedures. With the elimination of the Federal permit requirement, the number of producers requesting technical assistance from APHIS for the control of cormorants is expected to increase.

Question. Please provide an update on your activities to control fish-eating birds.

Answer. Assistance is provided nationwide, with intense efforts concentrated in Alabama, Florida, and Mississippi, where three wildlife biologists are stationed. Wildlife biologists conduct onsite evaluations to assess damage and identify the species of bird or mammal causing the damage, and make control equipment available to producers. If exclusionary and scaring techniques fail to reduce losses, producers may now take a limited number of birds by lethal means, as a result of a cormorant depredation order recently issued by the U.S. Fish and Wildlife Services (FWS). In addition, APHIS' field research station in Starkville, Mississippi conducts research and field studies to improve current control methods, and to develop new ones.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR COCHRAN

PACKERS AND STOCKYARDS OFFICE RESTRUCTURING

Question. The fiscal year 1999 budget requests a one-time increase of $3 million to enable the Packers and Stockyards to reorganize its National and regional offices in response to an Office of Inspector General report recommending an office restructuring to improve the Agency's ability to monitor and investigate anticompetitive practices.

Can this office restructuring be completed in fiscal year 1999? When do you plan to begin the consolidations of offices if the requested funding is provided?

Answer. If funding is provided, GIPSA plans to complete its restructuring during fiscal year 1999. The Agency is currently moving forward with restructuring its headquarters operations by consolidating two operating divisions and six branches into one division and three branches. The requested funding will be used to consolidate Packers and Stockyards' 11 field offices into 3 regional offices located in Denver, Colorado; Des Moines, Iowa; and Atlanta, Georgia, to provide significantly larger staffs located in regions with concentrations of beef, pork, and poultry. In order to assure that basic services are maintained across the Nation, the reorganization plan also includes resident agents who will work out of their homes or one of three suboffices located in Sacramento, California; Fort Worth, Texas; and Lancaster, Pennsylvania. This restructuring is vital to meeting the Department's responsibility, and industry's concerns, relating to competitive behavior in the livestock, meat and poultry industries.

Question. What savings will be realized as a result of this plan to consolidate and maintain fewer office?

Answer. The purpose of the restructuring plan is to strengthen Packers and Stockyards' ability to investigate anticompetitive practices while providing greater flexibility and efficiency in the Agency's operations by creating larger staffs with a broader mix of investigative skills. Except for the one time cost, consolidating the offices is not expected to result in either an increase or decrease in cost. However, the budget request does include additional resources to address concerns about competition in livestock procurement and poultry contract growing arrangements.

Question. Will this reorganization result in a staffing reduction as well?

Answer. The reorganization will not result in a staff reduction, however, it will substantially increase GIPSA's capacity to assemble investigative teams possessing the appropriate mix of economic, legal, and industry expertise required to conduct complex investigations in a timely manner.

PROPOSED NEW USER FEES

Question. The fiscal year 1999 appropriations request assumes a net reduction of $17.3 million resulting from proposed new user fees: $2.819 million from new methods development fees, $3.598 million in new fees for standardization activities; and a net reduction of $10.859 million in Packers and Stockyards license fees and a dealer trust. Please describe the proposed new user fees assumed in the President's fiscal year 1999 budget.

Answer. The proposed new user fees are consistent with the overall effort to balance the budget and with the Administration's efforts to shift funding for programs which benefit identifiable groups.

GIPSA develops, reviews, and maintains official U.S. grain standards that describe the grain characteristics in terms of physical, sanitary, and intrinsic value at the time of inspection. GIPSA also conducts applied research or tests that produce new or improved techniques for measuring grain quality. Because these standards and methods directly benefit and are used almost solely by the grain trading industry, and because they facilitate the orderly marketing of grain products, we believe that it is industry, rather than the general public, that should bear the costs.

As for the Packers and Stockyards license fees, this proposal would impose a license fee on an estimated 23,000 subject firms to fund the cost of administering the Packers and Stockyards Act (Act). The principal purpose of the Act is to assure the integrity of the livestock, meat, and poultry markets for the benefit of producers. This includes fostering fair and open competition, guarding against deceptive and fraudulent practices and providing financial protection for livestock and live poultry sellers and contract poultry growers.

The dealer trust proposal would amend the Act to create a dealer trust and require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock. Dealer failures represent a significant amount of unrecovered losses in the livestock marketing chain. A dealer trust would minimize the losses suffered by producers because of dealers failing to pay.

Question. Is new legislative authority required for all new user fees proposed assumed in the budget? Has the Administration submitted its legislative proposals for these fees to the Congress for consideration?

Answer. Yes, new legislative authority is required for all of these proposed user fees. The GIPSA legislative proposals will be sent to Congress as part of a total USDA legislative proposal package in the near future.

Question. Most of these user fee proposals have been proposed by the President in previous-year budgets but have not been acted upon by the Congress. Is there any indication that these fee proposals will have greater success in gaining the approval of the Congress and being enacted into law this year?

Answer. No. We have had no prior indications of Congress' intent regarding the user fee proposals.

Question. What impact will approval of the President's appropriations request for the agency have if the proposed user fees are not adopted?

Answer. Approval of the President's appropriations request will significantly impact the Agency's standardization and methods development activities, as well as its Packers and Stockyards program.

AGRICULTURAL CONCENTRATION

Question. The President's fiscal year 1999 budget requested increased resources to continue to implement the recommendations of the Secretary's Advisory Committee on Agricultural Concentration. The fiscal year 1999 budget requests an additional $505,000 for the Agricultural Marketing Service (AMS) to expand reporting of livestock and poultry markets. For the Grain Inspection, Packers and Stockyards Administration, an additional $795,000 and 15 staff years is requested for packer competition and industry structure investigations and analyses, and an additional $750,000 and 10 staff years is requested for poultry compliance investigations.

Please address the need for the additional resources requested for fiscal year 1999 to address livestock and poultry competition and industry structure.

Answer. The additional funds and personnel are needed for GIPSA to more aggressively pursue anticompetitive practices related to industry concentration. We have increased the breadth and depth of anticompetitive practice investigations dur-

ing the past 3 years. Due to our limited staff resources, however, the added focus on anticompetitive practice investigations has come at the direct expense of programs designed to protect individual producers from unfair practices and provide financial protection.

The additional funds will be used to recruit and integrate five additional economists, three lawyers, and two computer programmers into investigative units that will conduct investigations involving anticompetitive practices. Such expertise will allow for more effective monitoring and enforcement of potential anticompetitive practices in the increasingly concentrated meat packing industry while also ensuring that fair and competitive practices continue to grow and develop as the industry progresses. The funds will be used in fiscal year 1999 to continue conducting major investigations of potential anticompetitive practices and detailed analyses in the slaughter steer and heifer, slaughter hog, slaughter cow, and slaughter lamb industries. Detailed evidence will be developed if, and where incidences of anticompetitive practices are disclosed. Additional personnel with economic, statistical, and legal expertise will be critical to completing the necessary analyses that are essential for a full and complete investigation.

The additional $750,000 requested for poultry compliance is necessary for GIPSA to perform the in-depth compliance investigations necessary to ascertain if the firms are engaging in activities that may be unfair or unjustly discriminatory to the growers. These additional funds would permit GIPSA to be proactive in initiating and expanding the scope of our compliance investigations, and at the same time continue to timely investigate the large number of complaints being received from poultry growers. The funds will be used to place additional investigators in the field to conduct industry-wide investigations and address specific grower complaints on a more timely and thorough basis. This will enable us to examine the effect of practices that impact grower performance and pay on a broader scale.

Question. What progress has been made to date in implementing the recommendations of the Secretary's Advisory Committee on Agricultural Concentration with the increased resources that have been provided for this purpose?

Answer. USDA has taken several steps to implement the recommendations of the Secretary's Advisory Committee on Agricultural Concentration. USDA reviewed surveillance, investigation, and enforcement practices under the Packers and Stockyards Act and developed a restructuring plan to increase flexibility and efficiency in enforcing the trade practice and payment protection provisions of the Packers and Stockyards Act, and strengthened enforcement against anticompetitive practices.

GIPSA is currently recruiting and integrating economists into investigative units that will conduct investigations involving anticompetitive practices. Major investigations of fed steer and heifer procurement in the Texas Panhandle, slaughter hog procurement in the central United States, and slaughter lamb procurement in the western United States are currently under way. The investigations will examine statistical relationships between livestock prices and various formula and other contract purchase arrangements.

USDA has taken several actions to improve the market and price discovery information available to the livestock industry.

—Producer pork reporting—USDA is expanding the Missouri pork producer price reporting pilot project. Officials from USDA have met with the National Pork Producers Council to explore expanding Missouri hog price reporting to three additional States—Illinois, Iowa and Wisconsin.

—Expanded boxed beef reporting—Beginning September 1996, USDA extended its coverage of boxed beef sale commitments to cover the upcoming 15 business days, rather than the previous 10 business days. Approximately 45 percent of volume traded is now reported, compared with 30–40 percent previously reported.

—Value-based reporting—In October 1996, USDA initiated a weekly report of premiums and discounts being offered for cattle in the upcoming week by meat packers. All major packers are participating and feedlots can verify information through the report.

—Livestock produced or traded under contract—Beginning with the December 1996, Hogs and Pigs Report. USDA is reporting the number of hogs produced under contract by large hog producing operations. Starting in October 1996, USDA also began issuing a weekly report indicating the number of cattle being produced under contract for delivery in future months. For those contracts calling for settlement relative to a futures market price, the basis difference from a futures market contract is also reported.

—Regional beef quality and yield report—In February 1997, USDA initiated a report of beef grading results on a regional basis, for four regions of the country,

that will provide better geographic detail than contained in the current national report.

USDA will examine the relationship between prices reported to AMS and prices that GIPSA obtains during its investigations of competitive issues to evaluate whether USDA's publicly reported Market News prices accurately reflect packer procurement transactions.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. There is a direct correlation between the agency's mission, strategic goals, performance goals, and budget activities. Each of the agency's budget activities—the Packers and Stockyards program and the Grain Inspection program—is directly linked to a strategic goal and supporting performance measures. The Packers and Stockyards program is represented in Goal 1 of the Agency's strategic plan, and the Grain Inspection program is represented in Goal 2. Both goals support the Agency's mission and have supporting performance measures.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. We developed our strategic plan around our core business practices which parallel our existing budget activities. The end result is that there is a one-to-one correlation between budget activities and strategic goals and supporting performance goals.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, each budget account is aligned with a strategic goal and supporting performance measures. Several performance measures are still under development as we strive to efficiently and effectively measure outcomes.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. There are no differences.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. The Agency is evaluating the benefits of consolidating two budget activities, Standardization and Methods Development.

Question. How were performance measures chosen?

Answer. The Agency focused on measurements requested by our customers—cost efficiency, timeliness of service, and accuracy of results. To date, the Agency has developed measures of timeliness (e.g., percentage of violations corrected within one year of investigation's starting date) and cost efficiency (e.g., cost of the official grain inspection and weighing service per metric ton using constant 1992 dollars indexed on the Gross Domestic Product). The Agency will develop measurements of accuracy to coincide with the beginning of the fiscal year 2000 budgeting cycle.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. For some of the Agency's performance measures, such as cost per metric ton, the data was already available and resulted in no extra cost to the Agency. In other instances, the agency is still struggling with developing meaningful outcome measures and identifying the necessary data sources.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No, at this time, the Agency does not anticipate having performance measures for which reliable data are not available in time for the first performance report.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. Each of the Agency's five performance goals align with the Agency's five budget line items and, as a result, it would be difficult to assign greater importance to any one goal. As given in the fiscal year 1999 Annual Performance Plan, the Agency's five performance goals and affiliated budget line items are: (1) Monitor, investigate, and analyze the livestock, meat and poultry industries; identify and correct unfair, deceptive, or discriminatory trade practices; and provide financial protections to livestock and poultry producers, all with the intent of ensuring a fair, open, and competitive marketing environment for livestock, meat, and poultry

(Packers and Stockyards); (2) Increase the efficiency of U.S. grain marketing by harnessing technology to streamline grain inspection and weighing processes and providing objective measures of grain quality, quantity, and end-use value (Methods Development); (3) Enhance the uniformity of grain quantity and quality measurements to promote a more standardized framework for trade in the U.S. grain marketing system (Standardization); (4) Provide all segments of American agriculture with cost-effective and responsive official inspection and weighing services (Inspection and Weighing); and (5) Protect the integrity of U.S. grain marketing by regulating grain weighing and handling practices, and regulating the providers of official grain inspection and weighing services (Compliance).

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The Agency worked with its customers and employees to determine program expectations and then developed measurements to best determine whether those expectations are met. GIPSA anticipates refining some of its current performance goals and measures prior to the fiscal year 2000 budgeting cycle.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Although managers understand the difference, the Agency, at large, is still having difficulty in identifying meaningful outcome measures. For example, standardization of grain quality and quantity measurement improves market efficiency. Likewise, the use of grades and standards improves market efficiency if the grades and standards communicate the quality characteristics relevant to the market. GIPSA directly controls the standardization of the official inspection system and influences the standardization of the commercial market. Measuring the use of grades and standards by the commercial market is impractical, since nearly all those buying or selling grain use the grades and standards to one degree or another. As a result, GIPSA is attempting to develop surrogate measures that track the efficiency of the official inspection system and the adequacy of grades and standards.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers?

Answer. In late 1996, GIPSA conducted a mail-out survey of external customers of the official inspection and weighing system. Results from the survey have allowed the official system to quantitatively assess customer satisfaction in terms of the factors that have been identified by customers as being critical to the official system's success: timeliness, accuracy and consistency, cost-effectiveness, responsiveness, and professionalism. Results from the survey will also serve as benchmarks against which further progress will be measured. The Agency plans to conduct another customer survey in fiscal year 1999.

In 1994 and 1997, GIPSA also conducted surveys of employees of the grain program. The Agency's managers and employees have used, and will continue to use, the survey results to identify the Agency's strengths and weaknesses and to take actions to improve both.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. We aligned the Agency's strategic goals and supporting performance goals and measures with the Agency's two budget accounts, the Packers and Stockyards program and the Grain Inspection program.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. While not directly apparent, it is possible that a shift in funding sources for the Grain Inspection program would affect the cost of the official grain inspection and weighing service per metric ton.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes. With the exception of one measure, GIPSA will rely on internal agency procedures to track performance. More specifically, the Agency will rely upon existing systems, such as the agency's quality assurance/quality control and information management collection systems, to measure and report on program performance. By the start of the fiscal year 2000 budgeting cycle, GIPSA will have the capability of regularly assessing program progress.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way.

—Have you faced such difficulty?

Answer. Since GIPSA's program activities set forth in the budget and the Agency's strategic and performance goals are aligned, the Agency has not encountered such difficulty.

—Would the linkages be clearer if your budget account structure were modified?

Answer. No, the linkages are currently clear.

—If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. The Agency does not consider modification to be necessary at this time.

—How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. The Agency does not consider modification to be necessary at this time.

Question. Does your fiscal year 1999 Performance Plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The Agency's strategic plan, rather than its performance plan, identifies key external factors that could influence goal achievement.

—If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. GIPSA must effectively respond to the fluid and dynamic business environments in which the grain and livestock industries operate. Like many segments of American agriculture, these industries are experiencing rapid changes such as mergers, acquisitions, vertical integration, and increasingly automated operations. The changes are shaping how GIPSA operates. For example, GIPSA has developed a field office consolidation plan which will allow more resources to be located in regions where beef, pork, and poultry production and processing are concentrated. Furthermore, the field offices will be strengthened with additional expertise in economic, statistical, and legal issues to more effectively conduct investigations of alleged anticompetitive practices and financial and trade practice violations.

—What impact might external factors have on your resource estimates?

Answer. Changing external factors may require the Agency's Packers and Stockyards program to shift from one area of focus to another. In the grain arena, increases or decreases in U.S. grain exports may affect the cost per metric ton of the grain inspection and weighing service.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. GIPSA has not identified any overlapping functions or program duplication. GIPSA does, however, coordinate its program activities with a number of government entities. Within USDA, GIPSA works with the Animal and Plant Health Inspection Service and the Agricultural Marketing Service on marketing issues; the Foreign Agricultural Service on international trade issues and programs; the Agricultural Research Service and the Economic Research Service for research support; and the Office of the Inspector General on investigative matters. Further, GIPSA cooperates with various non-USDA entities, including the Food and Drug Administration on food safety issues; the Environmental Protection Agency on pesticide residue programs; and the Department of Justice and the Commodity Futures Trading Commission on investigative matters. GIPSA's strategic plan, rather than its performance plan, addresses the coordination of efforts.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that:

—To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. Given that the Agency's current performance goals and measures are relatively immature, the Agency is in the process of reviewing and refining its current goals and measures and developing some new measures in time for the beginning of the fiscal year 2000 budgeting cycle.

—Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. The Agency has not encountered any such factors at this time.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issues on September 30, 1997?

Answer. GIPSA does not foresee any need for substantive revisions in the Agency's strategic plan at this time.

QUESTIONS SUBMITTED BY SENATOR BURNS

PRICE REPORTING

Question. What does the Department plan in terms of price reporting action?

Answer. The Department plans to implement or enhance the following:

(a) Increased reporting on the terms of contract sales, or captive supply transactions. While AMS has been able to report captive supply volumes, reporting of contract terms and transactions has been more difficult. This information will assist the industry as they move toward a value based marketing system.

(b) Expanded reporting that includes value-based pricing indicators. A matrix report for value based marketing has been requested by the cattle industry. The report will provide the economic indicators to help guide producers in supplying products to meet consumer demands.

(c) Reporting share of slaughter by grade and yield. This report will provide industry with the consist and distribution of cattle that provides a barometer of available supplies that meet certain criteria for the trade.

(d) Reporting daily live cattle and hog crossings from Canada and Mexico. These reports provide the industry with information on volume and prices of animals being exported and imported at U.S. borders. Knowledge of movements and price levels provide industry a more level trading platform to assess their marketing plans.

(e) Increasing the reported volumes of forward sales of boxed beef. Increased volumes and broader coverage of prices provide market information that is important to the industry in negotiating forward sales of products and enhances competition.

(f) reporting packer premiums and discounts for beef carcass value differences. Information on packer premiums and discounts will assist industry in improving their products to meet stated premiums and therefore move more efficiently to meet consumer demands.

(g) Expanding producer reported hog marketing information. This will provide vital cross checks in the marketing of hogs. The recent changes that have occurred in the marketing of hogs, primarily of marketing on a carcass value-based concept, has necessitated the need for more producer input of data relative to marketing specifics.

(h) Reporting regional and national marketing of the direct feeder pig trade. There currently is no market report in place to assist producers in determining the fair market value of segregated early weaned and other weaned pigs. These reports will assist in this area.

Question. What options does the Department have to implement some sort of mandatory price reporting system for fat cattle?

Answer. Options include:

Continue with voluntary reporting of market information.

Pros:

(1) Most economical for the government and industry.

(2) Analysis and reporting volumes are sufficient to adequately establish trading levels and assist in the price discovery process.

(3) Information collected and reported does not divulge proprietary information.

(4) Places a minimum amount of burden on the industry.

(5) Contacts who currently provide information play large or significant roles in the market. Collection from a large number of small participants may have little or no effect on the price discovery process.

Cons:

(1) As the industry becomes more concentrated it is more difficult to obtain voluntary information.

(2) Some commodity products have very limited open market sales and if these sales are not obtained, the price discovery process hindered.

(3) There is the appearance of hidden sales.

Mandatory reporting of transactions only when asked by a reporter.

Pros:

(1) Would provide industry with a large amount of sales transaction marketing data.

(2) Remove the appearance of hidden sales information.

(3) Would limit the financial and personnel requirements that would be required under 100 percent reporting.

Cons:

(1) Promote the absence of available industry contacts to avoid reporting.

(2) Place a large financial burden on the government.

(3) Monitoring and enforcing mandatory reporting would require additional government financial and personnel resources.

(4) Industry members may be unwilling to cooperate with private and industry information systems if reporting to the government is mandated.

(5) Divulging information that could be used by a domestic or international competitor could be detrimental to the industry.

Question. Is the voluntary price reporting system working?

Answer. Yes, the system is working, however due diligence must be practiced. Market reporters develop reliable contacts to discuss market conditions and obtain information about sales or purchases. Voluntary participants are more likely to provide information of a confidential nature that affect market conditions to aid reporters in their market analysis. Voluntary collection of information is the most economical for the government and places a minimum amount of burden on the industry.

Question. What is USDA doing to insure that there is a competitive environment in the live cattle market?

Answer. GIPSA will restructure its Packers and Stockyards Programs (P&S) to strengthen enforcement against alleged anticompetitive practices and provide greater flexibility and efficiency in enforcing the trade practice and payment protection provisions of the P&S Act. GIPSA will restructure the headquarters offices of P&S, consolidate field offices, and add staff with economic, statistical and legal expertise to work on investigations of anticompetitive practices. P&S' Denver, Colorado, regional field office will handle all major competition and industry issues in the United States relating to cattle and sheep, as well as all trade practice and financial protection issues in its region. The Denver office will continue to conduct investigations of anticompetitive behavior in the cattle industry following reorganization.

GIPSA is conducting a broad investigation of fed steer and heifer procurement in the Texas Panhandle. Preliminary descriptive and graphical analysis have been completed and portions reported to the industry. Purchase and slaughter patterns have been examined to identify potential occurrences of aberrant or unusual procurement practices. Assessment has begun of whether the Department's publicly reported Market News prices accurately reflect packer procurement transactions. Econometric and statistical analysis of the data is underway to identify relationships between spot market prices and nonspot purchases, and to reveal relationships that may not be otherwise apparent. Portions of the econometric analysis will be conducted under cooperative agreement with researchers at Iowa State University and the University of Nebraska. The completion date depends on the results of the econometric and statistical analysis.

SUBCOMMITTEE RECESS

Senator BUMPERS. We will stand in recess subject to the call of the chair. Thank you very much.

[Whereupon, at 12:18 p.m., Tuesday, March 17, the subcommittee was recessed, to reconvene at 10:06 a.m., Tuesday, March 24.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, MARCH 24, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:06 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burns, Bumpers, Kohl, and Leahy.

DEPARTMENT OF AGRICULTURE

STATEMENT OF AUGUST SCHUMACHER, JR., UNDER SECRETARY, FARM AND FOREIGN AGRICULTURAL SERVICES

ACCOMPANIED BY DENNIS KAPLAN, DEPUTY DIRECTOR, OFFICE OF BUDGET AND PROGRAM ANALYSIS

FARM SERVICE AGENCY

STATEMENT OF KEITH KELLY, ADMINISTRATOR

GENERAL SALES MANAGER

STATEMENT OF CHRISTOPHER E. GOLDTHWAIT, GENERAL SALES MANAGER

FOREIGN AGRICULTURAL SERVICE

STATEMENT OF LON HATAMIYA, ADMINISTRATOR

RISK MANAGEMENT AGENCY

STATEMENT OF KENNETH D. ACKERMAN, ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order.

Today our subcommittee continues its hearings reviewing the President's budget request for the next fiscal year for the Department of Agriculture and related agencies. This morning we are specifically considering the budget request for programs and activities of the Department's Farm and Foreign Agricultural Services agencies. Our witnesses this morning include a panel led by the Under Secretary for Farm and Foreign Agricultural Services, Mr. August Schumacher, Jr.

Mr. Secretary, we appreciate your attendance and that of the others who are with you this morning. We invite you to introduce

them and proceed with your statement and any other statements by the panel that you think would be helpful to the subcommittee. We have copies of the prepared testimony, which we will print in the record in full. We are interested in hearing what your proposal is for appropriations for these activities, and thank you for being here today.

I am going to yield now for any comments or opening statements from other members of the subcommittee. Senator Bumpers.

STATEMENT OF SENATOR BUMPERS

Senator BUMPERS. Mr. Chairman, today's panel is going to be the last panel we will hear from regarding the President's budget. I would just like to make a few comments, and I will insert my formal opening statement for the record.

During my tenure in the Senate, I have seen many changes in farm programs and the relationship of the Department to the farming community. I have seen agricultural production go from huge surpluses to shrinking supplies. I have seen farm prices soar and I have seen them collapse. I have seen crops prosper and I have seen untold natural disasters that have destroyed countless acres of farmland and farmers' livelihoods along with them.

Two years ago, Congress enacted, without my support, legislation that dramatically changed the relationship of farmers and the Federal Government. Prices were good then, better than they are now. The phaseout of farm programs seemed a distant problem, especially when sweetened with additional cash from Uncle Sam.

We are already beginning to hear the faint cries of hard times ahead. Legislation is being discussed to extend crop loan periods and other farm safety net mechanisms seen only as an amendment away. I do not hold out false promises. We fought the hard fight and my side lost.

Still, in all my years of public service, one thing always rings true: The Government, Congress especially, will never forget its farmers. Not only has the Department changed its relationship with farmers, it has changed its relationship with itself. The USDA of 5 years ago is not the USDA of today. Names have changed, but changes have gone beyond the purely cosmetic.

The Farm Service Agency now exists where two agencies were before, ASCS and the Farmers Home Administration. To further complicate matters, the new agency houses more than two former agency missions. It houses two separate classes of USDA employees. The old Farmers Home Administration offices were staffed with regular Federal Civil Service employees, while ASCS offices were staffed with employees hired under a different authority, tied to the county committee system, and were considered non-Federal employees. Still, they were and are USDA employees, all with the same commitment to farmers and the delivery of Federal farm programs.

I make this distinction because the two classes of employees are not treated alike. Earlier this year, the Farm Service Agency conducted a RIF of 152 employees. Because of their status as non-Federal employees, the USDA employees from the old ASCS offices were the only ones to lose their jobs, regardless of years of service, experience, or other relevant factors. With all the attention to civil

rights problems at the Department, this inherently unfair situation is one that should not be overlooked.

PREPARED STATEMENT

Mr. Chairman, I will forgo the rest of my statement and ask a couple of questions on the point I just made later. I ask unanimous consent that my full statement be inserted in the record.

Senator COCHRAN. Without objection, it is so ordered. Thank you, Senator.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

Mr. Chairman: It is a pleasure to welcome Secretary Schumacher and the other USDA officials to this morning's hearing. Today's panel will be the last from USDA we will hear regarding the President's budget request for fiscal year 1999. It is somehow appropriate that this final USDA hearing will focus on those agencies which are most closely associated with farmers, in the traditional context, and with expanding export markets, which many believe will be the focus of U.S. agriculture's future.

During my tenure in the United States Senate, I have seen many changes in farm programs and the relationship of USDA to the farming community. I have seen agricultural production go from huge surpluses to shrinking supplies. I have seen farm prices soar and collapse. I have seen crops prosper and I have seen untold natural disasters that have destroyed countless acres of farmland and farmers' livelihoods along with them.

Two years ago, Congress enacted, without my support, legislation that dramatically changed the relationship of farmers and the Federal Government. Prices then were good, better than they are now, and the phaseout of farm programs seemed a distant problem, especially when sweetened with additional cash from Uncle Sam. We are already beginning to hear the faint cries of hard times ahead. Legislation is being discussed to extend crop loan periods, and other "farm safety net" mechanisms seem only an amendment away. I don't hold out false promise. We fought the hard fight and we lost. Still, in all my years of public service one thing I have learned: the Government, Congress especially, will never forget its farmers.

Not only has USDA changed its relationship with farmers, it has changed its relationship with itself. The USDA of five years ago is not the USDA of today. Names have changed, but changes have gone beyond the purely cosmetic. The Farm Service Agency now exists where two agencies were before, the Agricultural Stabilization and Conservation Service (ASCS) and the Farmers Home Administration (FmHA). To further complicate matters, this new agency houses more than two former agency missions, it houses two separate classes of USDA employees. The old FmHA offices were staffed with regular federal civil service employees while ASCS offices were staffed with employees hired under a different authority tied to the county committee system and were considered non-federal employees. Still, they were, and are, USDA employees all with the same commitment to farmers and the delivery of federal farm programs.

I highlight this distinction because the two classes of employees are not treated alike. Earlier this year, the Farm Service Agency conducted a RIF of 152 employees. Because of their status as "non-federal" employees the USDA employees from the old ASCS offices were the only ones to lose their jobs, regardless of years of service, experience, or other relevant factors. With all the attention to civil rights problems at the Department, this inherently unfair situation is one that should not be overlooked.

Another major change at USDA has been the manner in which federal assistance is administered to help farmers recover from natural disasters. In place of the ad hoc programs of the past is a series of risk management programs designed to cover a wide variety of disaster scenarios. Some of these programs even cover losses in market price. Still, there is much to do to make these programs truly fair. The natural disasters that now have the attention of Congress speak to this point. Some producers, dairy for example, are not covered at all for losses in production. Maple producers are covered for production losses but in a way that doesn't precisely fit the facts of the recent ice storms in the Northeast. Clearly, it is hard to prepare for every contingency, but it should be our goal to treat producers as fairly and consistently as possible. Otherwise, we will be urged to head back down the path of ad

hoc programs that can only escalate to a multitude of changing and contrary programs that we could not easily justify on either policy or budgetary grounds.

Finally, let me mention the role of the American farmer in world markets. When Thomas Jefferson spoke of America as a nation of yeoman farmers, his vision of agricultural markets did not see beyond the demands of a growing and expanding domestic population. In the course of two hundred years, Jefferson's view has been dramatically altered.

Today, financial crisis in Asia will affect thousands of metric tons of U.S. farm production that may find no way to market. Phytosanitary requirements in Europe may close down U.S. poultry plants and cost American jobs. Famine in Africa may compel the U.S. to ship food stores through the Public Law 480 programs, thereby boosting grain prices to farmers in mid-America. More and more, the nations and regions of the world are tied together in ways not imagined even a few short years ago.

I have spoken many times before about my concern for world food security and our ability to keep pace with an ever growing population. American farmers remain the best in the world and our natural resource base can keep them there if we manage it properly. We must keep our access to the markets and the people of the world wide open. Our farmers can produce, but they're never quite sure which markets will be open.

This is the last year I will review the policies and priorities of USDA in an official capacity as a member of the subcommittee. I want to stress in this, my last hearing with USDA agencies, the importance of supporting the American farmer. He is more than the simple romantic notion contained in political speeches. The American farmer is an integral and very important part of our economy. He contributes to our balance of trade. He protects our natural resources which, unlike most of us who see them as recreation, are the basis of his livelihood.

There is also something to that old romantic notion that is more than mere fiction. From the early days of America, philosophies tied to work ethic became the very fabric of this nation and that work ethic was largely based on that of the farmer. The America of today was not built from the foundation of a shopping mall or office complex. Neither the empires of finance nor the network of telecommunications serve as the model for who we are as Americans. If there is any single part of the American family that can remind us all of who we once were, it is the American farmer. The New York bond dealer, the Dallas oilman, and the California computer tycoon may never admit it publicly, but all our roots are on the farm.

STATEMENT OF SENATOR BURNS

Senator COCHRAN. Senator Burns.

Senator BURNS. Thank you very much, Mr. Chairman.

For the first time, I want to welcome Keith Kelly to the table this morning. Keith was raised up in the Red Lodge, MT, country and his father was an outstanding sheepman and they lost him a year ago. They are just fine people. I want to welcome Keith here. We have had a great working relationship for a long time.

I want to sort of associate myself with the words of Senator Bumpers. I think we have changed the direction of the USDA. It seems like we are getting away from the support. Of course, Mr. Kaplan has heard this speech so many times that he is getting sick of it and wants to go out and throw up. But we are changing our emphasis from the grassroots producer.

The more I explore this and we take a look—and we have a crisis on the farm. I do not care how you turn it. We have a crisis and it is an income crisis. A guy says there is nothing wrong on the farm except in the price, what we get at the gate.

The more I am kicking this around, the more I think it is in the area of the transparency in the market. We just do not get reports from our processors and our purveyors as it compares to the prices we receive at the gate, and I think there has to be some way that we get some transparency in the market. And it is just not in our grains. It boils down to the problem with all of the commodities.

Now we have packers that do not want to report what they gave for fat cattle going into their plants, and I think that is wrong because the free market—I will say right now that the auction markets right now are the only ones that are really engaged in price discovery. And I think we have to look at price discovery in order to gain transparency. That is our problem with the Canadian grain situation is transparency in the market. And I go back to the old Wheaties thing again, and I hate to keep beating on that, but if there is transparency in the market, then it seems as though good things happen and money does get filtered back down to the farm.

But we do not know what a crisis is until this next year as far as on the farm because we have got farmers that will not—we cannot produce our commodities for the same price, especially in the grains, as we produced in 1948, 50 years ago, and now that same combine is costing $180,000, that same tractor is costing over $100,000. And we are still paying taxes, and we pay the highest taxes. The Government does not choose to pay taxes on their land that they own in our counties to the rate of the private taxpayer.

So, we are in a bind, folks, and I am very much concerned. But I think it boils down to transparency in the market.

PREPARED STATEMENT

I will put the rest of my statement in the record. I got another commitment, Mr. Chairman, and I must leave, but that still concerns me.

Thank you very much.

Senator COCHRAN. Thank you, Senator. Your statement will be printed in the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BURNS

Thank you, Mr. Chairman.

I appreciate you calling this hearing this morning. As we look at the budget for the Department of Agriculture I see this as one of the more important hearings on the calendar. I believe that both of these agencies have a great impact on the farmer on the ground in Montana as well as the rest of the nation.

I would like to welcome Mr. Keith Kelly to this hearing. Mr. Kelly and I go back a ways in Montana agriculture. While I was broadcasting agriculture radio shows, Keith was the Director of Agriculture for the state of Montana. Keith is a good Montana native and we are pleased to see him in his position today.

As with most of the agencies which we have seen come before this committee, I am again concerned with the way that these agencies are budgeting for the coming fiscal year. I have to admit that I am again concerned with the lack of work that I feel is being done for the producer on the ground. This group has as much to do with lack of concern as any we have had testify before us.

As I look upon this budget for this year, I am concerned with the way the funds have once more been directed by the Department of Agriculture. I see funding cuts in areas where we have restored funds in past years. I also see programs continually proposed which this committee and Congress have told the Department that they are not inclined to agree with the Administration.

I will continue to stress the need I see for a sound and committed agriculture trade policy which will assist our producers in the world market. About a month ago I attended a farm forum in Cut Bank, Montana, where I was able to spend time with the people on the ground who are trying to make a living today, but who face terrible odds in doing so. Partially because of what they, and I, see as a faulty trade policy. When my farmers in Montana cannot sell their bushels of wheat for the equivalent price of a one pound box of Wheaties. Yet they continue to see hundreds of thousands of bushels of wheat crossing the border from Canada. Well, Mr. Chairman, it does not take a genius to understand how and why these men and women feel the way they do.

The man and woman in the field are very concerned about what they see happening on the world market. The rest of the world seems to be trading with each other and we sit by and watch them move their grain, while our Department of Agriculture does nothing. My producers are asking that this Department do something, other than sitting on their hands.

My producers in Montana, and those I have talked with across the country are very puzzled by what they are seeing in Washington today. They see reactive and not proactive trade arrangements being made. They feel as though, like I do, that this Administration and this Department do not care about them. Instead of actively moving in the market we hear that the Secretary is waiting until the rest of the world depletes their supplies of grain. Well I wonder how many farmers out there will still be there when something finally occurs.

Last week before the House, Secretary Glickman told the Agriculture Committee that he felt that using the Export Enhancement Program (EEP) would drive wheat prices lower. The countries we compete with would in turn lower their prices. He followed up by stating that sooner or later our competitors will run out of grain anyway and we will have the market to ourselves. Well I have some very serious concerns about those statements, and I will have questions to follow up with those remarks.

The one thing I have to say here is that the Secretary finally gave us some sense of a reason for not using the EEP funding. The real problem here lies in the way that all the funds for export marketing in the Department of Agriculture are being used. This is the basic root of why the producer in the field is losing sleep over and confidence in this Department.

We see other programs like the Foreign Market Development funds not being totally expended, resulting in carryover which the Department claims is a success. Instead where we have a program that they are using, they are not using it to its fullest degree. Programs where the dollars are cost shared by the producer are being carried over for use in the coming years.

Now I understand that the Department and the Foreign Ag Service is not excited about the fact that I got an amendment in the last farm program bill to create a line item for this account. And it has been stated that this line item ties their hands, but I like the people in the field, have little confidence in what would have been done if there was not a line item for this account. I believe I have heard it stated that they would have put more money in there, well I find that difficult to believe considering the amounts that they have placed in the budget in the past couple of years.

I could go on and on about the lack of confidence that the general agriculture producer has in this Administration when it comes to trade policy, but well unfortunately I don't see where it will do a lot of good. This Administration and Department have their minds set on not doing enough to assist the producers in the field. I will have some follow up questions to bring before the Committee to see if I can get some answers on later.

Last year we had some problems with the way that the signups for lands to be placed into the Conservation Reserve Program were being completed. The people on the land were left in a state of confusion and unfortunately now, in a state of distrust in the Department of Agriculture. The confusion in the way the program was being administered has hurt both the program and the producer.

The results of this confusion led to some of the best producing land in the state of Montana being placed in CRP. Excluding those marginal lands which the program was originally designed to protect. It was my understanding that the Conservation Reserve Program was a plan developed to take marginal, environmentally sensitive lands out of production and allow them to be reseeded in grasses. This then would serve to protect those lands, the environment and enhance wildlife opportunities in areas of a sensitive nature.

Instead in Montana what has occurred, by the development of the indexes used to judge the fields, was the exact opposite of what the program was intended to do. We have large sections of good solid producing land coming out of production, and those areas with highly sensitive land will continue to see the plowshare breaking the soil. This just does not make sense to me or to the people trying to protect the lands on which they plant.

Furthermore, during the signup periods, people were provided with certain sets of rules and standards by which their land was judged for suitability for inclusion in the program. Only to find out afterwards, that during the process the rules and standards had changed. So ultimately they found that the standards for which they were planning were no longer the same standards by which they could plant their cover seed for this land.

In a large operation it might be possible to overcome this type of realignment of seed purchase for cover forage, but on many of the smaller operations who count on this land for stable income, well it completely wipes out their cash reserve for the coming planting season. Making nearly impossible to either continue their enrollment in the program or plan for planting costs for the upcoming year.

These people are having a difficult enough time this year, with grain prices at horribly low levels. Brought on, in part at least, by the unwillingness of this Administration and the Secretary to use all the marketing tools at their disposal to make gains on the world market stage. American agriculture is always one of the first issues taken off the table at trade negotiations, in favor of the hi tech industry for which the United States is famous. Forsaking our ability to continue to produce our own supply of safe, reliable and cost effective food and fiber.

Mr. Chairman, I am concerned about the future of Agriculture in these United States. It seems we are headed down the wrong path. Life in Washington, DC, is so easy compared to the nightmares that the producer faces daily in the fields of our states. I pledge my time and energy to working with you to find ways we can assist the producer. I know you and the ranking member have a great deal of work before you, but I will be there to help in anyway I can to make sure that the producer on the ground in either Montana, Mississippi or Arkansas has a chance to make something of their futures, despite all the efforts of the Department of Agriculture.

STATEMENT OF SENATOR LEAHY

Senator COCHRAN. Senator Leahy.

Senator LEAHY. Mr. Chairman, I will put mine also in the record.

I am glad to see, of course, Gus Schumacher here. I have worked with him for so long. And Ken Ackerman who was a valued member of the Senate Agricultural Committee staff. He not only advised me on that, but perhaps as importantly has given me great advice on scuba diving. [Laughter.]

He is one of the best there is in that area.

I just want to thank you, Mr. Chairman, and Senator Bumpers for your help in approving the amendment for the emergency supplemental for maple farmers. I understand from Mr. Schumacher, he is looking carefully how to help there, and I will have questions that I will submit for the record on that area.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Senator. We will insert your prepared statement in the hearing record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR LEAHY

Good morning Under Secretary Schumacher. I would like to take a moment to mention a problem that I raised once before with Secretary Glickman, but which I think is important to discuss again today. Earlier this year a devastating ice storm paralyzed communities from Northern New York to the tip of Maine.

Just a few days after the storm, I visited the hardest hit areas of Vermont. The storm's damage was the worst I have ever seen. The damage to Vermont's maple groves was especially severe. The cost of downed taps and tubing in Vermont alone totaled over $4 million. In some cases, sugarmakers will have to wait for several years to allow regrowth before tapping can resume. And yet none of those costs were covered through the disaster assistance programs.

Last week the Appropriations Committee corrected that problem by including $4.48 million in the emergency supplemental to assist farmers to replace taps and tubing in maple groves throughout the Northeast which were affected by the storm. I appreciate the help Senator Cochran and Senator Bumpers gave in approving that amendment. However, getting this money out to those farmers will require an emergency designation by the President. I hope you will support that request and that the Farm Service Agency will help farmers in Vermont and throughout the Northeast make use of this funding to bring their maple groves back into production.

One other area also needs to be mentioned. I was hopeful that you, Mr. Under Secretary, could work out some new arrangements with Canada that would permit us to export milk to Canada. This is potentially a huge dairy market for Vermont—yet tariffs can be as high as 300 percent. I would like to see something done about this problem as soon as possible.

On a similar front, I am very concerned about other countries using sanitary standards as an excuse to keep out American products. And third, I am very concerned about the quality and safety of our imports.

STATEMENT OF AUGUST SCHUMACHER, JR.

Senator COCHRAN. Mr. Secretary, please proceed.

Mr. SCHUMACHER. Thank you, Mr. Chairman, and thank you, Mr. Burns, Mr. Bumpers, and Mr. Leahy.

I have a very fine panel this morning. Ken Ackerman is with us. Keith Kelly not only worked in Montana, but he and I worked together as commissioners, and we enjoyed each other working different ends of the country. Lon Hatamiya is our new FAS Administrator, but not new to USDA. He has done a fine job at AMS, and is doing a great job right off the get-go on Asia in FAS. Chris Goldthwait and Dennis Kaplan are here as well. Chris is working closely on Asia with Lon. Dennis has been here almost every meeting.

I would like to submit my formal statement for the record, Mr. Chairman, and then have a very brief opening comment, if that would be permissible.

Senator COCHRAN. That certainly will be. Your statement will be printed in the record.

Mr. SCHUMACHER. Mr. Chairman, our mission—and I always consider this the most important area of USDA—is to secure long-term vitality, global competitiveness, and profitability for the American family farmer and rancher. As American agriculture continues to adjust to the new Federal policies that the committee has outlined, these expose producers more directly to risks and market fluctuations, as has been noted. The goal of the President and the Secretary remains to improve farm income and to provide an adequate safety net for American family farmers and ranchers. The President's budget we feel will permit us to accomplish this goal.

Today I am going to talk a fair bit about this in my opening statement and then, of course, take questions on the crucial safety net for our farmers and ranchers.

This safety net has several critical elements, including assistance in managing risks inherent in agricultural production, assistance in obtaining credit necessary for agricultural production, assistance to producers and ranchers in times of crisis, emergency, and some of the new weather patterns we are seeing, and assistance in marketing our agricultural products in the strong global marketplace. We feel this budget supports and strengthens this safety net.

Today's hearing is very timely, Mr. Chairman, because it is being held while Congress is considering support for critical elements of the safety net in the context of the President's supplemental appropriations request for fiscal year 1998, and the research bill, as well as the present budget debate that is currently ongoing.

We certainly appreciate the support the Senate has shown in supporting additional funding to provide emergency assistance to farmers and ranchers who recently sustained losses due to natural

disasters, which is well documented, and to finance farm ownership and operating loans targeted to small, beginning, and socially disadvantaged farmers through supplemental appropriations.

Absent enactment of the supplemental budget, funds available for direct loan programs during 1998 will be used up by this spring. They will end, and farm ownership guaranteed loans will be exhausted by the end of June.

We also appreciate the healthy debate that is taking place in the context of the research bill and other bills regarding permanent funding for the vitally important crop insurance program.

We appreciate the opportunity to work with you and your committee to provide permanent funding for these critically important programs without jeopardizing funding for other priorities outlined in the President's budget.

Mr. Chairman, Secretary Glickman is concerned the safety net does need to be strengthened in three respects: credit, insurance, and the international side. I will be brief on all three.

Mr. Chairman, the Secretary believes that several aspects of our credit programs need to be strengthened. In order to be successful and profitable in farming, America's farmers and ranchers need access to adequate, affordable credit. For that reason, the budget provides almost $3 billion in funding for farm loan and loan guarantee programs for farm families who would be unable to obtain credit otherwise, and is consistent with recommendations of the Department's Civil Rights Action Team and the National Commission on Small Farms.

Carolyn Cooksie, who is here today, oversees lending for 110,000 farmers on direct loans and an additional 50,000, I believe, on guaranteed. So, roughly 160,000 farmers are working with Carolyn on credit, a very important issue.

We have submitted legislation that would amend the "one strike and you are out" clause that prohibits family farmers and ranchers, 73,000 since 1989, who have ever had a wipe-down, for whatever reason, from ever coming to USDA for another loan. We believe this is too harsh, too restrictive, and we hope Congress will support this legislation.

Further, the Secretary has placed high priority on providing credit to small, socially disadvantaged, and beginning farmers and ranchers. The budget proposal we have submitted reflects this commitment.

We also believe more funds are needed for the direct loan programs. We have 7,400 direct operating loan applications on hand. Nearly 4,000 of these will go unfunded unless we provide some additional funds. This is similar to what happened last year. Loans are made on a first-come-first-served basis, and when funds are gone, they are gone.

As I said earlier, we appreciate your support in the Senate—strong support—for these programs through the supplemental appropriations bill that is underway, and we look forward to working with you and your colleagues in the House to put this funding in place.

We are reviewing several other aspects of our credit programs. We will be proposing regulatory streamlining changes to make these programs more user friendly, both for the borrowers and also

for the banks that provide the important guarantee. We are moving very hard on low documentation and we will continue to brief you and your committee on those improvements.

Let me just touch briefly on crop insurance, and then I will end with the international side.

This is under great discussion as we speak, in fact, yesterday, today, and tomorrow. I was with Mr. Stenholm in Texas yesterday, and he has been in close touch with the Congress on these very important issues.

We believe that America's family farmers and ranchers deserve to know that crop insurance, the backbone of the farm safety net, is on a sound financial footing. Crop insurance provided $24 billion in protection to more than 600,000 producers last year.

Ken Ackerman's group expects that next year 63 percent—63 percent—of our total insurable acres will be covered by our crop insurance risk management program. Twenty-two percent of this acreage is expected to be covered at the CAT level, which is 50 percent of the approved yield covered at 55 percent of the expected market price, with the Federal Government paying 100 percent of that premium. Forty-one percent of the insurable acres is expected to be covered at higher levels, the buy-up, up to 75 percent of the approved yield level, covered at 100 percent of the expected market price, and for this buy-up, of course, producers pay a premium.

Since passage of crop insurance reform in 1994, total expenditures have averaged about $1.2 billion. In 1999, these expenditures are expected to rise, depending on the appropriation, to $1.8 billion. The budget proposal provides for full funding of this amount, and proposes to shift all delivery expenses from discretionary to mandatory. This shift would consolidate all spending for the program other than salary related and operating costs into a single account, a mandatory account, and eliminate the possibility of the program being restricted by a limited appropriation of discretionary funds.

We look forward to working with your committee, Mr. Chairman, to provide offsets without diminishing funding for the program to the extent that it would be put at risk or for other priorities in the President's budget.

Our crop insurance program has changed dramatically over these past 5 years and is, we feel, much improved. Participation is more than double the levels of the early 1990's. Farmers have more choices of insurance, and our delivery system has been solid. At the same time, we also recognize that expectations for crop insurance and the complementary risk management tools, as we are looking at a number of issues like dairy options and others, will have grown dramatically as well. And it is very important that in addition we move beyond crop insurance and look at related risk management tools that Ken Ackerman and his team are ably developing, in accordance with the farm bill.

As other programs have receded under the farm bill, farmers more and more depend on crop insurance and related risk management tools as the principal safety net, along with Lon Hatamiya's group on the international side.

As a result, while maintaining the program's basic financial soundness, we must continue to expand Federal crop insurance to cover as many producers as practical, correct program flaws when

we find them, and respond to customer needs with a growing menu of services and tools. It is a great challenge, Mr. Chairman. We will need to work closely with you as we work to make the necessary improvements.

Let me then conclude on the international side. I have been before you in the past as Lon's predecessor. I continue to spend a fair bit of my time on the international side because export markets are so critical—so critical—to America's family farmers.

The budget provides a number of tools which we believe are needed to help expand U.S. agricultural exports. The key is to ensure that markets are open and ranchers and farmers have the opportunity to compete and ensure that we remain a reliable supplier of safe, affordable, high-quality food and farm products to our customers.

Again, our budget will allow us to continue our market reporting. Senator Burns has mentioned the very important need for transparency in market reporting and intelligence gathering activities overseas. Our budget will also continue our trade policy negotiating work going into the next round. We have been very active, Mr. Chairman, in trying to make sure that as we get information internationally, we get it out promptly to all segments of American agriculture, particularly using the radio, so that farmers have equal access to this information that comes in from overseas so they can make prompt decisions on their crop sales and planning ideas.

Access to this information is one of the keys to success in this marketplace. The budget provides full funding for the MAP program, the Market Access Program, the Dairy Export Incentive Program, and the GSM Export Credit Guarantee Programs, as well as some innovative multiyear funding for the Export Enhancement Program.

It also includes $3 million for the very successful Cochran Fellowship Program, unchanged from 1998 levels.

We believe we need to use all these tools to respond to changes in market condition. We have been very aggressive this year, Mr. Chairman, in using the GSM program in Asia. Chris and Lon have been to Asia twice and they can respond to any questions. We feel, because of liquidity problems there, this is the right tool for the right job. We have been criticized for this by certain countries.

There continues to be a need, however, for liquidity in Asia as they continue to work through a very difficult situation. There is a tremendous demand for our products—meats, cotton, soybean meal, hides and skins, and corn and soybeans.

But the Asian currency situation and the banking crisis have made it difficult, particularly in December, January, and February, to finance transactions through Lon's and Chris' program, the GSM, which provides commercial guarantees on letters of credit at commercial rates to allow this trade to take place and to help resolve some of the ongoing liquidity problems in certain key countries. GSM is the right tool for managing this crisis.

The facts speak for themselves. Since Secretary Glickman announced the program in Korea, we have registered nearly $700 million in sales under the program. This includes $87 million in beef, $13 million in pork, $125 million in cotton, and $100 million in

hides and skins. And certainly it is having an impact on the bottom line.

One of the mistakes made when Chris, Lon, and I were negotiating this is that we did not include hides and skins in the original negotiation with Korea. Once we realized the importance of hides and skins, the Secretary, Lon, and I worked to get the Korean Government another $100 million, to bump it up to $1.1 billion.

This had an immediate effect. The price of hides a hundredweight fell in January to $57 because Korea takes something like 35 percent of all the hides produced in the United States, and as soon as that was announced, the price went up $10 to $67, and that put between $5 and $10 back into the hands of America's 900,000 producers of cows and calves. Again, a very useful tool and we were able to operate it very quickly.

Certainly also with cotton, the GSM has had an important role to play throughout Asia as it has been used to stabilize contracts and keep those markets open for American cotton exporters.

Mr. Chairman, in closing, we are using all of these tools that Congress has made available—credit, crop insurance, emergency assistance, and export expansion measures—as strategically targeted as possible, to accomplish our mission to keep family farming and ranching profitable in this country.

We do not have all the tools we would like to have, and we have put forward a series of proposals within the framework of a balanced budget to strengthen the farm safety net.

I look forward to working with you and other members of the committee as Congress considers our proposals for the upcoming year.

That concludes my remarks, Mr. Chairman. I would be very pleased to take your questions.

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much, Mr. Secretary. We will insert your prepared statement in the hearing record along with the statements of Mr. Kelly, Mr. Hatamiya, and Mr. Ackerman.

[The statements follow:]

PREPARED STATEMENT OF AUGUST SCHUMACHER, JR.

Mr. Chairman and Members of the Committee, I am pleased to appear before you this morning to discuss the fiscal year 1999 budget and program proposals for the Farm and Foreign Agricultural Services (FFAS) mission area of the Department of Agriculture (USDA). With me today are the Administrators of the three agencies within our mission area: Kenneth D. Ackerman, Administrator of the Risk Management Agency; Keith Kelly, Administrator of the Farm Service Agency; and Lon S. Hatamiya, Administrator of the Foreign Agricultural Service. I am also pleased to be accompanied by Christopher Goldthwait, the Department's General Sales Manager, and Dennis Kaplan from the Department's Office of Budget and Program Analysis.

Statements by the Administrators, providing details on their agencies' budget and program proposals for 1999, have been submitted to the Committee. My statement will summarize the proposals, after which we will be pleased to respond to your questions.

Mr. Chairman, the mission of FFAS is to secure the long-term vitality and global competitiveness of American agriculture. As American agriculture continues to adjust to new Federal policies that expose producers more directly to risks and market fluctuations, the goal of President Clinton and Secretary Glickman remains to improve farm income and provide an adequate safety net for American family farmers and ranchers. The President's budget proposals allow us to accomplish this goal.

While we have moved away from the traditional supply management and price support farm programs, USDA still provides a crucial safety net for American producers. This safety net has several critical elements, including assistance in managing risks inherent in agricultural production, assistance in obtaining credit necessary for agricultural production, assistance for producers in times of emergency, and assistance in marketing American agricultural products in the global marketplace. The budget supports and strengthens this safety net.

Further, Secretary Glickman has placed a very high priority on providing credit to small, socially disadvantaged, and beginning farmers and ranchers. The President's budget proposals reflect that commitment.

FARM SERVICE AGENCY

The Farm Service Agency (FSA) is the agency that family farmers and ranchers interact with most frequently. Producers come to FSA to participate in farm programs, for farm ownership, operational, and commodity loans, for disaster assistance, and to participate in the Conservation Reserve Program. The FSA network is a tremendous resource. We can all be proud of the dedicated FSA staff who serve America's family farmers and ranchers.

The consolidation of staffs and county offices, establishment of a common computing environment, and the convergence of administrative services at all levels of the county-based agencies continue to be the focus of USDA streamlining efforts. As part of the Department's continuing reorganization, we are implementing a field office streamlining plan which co-locates the county-based agencies in one-stop USDA Service Centers. At this point, the county offices have been consolidated into about 2,700 Service Centers. An additional streamlining initiative will consolidate administrative support functions for the county-based agencies.

We are also developing a common computing environment for these agencies to optimize the use of data and equipment and improve the flow of information across the agencies. Also, the Department has entered into a contract with an independent consultant who is examining what further steps, if any, can be taken to improve the efficiency of our farm and rural program delivery system. That study is scheduled to be completed by the end of this fiscal year. Collectively, these efforts represent a substantial retooling of our service delivery system and a vital investment in rural America that is important to family farmers and ranchers.

Our budget proposals provide $976 million for salaries and expenses for FSA in 1999 for the administration of its programs. This is comprised of appropriated funding of $953 million, a proposal for the collection of user fees for the sale of information to the public of $10 million, and estimated carryover funds of $13 million. The total includes $21 million for increased pay costs and $30 million in increased funding for the common computing environment. The 1999 request represents a $13 million increase over our current estimate for 1998; however, the funding requested will support about 1,100 fewer staff years than in 1998.

Commodity Credit Corporation

Before I turn to the programs administered by FSA, I would like to address the budget request for the Commodity Credit Corporation (CCC), a government entity for which FSA provides operating personnel. Domestic farm commodity price and income support programs are administered by FSA and financed through CCC. CCC is also the source of funding for a number of the conservation programs administered by USDA, and it funds a portion of the export programs administered by the Foreign Agricultural Service. Funds are borrowed by the Corporation from the Treasury to finance CCC programs. Changes over the last decade in commodity, disaster, and conservation programs have substantially modified the level, mix, and variability of CCC outlays. Since the mid-1980s, commodity program spending has declined dramatically, spending for ad hoc crop disaster programs has been virtually eliminated, and spending for conservation programs has increased and become a major portion of CCC's outlays. A great deal of volatility associated with CCC outlays has been removed due to provisions of the 1996 Farm Bill.

The 1999 budget reflects a need for $8.4 billion to reimburse CCC for its actual fiscal year 1997 realized losses, an increase of $7.7 billion from the 1998 reimbursement of $784 million. In prior years, the request for appropriations to reimburse CCC for net realized losses has been based on an estimate of losses incurred one year earlier which have not been previously reimbursed. The estimate could exceed or fall short of the actual amount of loss. Beginning in the 1998 budget, the request for appropriations to reimburse CCC for net realized losses covered the actual amount of the unreimbursed losses incurred 2 years earlier. The appropriation request for 1999 would fully reimburse CCC for the balance of actual 1997 net realized losses of $8.4 billion. Appropriations to reimburse CCC for actual net realized

losses to be incurred in 1998, currently estimated to total $8.5 billion, will be requested in the President's budget for fiscal year 2000.

Commodity Price and Income Support Programs

Commodity price and income support program outlays account for about two-thirds of total CCC outlays in 1999. The President's budget includes $5.94 billion in funding for commodity price and income support programs in 1999, down from the current estimate of $6.25 billion in 1998.

The commodity price and income support programs administered by FSA were changed dramatically by provisions of the 1996 Farm Bill. The 1996 Farm Bill replaced deficiency payments with fixed production flexibility contract payments that are no longer tied to market price. Nonrecourse loan programs for contract commodities and oilseeds have been retained. These programs continue to provide producers with some protection against sharp declines in market prices, but the changes in the support programs have diminished the traditional role of the farm programs as a buffer against fluctuations in production and commodity prices.

The 1996 Farm Bill also modified price support provisions for dairy, sugar, and peanuts. Dairy price supports are being phased out, and Secretary Glickman recently announced major reforms of milk marketing orders. The peanut program was made a no-net-cost program, the minimum national peanut poundage quota was eliminated, and the quota rate level was reduced. With respect to sugar, sugar loan rates were effectively reduced with the imposition of loan forfeiture fees, marketing assessments were increased, and marketing allotments were suspended.

The Administration continues to place a high priority on helping farmers to manage risk. These changes underscore the importance of crop insurance programs that help farmers manage production risk. For the crop insurance program administered by the Risk Management Agency, legislation will be proposed with the 1999 budget to provide mandatory funding for administrative expense reimbursements to reinsured companies previously funded through the discretionary account. Offsets required for the proposal are included in the budget. For producers of crops for which crop insurance is unavailable, the Noninsured Crop Disaster Assistance Program, administered by FSA and funded through CCC, provides coverage against catastrophic losses where area-wide crop losses exceed 35 percent of normal yields.

Conservation

Conservation program outlays account for almost one-fourth of the CCC expenditures in 1999. The 1996 Act authorized CCC funding for the Conservation Reserve Program (CRP) administered by FSA and several new conservation programs administered by the Natural Resources Conservation Service (NRCS). In 1998, outlays for CRP will total an estimated $1.9 billion, including $63 million in NRCS and Forest Service technical assistance costs paid for with appropriated funds and $1.8 billion from CCC for rental costs and for sharing the cost of establishing permanent cover on replacement acres. For 1999, outlays for CRP will total approximately $1.72 billion, including $24 million in appropriated funds for technical assistance and $1.7 billion from CCC.

CRP provides landowners annual payments and half the cost of establishing a conserving cover in exchange for retiring environmentally sensitive land from production for 10 to 15 years. The 1996 Act authorized the program through 2002 and set maximum enrollment in the program at 36.4 million acres. Current enrollment totaled about 28 million acres at the end of calendar year 1997. After a successful 16th CRP regular signup, the budget assumes acreage enrollments under the CRP of about 32 million acres in 1998, 34 million acres in 1999, with an eventual enrollment of 36.4 million acres by 2001.

A number of other conservation programs administered by USDA, such as the Wetlands Reserve Program, the Environmental Quality Incentives Program (EQIP), the Conservation Farm Option Pilot Program, and the Wildlife Habitat Incentive Program are also funded by CCC. These programs are administered primarily by NRCS, and funding for these programs will be discussed in detail when NRCS appears before the Committee.

Farm Loans

In order to be successful in farming, America's family farmers and ranchers need access to adequate credit. For that reason, the budget provides almost $3 billion in funding for farm loan and loan guarantee programs for farm families who would be unable to obtain credit otherwise and is consistent with recommendations of the Department's Civil Rights Action Team and the National Commission on Small Farms. It includes $85 million for direct farm ownership loans and $425 million for guarantees for farm ownership loans, compared to 1998 levels of $46 million and $400 million, respectively. The funding requested would allow USDA to help 3,458 beginning

and small farmers to either acquire their own farm or to save an existing one, with about 1,000 of those served receiving direct loans.

The budget also includes $2.4 billion in direct and guaranteed farm operating loans, nearly the same funding level as 1998. This funding level will allow FSA to serve an estimated 28,000 beginning and small farmers, about 12,000 of whom will receive direct loans. The budget also provides $25 million in emergency loans for qualifying losses which occur in areas covered by a Presidential or Secretarial disaster declaration. In addition, the budget provides $1 million for Indian tribe land acquisition loans, $25 million for credit sales of property acquired by FSA, and $30 million for the boll weevil eradication program.

Credit is one element of the farm safety net which needs strengthening. For this reason, the Administration has proposed emergency legislation to modify the 1996 Act prohibition on loans to borrowers who received debt forgiveness. The "one strike and you're out" provision in current law is more restrictive than U.S. bankruptcy laws which allow individuals to reestablish credit. Our proposal would correct this inequity by providing borrowers a second chance.

Other FSA Programs

The budget proposes to double funding for State mediation grants from $2 million in 1998 to $4 million in 1999. Mediation gives family farmers, including many low income and socially disadvantaged farmers, the opportunity to remain on the farm by resolving credit and other issues through alternative dispute resolution. The increased funding will support mediation programs in the 21 States currently certified in 1998, as well as any additional States that become certified by 1999, and will allow States to expand programs to include mediation of other agricultural issues in addition to credit disputes.

FSA also administers the Emergency Conservation Program (ECP). Under this program, USDA shares the cost of rehabilitating farmland damaged by natural disasters. Supplemental appropriations provided a total of $95 million for the ECP in 1997. As of March 12, 1998, approximately $9.7 million of that total remains unallocated. No funds have been appropriated to date for the program in 1998, although a request for supplemental funding is now pending before Congress. The budget proposes no funding for the program in 1999.

Requested 1998 Supplemental Funding

The President recently submitted several supplemental funding requests to Congress to provide emergency assistance to farmers and ranchers who recently sustained losses caused by natural disasters, and to finance farm ownership and operating loans targeted to beginning and socially disadvantaged family farmers.

For those whose lands were damaged by ice storms in the Northeastern United States, rains and mudslides in California, tornadoes in Florida, and other recent natural disasters, we are requesting a contingency of $20 million for the Emergency Conservation Program. The Administration is also asking for $4 million for losses sustained by dairy and livestock producers. Emergency funding is also requested to provide $25 million in additional emergency loans ($6 million in budget authority) and a contingency of $62 million in emergency loans ($15 million in budget authority).

In addition, we are requesting approval to redirect $6.7 million in budget authority from guaranteed farm operating loans to finance $39 million in direct farm ownership loans, $25 million in farm ownership guaranteed loans, and $10 million in farm operating direct loans. Absent enactment of the supplemental, funds available for direct loan programs during 1998 will be used up by this Spring, and farm ownership guaranteed loans will be exhausted by the end of June. These programs are targeted to beginning and socially disadvantaged family farmers and were recommended for increased funding in the Civil Rights Action Team Report to the Secretary.

RISK MANAGEMENT AGENCY

The virtual elimination of ad hoc crop disaster aid and subsequent passage of the 1996 Farm Bill expanded the role of the Risk Management Agency (RMA), giving it primary responsibility for providing an agricultural safety net. It is doing so in several ways. RMA administers the Federal crop insurance program on behalf of the Federal Crop Insurance Corporation (FCIC), offering farmers protection against income losses due to production failures and in some cases, market price declines. It is aggressively providing risk management education to make farmers aware of risk management strategies and actions to cover those risks. And, it is pursuing innovative tools, such as the Dairy Options Pilot Program, to give farmers more risk management alternatives.

From 1987 to 1994, disaster assistance payments averaged roughly $1.2 billion a year, while annual crop insurance outlays averaged roughly $800 million over the same period. Combined, the total Federal expenditure was roughly $2 billion annually. Since the Federal Crop Insurance Reform Act of 1994 (1994 Act), total expenditures for the crop insurance program have averaged $1.2 billion annually. For 1999, expenditures will total about $1.8 billion; the budget provides for full funding of this amount.

In 1997, crop insurance provided $24.3 billion in protection to more than 600,000 producers, holding slightly more than 1.3 million policies on 181.4 million acres. For 1998 and 1999, we expect to maintain approximately the same level of participation and that producers will select higher levels of coverage. Further, Crop Revenue Coverage (CRC) is now available on almost 90 percent of the corn, wheat, cotton, soybean, and grain sorghum acres in the United States. CRC helps protect producers from losses in yield, price, or combinations of both factors.

By 1999, RMA expects that roughly 63 percent of the country's insurable acres will be covered by the crop insurance program. Twenty-two percent of insurable acreage is expected to be covered at the catastrophic coverage level (50 percent of the approved yield covered at 55 percent of the expected market price) with the Federal government subsidizing 100 percent of the premium, and 41 percent of the insurable acreage is expected to be covered at higher levels of coverage (up to 75 percent of the approved yield covered at 100 percent of the expected market price) for which producers pay a premium, a portion of which is also subsidized by the Federal government.

With our private sector partners, including farmer organizations, crop insurance agents, trade associations, and educational institutions, we are continuing to work with agricultural leaders nationwide to increase producers' awareness of risk management strategies and impress upon them the importance of taking active steps to protect their investments from fluctuating prices and weather-related disasters. Our budget proposals include $5 million to carry out these educational initiatives.

We are also exploring new programs that will allow us to offer coverages that better meet the needs of family-sized farm operations. We intend to launch a Dairy Options Pilot Program this year, and our budget proposal includes $10 million for this program in both 1998 and 1999.

The budget includes a proposal to shift all reimbursements for delivery expenses incurred by reinsured companies from discretionary to mandatory spending. This shift would consolidate all spending for the program other than salary-related and operating costs into a single account and eliminate the possibility of the program being restricted by a limited appropriation of discretionary funds.

The proposal results in an increase of $185 million in outlays from the mandatory account in 1999, associated with $205 million in budget authority for reimbursement of delivery expenses. This will require corresponding mandatory offsets. Of the $1.1 billion in offsets needed through 2002, USDA will propose that about half come from the crop insurance program, with producers and insurance providers sharing the reductions. Beginning in 2000, savings within the crop insurance program are achieved by: limiting payment eligibility under the catastrophic risk protection (CAT) insurance program to $100,000 per person; reducing administrative subsidies for insurance providers from 27 percent to 25 percent of premiums for buy-up coverage; reducing premium subsidies for higher levels of coverage; and reducing the statutory loss ratio target from 1.075 to 1.060 beginning in 2000.

For 1999, necessary offsets have been identified, including savings from the Cotton Step 2 Payments and from the Export Enhancement Program.

FOREIGN AGRICULTURAL SERVICE

One of USDA's primary goals is to expand economic and trade opportunities for agricultural producers and other rural residents. The opening and expansion of foreign agricultural markets has never been more important. Recent changes in Federal farm policy, including those adopted in the 1996 Farm Bill, have made it clear that new and growing markets are critical to future income growth for our farmers and ranchers.

We have made some notable progress in achieving our export expansion goal in recent years. U.S. agricultural exports reached $57.3 billion in fiscal year 1997, the second highest level on record. Last year also marked the third consecutive year that exports topped $54 billion. The agricultural trade surplus ended the year at $21.5 billion. Four of 1997's top 10 markets for U.S. agricultural exports rose to new highs. Records were set to both U.S. neighbors, Canada and Mexico. Together, our NAFTA partners accounted for $11.7 billion in U.S. exports this past year, 20 percent of our total agricultural exports worldwide and greater than our sales to Japan.

Records were also set to Hong Kong and Russia. However, we also experienced declines in other top markets with value declines to three key Asian markets—Japan, Taiwan, South Korea—ranging from 10 to 12 percent.

The Foreign Agricultural Service (FAS) plays a critical role in our efforts to achieve the Department's goal of expanding overseas markets. Working with the Office of the United States Trade Representative, FAS is involved in agricultural trade policy, monitoring and enforcing trade agreements, and working to reduce trade barriers and increase market access for U.S. agricultural products. Through its network of 81 Counselor/Attaché offices and Agricultural Trade Offices, FAS provides market intelligence information to U.S. producers and exporters, enabling them to compete for market opportunities abroad. FAS administers a variety of foreign food assistance, market development and export promotion programs which are designed to bolster U.S. competitiveness in international markets and build long-term trading relationships with other countries. FAS also carries out exporter outreach and assistance programs which are designed to increase domestic awareness of export opportunities, help companies become export ready, and link export-ready and new-to-export companies to foreign buyers overseas. And, FAS coordinates international activities throughout USDA, bringing to bear all of the resources of the Department to address issues as they arise.

The budget provides a total program level of $190 million for FAS for 1999. This includes $146 million of appropriated funding, an increase of $6 million over the 1998 enacted level.

The budget proposal includes $4 million for overseas administrative services provided by the Department of State in support of the International Cooperative Administrative Support Services (ICASS) program, and includes $2 million to establish a buying power maintenance fund to assist FAS in managing unanticipated changes in the costs of its overseas operations which can result from exchange rate losses or gains. This proposal responds to a request of the Conference Committee on the 1998 Agriculture Appropriations Bill.

The budget also includes an increase of $500,000 for FAS to re-engineer its program performance measurement and evaluation tools, which are a critical element in meeting requirements of the Government Performance and Results Act.

The budget proposes to shift funding for FAS information technology infrastructure and related expenses to the FAS appropriated account. At present, these costs are funded through a reimbursable agreement with CCC. FAS will meet these costs, which are estimated to be $12 million in 1999, through staff-year and associated cost reductions and through increased cost-share contributions to the Foreign Market Development Program.

Export Credit Guarantee Programs

Under the export credit guarantee programs, CCC provides payment guarantees for the commercial financing of U.S. agricultural exports. These programs facilitate exports to buyers in countries where credit is necessary to maintain or increase U.S. sales, but where financing may not be available without CCC guarantees.

The budget proposes a new approach to presenting the estimates for export credit guarantee programs. Program levels, budget authority and outlays will reflect the level of sales expected to be registered rather than the authorized level. This provides more realistic estimates of the costs of the guarantee programs and improves the accuracy of CCC budget estimates. This change will not restrict program use; the authorized levels remain available for use as determined by program demand and changing market conditions.

Following this new approach, the budget projects an aggregate program level of $5.0 billion for export credit guarantees in 1998 and $4.6 billion in 1999. These program levels are significantly higher than in recent years, reflecting large increases in programming in Southeast Asia and South Korea this year that are expected to continue into 1999. The 1999 program level includes $4.3 billion for GSM–102 short-term export guarantees and $100 million for GSM–103 intermediate-term guarantees. Additionally, the budget includes $150 million for supplier credit guarantees and $50 million for facilities financing guarantees.

Export Subsidies

The budget proposes a flexible, multi-year program level authorization for the Export Enhancement Program (EEP), which is one of two export subsidy programs administered by FAS. The proposal provides total funding level of just under $1.2 billion for EEP during the 1999 to 2003 period and provides administrative discretion to the Department to determine the level of funding for individual years. The proposal will generate approximately $1.4 billion in savings during this period, which will help offset increased funding included in the budget for crop insurance and

other mandatory spending proposals. There has been limited activity under EEP during the past two years due to world supply and demand conditions. However, the program remains in place and USDA is prepared to resume awarding EEP bonuses should market conditions warrant. Annual program levels will continue to be subject to the export subsidy reduction commitments established in conjunction with the Uruguay Round Agreement on Agriculture.

FAS also administers the Dairy Export Incentive Program (DEIP), which helps exporters of U.S. dairy products become price competitive and thereby make sales in targeted overseas markets where competitor countries are making subsidized sales. For DEIP, the budget assumes a somewhat lower level of program activity in 1999 due primarily to a projected tighter domestic market situation. However, the actual level of DEIP programming will be determined by market conditions in 1999, subject only to the Uruguay Round Agreement subsidy reduction commitments. Thus, the actual level of DEIP programming could exceed what is assumed in the budget should supply and demand conditions not be as tight as currently projected.

Public Law 480

Public Law 480 programs are the primary means by which the United States provides foreign food assistance. FAS administers Title I of Public Law 480, which provides for sales of U.S. agricultural commodities to developing countries and private entities through concessional financing. Titles II and III of Public Law 480 are administered by the Agency for International Development. Under Title II, the United States provides humanitarian food assistance to needy people in foreign countries in response to malnutrition, famine, and other extraordinary relief requirements. Title III provides food assistance on a grant basis to least developed countries to support programs of economic development.

The budget provides a total program level for Public Law 480 food assistance of $979 million. This is expected to provide approximately 2.8 million metric tons of commodity assistance, approximately 700,000 metric tons less than the current estimate for 1998. The budget reduces funding for Title I from $245 million in 1998 to $112 million in 1999.

Funding for Titles II and III remains the same for 1998 and 1999 at $837 million and $30 million, respectively.

In addition, the budget assumes that approximately $109 million of CCC funds will be used to support the Food for Progress program. Under Food for Progress, U.S. agricultural commodities are provided to developing countries and emerging democracies which have made commitments to introduce and expand free enterprise in their agricultural economies. Commodities are provided on either long-term credit or grant terms to foreign governments, private voluntary agencies, nonprofit agricultural organizations, cooperatives, or intergovernmental organizations.

Market Access Program

The President's budget fully funds the Market Access Program (MAP) at $90 million. FAS administers MAP to support the development, maintenance, and expansion of commercial export markets for U.S. agricultural commodities and products. Under the program, CCC funds are used to provide cost-share assistance to participating organizations including nonprofit agricultural trade organizations, State regional trade groups, and private companies, for carrying out foreign market development activities in designated countries. Only small businesses are permitted to receive direct assistance under MAP.

YEAR 2000 COMPLIANCE

Finally, I would like to provide an update on Year 2000 compliance efforts. FAS, FSA, and RMA are on target for meeting required conversions and retrofitting computer hardware, software, and other systems to ensure Year 2000 compliance.

FSA is the lead agency providing information technology support for the agencies within our mission area. In August 1996, FSA established a target of September 30, 1998, for completion of conversion, well ahead of OMB's recently announced target of March 1999. FSA has reported and tracked the status of all Year 2000 efforts since October 1996. All FSA systems that have not been canceled or replaced are regarded as mission critical systems. As of January 28, 1998, FSA has completed 42 percent of its Information Technology (software application) systems. For all Year 2000 projects, both application and non-application projects, FSA has completed over 27 percent. Within the next 3 to 6 months, the percentage of completion will increase significantly as ongoing field office projects are completed.

FAS has also established September 30, 1998, as the target date for completion of all conversion projects. From the beginning, FAS took the approach that Year 2000 compliance would be incorporated into the overall re-engineering efforts for the

FAS applications systems. The process to re-engineer all of FAS's mission critical applications into a client/server environment began in 1994. FAS identified 14 applications as being mission-critical. Eight of those 14 applications are Year 2000 compliant; the remaining 6 systems will be compliant by September of this year.

RMA is also making steady progress to meet Year 2000 compliance. The Agency has identified 48 mission-critical application systems which must be Year 2000 compliant. Of these, 19 are compliant, 10 will be replaced, one is being repaired, and 18 will be retired. All of RMA's transaction data is compliant now. Historical data is still being migrated into Year 2000 compliant systems. Most of the work will be done by September 1998, and RMA is on track to have all systems Year 2000 compliant by the March 1999 deadline.

The planned early completion date for FSA and FAS will allow those agencies to use the remaining time for actual production processing with the systems to ensure compliance and will provide time to eliminate any errors.

In closing, I would like to add that I believe the Department of Agriculture has an important role to play in helping American farmers and ranchers succeed. The FFAS mission area plays a crucial role in the Department's efforts to improve farm income and provide an adequate safety net for America's family farmers and ranchers. Our programs don't operate in a vacuum, but in partnership with State and local governments, commodity organizations, private insurance companies, colleges and universities, and most importantly, with individual producers. These are our customers, and these are the people we are all here to serve. Although many challenges are ahead of us, FSA, FAS, and RMA are committed to the prospect of using all the tools available to us to serve our customers in a farmer-friendly way. With the continued support of this Committee, we will continue to do so.

This concludes my statement, Mr. Chairman. We will be pleased to answer any questions you and other Members of the Committee may have.

PREPARED STATEMENT OF KEITH KELLY

Mr. Chairman and Members of the Subcommittee, this is my first opportunity to offer a statement to this Subcommittee, and I am pleased to present the fiscal year 1999 budget for the Farm Service Agency (FSA). While our budget estimates conform with Government Performance and Results Act (GPRA) requirements regarding strategic and annual performance plans, I will discuss in a traditional format the budget estimates for the programs that serve as our tools for meeting GPRA goals—price and income support and related programs of the Commodity Credit Corporation, conservation programs funded by the Commodity Credit Corporation, the farm loan programs of the Agricultural Credit Insurance Fund, and a number of others. To conclude my statement, I will summarize our request for administrative support.

Before presenting our budget requests, however, I would like to emphasize the importance of strategic planning. The formal plans that we have submitted so far are a first step in a comprehensive process of examining the role of this agency and its appropriate level of resources now and years into the future. Accordingly, I have established a Strategic Planning, Policy, and Operations Staff within FSA to spearhead the necessary analysis.

I would also like to take a moment, before I discuss 1999, to mention some proposed changes to 1998 funding. The President has transmitted to Congress a number of supplemental requests as well as a rescission proposal. To respond to natural disaster conditions afflicting various parts of the nation, we are requesting $20 million for the Emergency Conservation Program; $4 million to indemnify producers for milk and livestock lost due to disaster; and $21 million in appropriated subsidy, of which $15 million would be available on a contingency basis, to provide up to $87 million in emergency disaster loans. We are also requesting approval to redirect $6.7 million from the current appropriation for guaranteed farm operating loans to provide increases in direct farm ownership and operating loans as well as guaranteed farm ownership loans, all of which are expected to be depleted in coming months. This redistribution would help increase opportunities for beginning and socially disadvantaged farmers. Finally, the Administration is proposing a rescission of $1.08 million from the FSA Salaries and Expenses account to help offset a supplemental funding request for the USDA civil rights initiative.

COMMODITY CREDIT CORPORATION

Domestic farm commodity price and income support programs are administered by the Farm Service Agency and financed through the Commodity Credit Corporation (CCC), a government entity for which FSA provides operating personnel. The

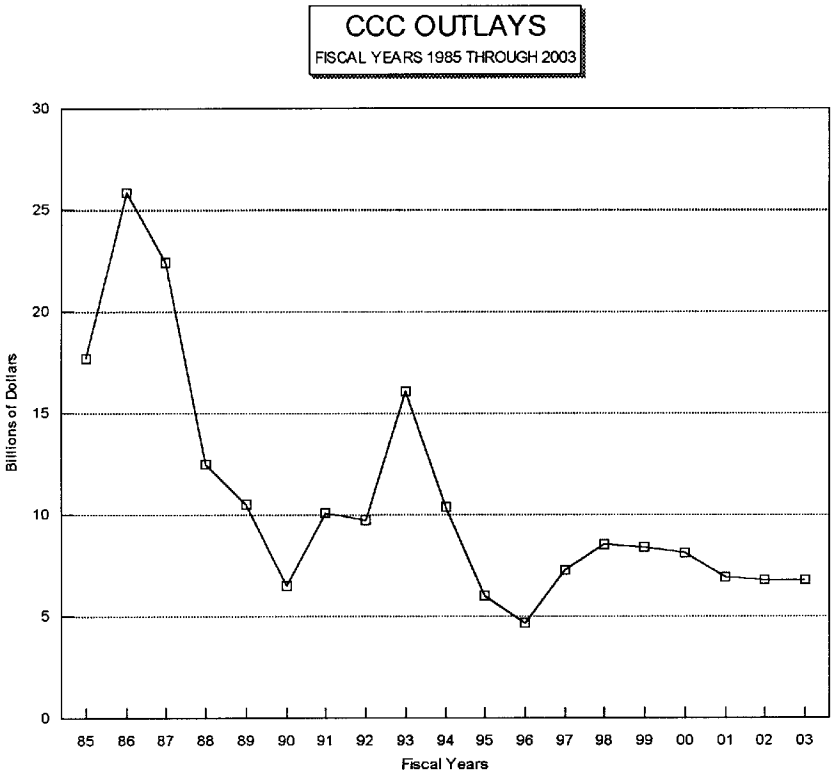
CCC is also the source of funding for most of the conservation programs administered by FSA and the Natural Resources Conservation Service (NRCS), and it funds a portion of the export programs administered by the Foreign Agricultural Service (FAS). Funds are borrowed by the Corporation from the Treasury to finance CCC programs. Commodity support operations, handled primarily through loans, payment programs and some limited purchase programs, currently include those for wheat, corn, soybeans, minor oilseed crops, cotton (upland and extra long staple), rice, tobacco, milk and milk products, barley, oats, sorghum, peanuts and sugar.

Program Outlays

The current 1999 budget estimates largely reflect estimated supply and demand conditions for the 1998 crop. However, a great deal of the volatility associated with forecasting commodity program outlays has been removed due to the provisions of the 1996 Farm Bill. The price and income support programs funded by CCC for the 1996 crops and beyond are determined by that legislation, which has fundamentally restructured income support programs and discontinued supply management programs for producers of feed grains, wheat, upland cotton, and rice.

The budget includes proposed legislation that would limit cotton user marketing certificates to no more than $140 million in 1999 for savings of about $110 million. The proposed spending level of $140 million in 1999 is in line with the history of spending for this program. Since the marketing certificate program was first implemented in 1991, we have spent about $750 million on these payments—a little over $125 million per year, on average. To help meet critical water quality goals and to address the recommendations of the Civil Rights Action Team (CRAT), legislation is proposed to increase CCC funding for the Environmental Quality Incentives Program (EQIP) by $100 million in 1999 and by a total of $350 million for the period 1999 to 2003. The Department also proposes legislation to provide a flexible, multiyear program level authorization for the Export Enhancement Program (EEP), providing total funding of just under $1.2 billion for the 1999 to 2003 period, with a funding limitation of $320 million in 1999. This proposal provides the Department the discretion to determine the annual funding levels, where funding not used one year will remain available for use in subsequent years. This proposal would generate estimated savings of $230 million in 1999 and a total of $1.4 billion during 1999 to 2003.

Changes over the last decade in commodity, disaster, and conservation programs have substantially modified the level, mix, and variability of CCC outlays. Since the mid-1980's, commodity program spending has declined, and will continue to decline as annual fixed production flexibility contract payments are reduced. Spending for ad hoc disaster programs has been virtually eliminated, and CCC spending for conservation programs has increased from negligible amounts prior to the 1996 Farm Bill to over $2 billion in 1999, becoming a major portion of CCC's outlays. Including conservation programs and other programs for which CCC funding was authorized by the 1996 Farm Bill, CCC outlays are projected to total $8.6 billion in fiscal year 1998 and $8.4 billion in fiscal year 1999, and are expected to decline to about $7.0 billion by fiscal year 2003. This outlay trend is shown on the graph that follows.



Total net outlays for fiscal year 1999, including the impact of proposed legislative savings, are expected to decrease by $200 million to $8.4 billion.

ADP Expenses and other Section 11 Activities

Section 161 of the 1996 Farm Bill significantly limits the use of CCC funds for certain operating expenses. CCC spending for equipment or services relating to automated data processing (ADP), information technologies or related items (including telecommunications equipment and computer hardware and software, but excluding reimbursable agreements), was limited by the 1996 Act to $275 million for the six-year period including fiscal years 1997 through 2002, unless additional amounts for such contracts and agreements are provided in advance in appropriation acts. The amount actually obligated for ADP-related expenses in fiscal year 1997 was $36.1 million. The 1999 budget assumes that expenditures for computer and telecommunications equipment subject to the cap will total $107 million in fiscal year 1998 and $76 million in fiscal year 1999. Start-up funding for the Common Computing Environment (CCE) is included in both years, and will supplement other agencies' funds to begin USDA Service Center CCE implementation activities.

Section 161 of the 1996 Act also amended Section 11 of the CCC Charter Act to limit the uses of CCC funds for reimbursable agreements and transfers and allotments of funds to State and Federal agencies. Starting in fiscal year 1997, the total of CCC fund uses under that section in a fiscal year, including agreements for ADP or information resource management activities, may not exceed the total of such allotments and transfers in fiscal year 1995. CCC obligations for Section 11 activities in fiscal year 1995 were $46.2 million, obligations in fiscal year 1996 were $51.2 million, and obligations in fiscal year 1997 were $39.3 million. The budget projects obligations under the cap for reimbursable agreements will total $44.9 million in fiscal year 1998 and $46.1 million in fiscal year 1999.

Reimbursement for Realized Losses

Mr. Chairman, the 1999 budget reflects a need for $8.439 billion to reimburse CCC for its fiscal year 1997 realized losses, an increase of $7.7 billion from the fiscal year 1998 reimbursement of $784 million. In prior years, the request for appropriations to reimburse the CCC for net realized losses has been based on an estimate of losses incurred one year earlier which have not been previously reimbursed. The estimate could exceed or fall short of the actual amount of loss. Last year, in response to OIG recommendations, the request for appropriations to reimburse CCC for net realized losses covered the actual amount of the unreimbursed losses incurred 2 years earlier. In this manner, realized losses are not requested for reimbursement until actually recorded on the books of CCC. The appropriation request for fiscal year 1999 would fully reimburse CCC the balance of actual fiscal year 1997 realized losses of $8.439 billion. Appropriations to reimburse CCC for actual net realized losses to be incurred in 1998, currently estimated to total $8.5 billion, will be requested in the fiscal year 2000 budget.

Appropriation Language Change

One CCC appropriation language change is proposed in the budget. Language pertaining to a minimum level of export credit guarantees is proposed for deletion. This language is not required in the appropriations act because the export credit authorizations are permanent authority. Moreover, the 1999 budget adopts a new approach for presenting more realistic annual program levels for the export credit guarantee programs. The estimates for the annual level of programming will reflect the actual level of sales expected to be registered under the export credit guarantee programs, to be determined by program demand, market conditions, and other relevant factors.

CCC-FUNDED CONSERVATION PROGRAMS

Conservation Reserve Program

The 1996 Farm Bill reauthorized the Conservation Reserve Program, established maximum enrollment at 36.4 million acres, and changed the program's financing from direct appropriation to CCC funding. The legislation also redefined the program, changing its primary focus from highly erodible land conservation and supply management to environmental protection, with wildlife habitat and water quality joining soil erosion reduction as primary program objectives.

Continuous signup has been available for certain high priority practices involving small acreages, such as filter strips and shelterbelts. As of December 1997, over 500 thousand acres have been signed up under this provision. The 16th signup for CRP regular enrollment began on October 14, 1997, and ended on November 14, 1997, with 9.5 million acres offered for enrollment at FSA offices. The 1999 budget assumes acreage enrolled under the 15th and 16th signups, in combination with the continuous signup, will bring CRP enrollment to about 32 million acres in fiscal year 1998, to 34 million acres in fiscal year 1999, and to an eventual enrollment of 36.4 million acres by fiscal year 2001.

In 1998, CCC is making payments of approximately $1.603 billion for rental costs of acres that were enrolled for fiscal year 1997. About $195 million is being used for sharing the cost of permanent cover on acres enrolled during the 15th and 16th signups and under continuous signup provisions. Fiscal year 1998 CRP technical assistance costs of $63 million for NRCS and FS are funded by unobligated balances of CRP funds appropriated prior to enactment of the 1996 Farm Bill. For 1999, CCC program costs are expected to total approximately $1.694 billion, consisting of: $1.497 billion for rental payments on acres enrolled for fiscal year 1998, including those approved during the 15th, 16th, and continuous signups; and about $197 million for cost-sharing of permanent cover on enrolled acres. Fiscal year 1999 CRP technical assistance costs of $24 million for NRCS and FS are also funded by unobligated balances of CRP appropriated funds.

Other CCC-Funded Conservation Programs

The 1996 Farm Bill restructured many of USDA's conservation programs and, as with the CRP, changed the financing to CCC funding. With the exception of the Flood Risk Reduction Program, the CCC-funded conservation programs are administered under the lead of NRCS. NRCS will discuss these programs with you in detail, and I will just mention them briefly.

The Wetlands Reserve Program was reauthorized by the 1996 Farm Bill, and funding of $123.7 million is included in the CCC budget. The new Environmental Quality Incentives Program encompasses the objectives of four previous conservation programs: the Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program, and the Colorado River

Basin Salinity Control Program. The CCC budget reflects $300 million for the EQIP in 1999, including the proposed legislation to increase the program by $100 million in 1999 and by a total of $350 million for 1999 to 2003. The Conservation Farm Option is a pilot program which allows an eligible producer to receive a single payment totaling what he or she would have received separately under the CRP, WRP, and EQIP. For 1999, $25 million is included for the CFO in the CCC budget. CCC funding of $20 million will be transferred to NRCS to be used in 1999 for the Wildlife Habitat Incentive Program, which shares the cost of developing habitat for upland wildlife, wetland wildlife, threatened and endangered species, fish, and other types of wildlife.

FARM LOAN PROGRAMS

The programs of the Agricultural Credit Insurance Fund (ACIF) provide a variety of loans and loan guarantees to farm families who would be unable to obtain credit otherwise. The 1999 budget provides for a total program level of almost $3.0 billion in ACIF direct loans and guarantees, up approximately $83 million from the current estimate for 1998. The largest segment of FSA lending is carried out in partnership with private lenders through the guarantee programs, which are most cost-efficient for the taxpayer because of their low subsidy cost. This budget continues strong support for guaranteed loans, with a proposed program level of over $2.3 billion. Moreover, in accordance with the recommendations of the Secretary's Civil Rights Action Team (CRAT) report of February 1997, we are seeking additional funding for direct loans, which provide affordable, supervised credit, a portion of which is targeted to beginning farmers and members of socially disadvantaged groups.

For direct farm ownership loans we are requesting a loan level of $85 million, at least 18 percent of which would be targeted to socially disadvantaged farmers. This program level, an increase of over $39 million from fiscal year 1998, would enable FSA to extend credit to more than 1,000 small and beginning farmers to purchase or save a family farm, nearly double the number estimated for the current fiscal year. For direct farm operating loans we are requesting a modest increase for a program level of $500 million, up about $10 million from 1998, to provide about 11,580 loans to family farmers. At least 12 percent of this funding would be targeted to socially disadvantaged farmers. Both of these direct loan requests represent the levels recommended by the CRAT report.

For guaranteed farm ownership loans in fiscal year 1999, we are requesting a loan level of $425 million, an increase of $25 million. For guaranteed farm operating loans we propose to hold the 1999 program level at the current level of $1.9 billion.

Other Loan Programs.—The Budget requests a loan level of $25 million for credit sales of acquired property, unchanged from 1998. This program assists qualified applicants to purchase property in FSA inventory.

The Budget also proposes a program level of $25 million in emergency disaster loans in fiscal year 1999. In addition, our budget proposes to offer just over $1 million in Indian tribe land acquisition loans and $30 million for boll weevil eradication.

We have noted the recommendations of the Secretary's National Commission on Small Farms and are studying ways to use them. Our farm loan programs are already essentially directed at small farms since only family-size farms meet our loan eligibility requirements. Our average farm operating loan is about $45,000. In response to a recommendation made by both the Commission and the CRAT, USDA is proposing legislation to amend the 1996 Farm Bill prohibition on loans to borrowers who have been granted debt forgiveness. This change is designed to provide a second chance to borrowers who might be denied credit as a result of losses that occurred long ago.

OTHER APPROPRIATED PROGRAMS

State Mediation Grants

Since 1987, State Mediation Grants have enabled a number of States to develop programs to deal with conflicts involving distressed agricultural loans. The Department of Agriculture Reorganization Act of 1994 expanded the program from farm credit cases only, to include disputes concerning wetland determinations, conservation compliance, pesticides, and other agricultural issues. Operated primarily by State universities or departments of agriculture, the program provides neutral mediators to assist producers, primarily small farmers, in resolving disputes before they culminate in litigation or bankruptcy. Moreover, this program supports the Vice President's initiative to achieve savings through alternative means of dispute resolution since mediation, at $200 to $250 per case, offers significant savings over national level administrative hearings, which cost about $3,000 to $4,000 per case.

Participating States certify their programs with FSA annually. Currently, 21 States have programs that qualify for grants. At least one additional State is expected to be certified for fiscal year 1999, and additional States are in the process of developing programs. For fiscal year 1999 the Budget requests $4 million, an increase of $2 million over fiscal year 1998, to meet the rising demand expected as a result of the program's broadened scope and to accommodate newly participating States. This level would allow us to provide grants which cover the full 70 percent of program costs authorized by law, eliminating the need to prorate available funds among States as we have done at the current appropriated level.

A proposed rule for this program is in final stages of clearance within the Department and will soon be published for public comment. The regulations provide a uniform set of requirements for all States participating in the program and address the issue of confidentiality of records in mediation cases.

Emergency Conservation Program

The Emergency Conservation Program assists producers in rehabilitating farmland damaged by natural disasters and in carrying out emergency water conservation measures during periods of severe drought. The program shares the cost of practices to restore the land to its productive capacity as it existed prior to the disaster. As might be expected, funding needs for this program vary widely from year to year, depending upon the occurrence of natural disasters.

The President's Budget requests no ECP funding for fiscal year 1999. No funding was provided in the fiscal year 1998 Appropriations Act, but carryover unallocated balances remain available from supplemental funding of $95 million in fiscal year 1997. As of March 12, approximately $9.7 million is available for allocation. Allocations of about $14.3 million have been issued so far in fiscal year 1998 for some of the Northeast States hit by ice storms, several States damaged by floods, and a number of other States affected by other disasters. Additional requests are anticipated from the Northeast as well as flood-damaged regions of California, and others. We anticipate that all funds remaining from 1997 will be allocated before the end of the fiscal year. Accordingly, as I mentioned earlier, the Administration has transmitted a request for $20 million in supplemental funding that would be contingent upon usage of available funds and subject to a budget request from the President.

Dairy Indemnity Program

The Dairy Indemnity Program compensates dairy farmers and manufacturers who, through no fault of their own, suffer income losses on milk or milk products removed from commercial markets due to residues of certain chemicals or other toxic substances. Payees are required to reimburse the Government if they recover their losses through other sources such as litigation. The 1999 appropriation request of $450 thousand would cover a higher than normal but not catastrophic level of claims.

ADMINISTRATIVE SUPPORT

The costs of administering all FSA programs are funded by a consolidated Salaries and Expenses account. The account is comprised of direct appropriation, transfers from program loan accounts under credit reform procedures, user fees, and advances and reimbursements from various sources. The Budget proposes to increase direct funding by $40.7 million, of which $17.8 million is included under the Agricultural Credit Insurance Fund program account in order to offset serious staff shortages in administering farm loan programs. These resources would help achieve reduced direct loan losses by providing enhanced supervised credit, and would also allow reduced processing time for direct and guaranteed loan requests. We also plan to lower delinquency rates by increasing our loan servicing capability. Our proposal for $952.7 million in direct funding reflects increases for the Common Computing Environment ($30 million) and pay costs ($20.8 million), partly offset by salary savings from reductions in staffing financed by direct funds (−$11 million). Considerable county office staffing reductions occur because of a $37.8 million reduction in available carryover funds in 1999, and because of continuing workload impacts of the 1996 Farm Bill.

The increase of $30 million for the Common Computing Environment (CCE) will be used, along with funding from the Natural Resources Conservation Service and Rural Development, to implement the CCE for USDA Service Centers. A CCE will provide a common technical architecture supporting both the program delivery and administrative support of participating agencies. Implementation is based on a thorough analysis and reengineering of business practices and involves pretesting, procurement, deployment, installation, and training associated with equipment and software such as standard network servers, desktop or laptop computers, standard-

ized peripherals, and commercial off-the-shelf software. Achievement of a CCE will enhance customer service and optimize the opportunities for sharing of resources among the USDA Service Center partner agencies.

In the meantime I am happy to report that FSA is making good progress in conversion and retrofitting of existing computer systems to ensure Year 2000 compliance. In August of 1996, we established a target of September 30, 1998, for completion of conversion, well ahead of the Office of Management and Budget's recently announced target of March 1999. We have reported and tracked the status of all Year 2000 efforts since October 1996. All FSA systems that have not been cancelled or replaced are regarded as mission critical. As of January 28, 1998, we have completed 42 percent of our Information Technology (software application) systems. For all Year 2000 projects, both application and non-application projects, we have completed over 27 percent. Within the next 3 to 6 months, the percentage of completion will increase significantly as ongoing field office projects are finished. Our planned early completion target will allow us time for testing and correction of any problems.

Staffing

From fiscal year 1993 through the current fiscal year 1998, FSA will have reduced total staffing by 25.8 percent. These reductions reflect an overall 22.5 percent reduction in Federal staff years and a 27.5 percent reduction in non-Federal county office staff years. The fiscal year 1999 Budget proposes a further reduction of 1,118 staff years for fiscal year 1999, of which 263 are Federal staff years and 855 are non-Federal county office staff years.

As you know, Mr. Chairman, we have proceeded with the closure of FSA county offices according to the 1994 plan. However, the staffing reductions we are proposing for fiscal year 1999 require a reexamination of our county office structure. Because there is a point at which an office can be too small to function effectively, it may become necessary to consolidate offices where staffing reductions take place. I will consider any closure decisions in light of cost effectiveness and quality of service to the producer, and I will keep the Committee apprised of any prospective closures.

As you also are aware, the Secretary favors converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status. Conversion of these FSA non-Federal employees to Federal civil service status would eliminate the challenges FSA currently faces in operating two different personnel systems for employees in county offices. These challenges include the fact that non-Federal FSA employees cannot compete for FSA Federal vacancies on an equal footing with Federal employees, non-Federal employees who are RIFed are not entitled to assistance and priority placement under the Career Transition Assistance Program, and FSA is required by law to establish separate supervisory reporting lines for non-Federal and Federal employees located in the same county office.

Legislative Proposal

In closing, I would like to point out that the President's Budget includes a proposal to provide $10 million of FSA's 1999 funding through charging a fee for information requested by insurance companies, appraisers, consultants, attorneys, and others. This proposal is in keeping with the Administration's user fee initiative intended to shift costs from the general taxpayer to the parties that benefit directly from the information.

Mr. Chairman, this concludes my statement. I will be happy to answer your questions and those of the other Subcommittee Members at any time.

PREPARED STATEMENT OF LON HATAMIYA

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to review the work of the Foreign Agricultural Service (FAS) and to present the President's budget request for fiscal year 1999.

Although I have been administrator of FAS for a short time, I am familiar with the Agency and its accomplishments, both through my work as administrator of the Agricultural Marketing Service and through work on my family's farm in California. During my four years as AMS administrator, FAS and AMS worked together on a regular basis, particularly in our efforts to implement the North American Free Trade Agreement (NAFTA). As a farmer from the No. 1 exporting state, I can fully appreciate the role of FAS in assisting agricultural exporters and the increasing importance that exports will play in the future for American farmers.

AGRICULTURAL EXPORTS REACH SECOND HIGHEST LEVEL EVER

In fiscal year 1997, U.S. agricultural exports reached $57.3 billion, the second highest level on record. Last year also marked the third consecutive year that exports topped $50 billion.

Exports of intermediate products (such as soybean meal and planting seeds) set a record at $12.3 billion. Consumer-oriented products also reached a record level of $20.8 billion, with poultry and fresh fruit leading the way. Exports of bulk products were down 16 percent because reduced wheat, corn, and cotton sales offset record soybean and tobacco sales.

Four of 1997's top 10 markets for U.S. agricultural exports rose to new highs. Records were set to both U.S. neighbors, Canada and Mexico. Together, our NAFTA partners accounted for $11.7 billion in U.S. exports this past year, 20 percent of our total agricultural exports worldwide and greater than our sales to Japan. Records were also set to Hong Kong and Russia. However, we also experienced declines in other top markets with value declines to three key Asian markets—Japan, Taiwan, South Korea—ranging from 10 to 12 percent.

The Latin American market continues to grow in importance for U.S. agriculture. U.S. exports to Latin America reached $10 billion in 1997, exceeding the total for all of Western Europe.

As usual, agriculture made a healthy contribution to the U.S. merchandise trade balance in fiscal 1997. The agricultural trade surplus (exports minus imports) ended the year at $21.5 billion. With this latest figure, agriculture has now registered trade surpluses in each of the last 37 years.

More so than agricultural products, U.S. wood and fishery products faced a mixed trade picture in fiscal 1997. It was good news for wood product exports, which reached a record $7.5 billion—up 5 percent from the previous year. Edible fish and seafood products did not fare as well. Export value slipped 6 percent to $2.7 billion. Weak world salmon prices, a shortage of U.S. crab and crabmeat, increased competition, and sluggish demand all contributed to this drop.

Combined U.S. exports of agricultural, wood, and fish products in 1997 were $67.4 billion. This was down 3 percent from 1996's record-breaking $69.8 billion, but well above earlier levels. In fiscal 1990, agricultural, wood, and fish exports totaled only $49.4 billion.

For fiscal 1998, our February estimate forecasts U.S. exports at $56 billion. With imports projected at $38.0 billion, the current estimates set the agricultural trade surplus at $18 billion this year. The decline in exports forecast for this year is due largely to the unsettled financial situation in Asia, strong competition from other exporting nations, and the strong dollar.

Mr. Chairman, one of USDA's primary goals is to expand economic and trade opportunities for agricultural producers and other rural residents. The modest annual growth projected in domestic demand for U.S. agricultural products makes the export market one of the most viable sources of increases in U.S. farm income.

FAS MISSION, ACCOMPLISHMENTS AND FUTURE CHALLENGES

Before I present our budget request, I would like to briefly share my thoughts on our mission highlighted in our 5-year strategic plan, and briefly review the strategies we will use to successfully accomplish our goals. My staff at FAS has created a highly focused strategic plan to guide us in accomplishing our mission and turning future challenges into opportunities for U.S. agriculture. As stated in our strategic plan, FAS' mission is to serve U.S. agriculture's international interests by expanding export opportunities for U.S. agricultural, fish, and forest products and promoting world food security.

FAS identified two goals and a number of strategies in its strategic and annual performance plans that I believe will help us help American agriculture tap into export opportunities. The first goal is to expand export opportunities. We will accomplish this goal by:

—aggressively pursuing reductions in trade barriers and trade-distorting practices of key trading partners;

—identifying constraints to U.S. exports and implementing strategies for overcoming them;

—defending U.S. agricultural interests by promoting U.S. policy views before the international community;

—strengthening the export knowledge and skills of producers, exporters, and new-to-export small agribusiness firms so they can compete more effectively in the international marketplace;

—educating foreign buyers on the merits of U.S. products;

—targeting market development and promotion activities to leverage the entrepreneurial spirit of America's small business owners in expanding agricultural exports;
—assuring accurate and timely dissemination of market intelligence that serves a broad domestic customer base through the effective application of technologies such as the Internet;
—effectively applying our GSM export credit guarantee programs in developing country markets where liquidity is a limiting factor to U.S. exports; and
—using the Dairy Export Incentive Program (DEIP) up to GATT-allowable limits.

Our second goal is to promote world food security, which we will accomplish by:
—ensuring the U.S. research community has accurate and up-to-date information about areas of emerging trends in scientific research and technical activities that will benefit U.S. farmers through improving farming technologies;
—supporting economic development efforts, especially in emerging markets and developing countries;
—continuing to use the Public Law 480, Title I program, increasing its focus on the private sector; and
—continuing the successful work under the Food for Progress program with private voluntary organizations.

Through these aggressive strategies, we are helping our farmers and ranchers meet the competitive challenges both now and in the future. FAS conducts a wide range of programs and activities to successfully implement these strategies, as we work to achieve our mission and goals. Some accomplishments in 1997 include:

Trade policy accomplishments.—In 1997, the United States won a major victory in the first case brought to the World Trade Organization (WTO) under the new Sanitary and Phytosanitary (SPS) Agreement. In August, the WTO upheld the claims of the United States and Canada that the European Union's (EU) import ban on meat from hormone-treated animals was inconsistent with the EU's commitments under the WTO SPS Agreement. The decision was affirmed just last month by the WTO's Appellate Body. This ban, initiated in 1989, stopped over $100 million in U.S. beef exports annually. We are ready to work with EU officials toward resuming normal trade as soon as possible.

Other accomplishments included the first commercial shipment of U.S. tomatoes to Japan, the lifting of Egypt's ban on imported poultry, gaining market access for sweet cherries in Mexico, preserving the market for U.S. petfood exports to Switzerland, implementing a project to expedite shipments of live cattle from Montana and Washington to Canada, and working with Chile to re-open its market to U.S. wheat.

Enforcing Trade Agreements.—FAS aggressively monitored foreign countries' compliance with Uruguay Round Agreement commitments during 1997, the second year of the agreement's implementation. FAS efforts helped safeguard negotiated trade benefits, including working with Costa Rica to open its poultry tariff rate quotas, which had been delayed by domestic legal challenges. That action set a precedent for other countries to implement their agreement commitments. FAS efforts also resulted in the Philippines taking major steps to fully open its market for U.S. pork and poultry exports. FAS work contributed to the opening of formal dispute settlement proceedings by the U.S. government that will challenge the EU's cheese export subsidies and Canada's milk price pooling scheme—practices that may constrain U.S. dairy exports. We have used the NAFTA committee process to gain new access for sweet cherries and address restrictions that would have impeded exports for grain, livestock, fruit and milk to Mexico.

Expanding and Improving Export Assistance Programs.—Export programs and services were refined and expanded to meet changing demands of the international marketplace and keep pace with the competition. In 1997, funding offered under the Foreign Market Development Program (FMD) for the first time was provided to export organizations through a competitive process. Under the 1997 Market Access Program (MAP), 84 percent of the brand promotion funds assisted small-sized companies and cooperatives. Funding has been cut significantly for large companies and will be eliminated entirely in the 1998 allocation process.

In 1997, U.S. exporters reported the first sales under the Supplier Credit Guarantee Program. In addition, a new Facilities Credit Guarantee Program was launched. The program provides payment guarantees to help finance exports of U.S. goods and services for agricultural facilities in emerging markets.

Through a variety of training experiences throughout the United States, the Cochran Fellowship Program provided 707 participants from 45 countries exposure to U.S. economic policies, business practices and products. New programs were initiated in Kenya, Namibia and Brazil. In Ukraine, USDA, through the Commercial Agriculture Development Project, provided technical assistance and training to develop a system of grades and standards to facilitate domestic and international commerce.

Reaching Out to New Exporters.—FAS continued its outreach efforts to educate American farmers and exporters about foreign sales opportunities. In 1997, efforts continued to target cooperatives and small, disadvantaged, and minority firms. New partnerships were formed with vocational agriculture teachers, 4–H and FFA representatives to inform more of the public, particularly young farmers, of the dynamics of agricultural exports and the need to get more producers and companies exporting. In addition, FAS has worked with the FFA and United Negro College Fund to organize an international intern program providing interested students an opportunity to gain international experience by working in select FAS overseas offices.

Providing Scientific and Policy Leadership on Biotechnology.—In 1997, FAS and other USDA agencies took a leadership role to ensure that farmers and consumers around the world have access to approved products resulting from biotechnology. FAS worked tirelessly in EU countries to convince policy makers of the need for food safety decisions to be based on sound science. Two biotech products were cleared for importation by most European countries. FAS worked with Egyptian officials to continue to keep the Egyptian market open to approved agricultural biotechnology products. USDA worked to assure Brazilian officials of the safety of approved biotechnology products, and Brazilian officials approved the importation of 1.5 million metric tons of soybeans, including those derived from biotechnology. The establishment of the U.S.-Indonesia Food and Agricultural Forum insured continued dialog among senior public and private sector officials of both countries on issues related to food safety, genetically engineered products and trade. This is envisioned as a model to engage the leadership of other countries in a continuing discussion of these important issues. The United States also is a key proponent of a biotech initiative under the Asian Pacific Economic Cooperation (APEC) forum. We are sponsoring educational workshops aimed at harmonizing regulatory approaches to biotech products among APEC members.

Working to Ensure Food Security Around the World.—In 1997, USDA worked vigorously to continue the momentum created by the 1996 World Food Summit. At the Summit, 186 countries adopted a Plan of Action that endorses trade liberalization, free markets, private sector initiative, sustainable development, and self-reliance rather than self-sufficiency. USDA is coordinating U.S. follow-up by the government, which emphasizes strengthening the U.S. contribution to alleviating hunger and malnutrition at home and abroad. Central to that effort is the development of a U.S. Action Plan on Food Security to serve as a blueprint for future U.S. policies and programs. The plan is being developed in full collaboration with non-government organizations, the private sector and academia. Intended to be not just a government plan, but one for the country as a whole, its completion will hopefully also be an incentive for other countries to meet their commitments made at the Summit.

Promoting Scientific Cooperation.—USDA scientific cooperation with foreign countries continues to pay off in practical ways for U.S. agriculture. USDA uses science to help solve critical problems such as trade barriers and phytosanitary issues, food safety, and exotic diseases and pests. Postharvest technology scientists have worked with Malaysian counterparts to develop quarantine treatments to hasten the elimination of trade barriers to commodities susceptible to fruit fly. A Chinese team visited the United States to exchange information on viral diseases of animals, laying the groundwork for the exportation of U.S. Shorthorn cattle and diagnostic equipment to China.

Scientists are also promoting new industrial uses for U.S. agricultural products overseas. Initiatives include collaboration with Hungary on biodegradable plastics from corn starch, Argentina on hypoallergenic latex from guayule, and Mexico on pulp and paper products from crop wastes. Such projects help open new markets for U.S. products and diversify the U.S. export portfolio.

An important component of global food security is food safety. USDA has ongoing efforts to transfer existing technologies and develop new technologies in food safety. An example of successful technology transfer is a project that allowed USDA to provide relevant information to the Bulgarian government concerning health risks of rice grown in a region contaminated with arsenic. Subsequent efforts have focused on developing new phytoremediation techniques using plants to detoxify contaminated soils.

Challenges for 1998

Mr. Chairman, we just need to look at the front page of nearly any newspaper in America to see the issues confronting American farmers and producers. From Asian currency problems to biotechnology to food safety concerns, American farmers face challenges that were unthinkable just a few years ago. Today's global trading environment means that the actions taken by governments and businesses far from U.S. shores can and do have an impact on U.S. farmers. The enactment of the land-

mark 1996 farm bill makes the role of exports and, in turn, the role of FAS even more prominent in increasing the economic opportunities for America's farmers and ranchers. I would like to take a few moments to outline some of the issues we will be focusing on in the coming year.

Impact of Asian Financial Problems.—USDA's latest export forecast shows plainly the impact the events in Asia are having on our exports to those markets. I just recently returned from Japan and Korea to learn first hand the problems and the issues that continue to face those countries and U.S. exporters. Earlier this year, I also visited several Asian nations and the information I gathered on my most recent trip will help us determine whether our initial efforts are meeting with success.

We intend to use all the programs at our disposal to diminish the impact on U.S. agricultural exports. We have announced the availability of $1.1 billion in export credit guarantees to South Korea, and have increased the availability of export credit guarantees to the Philippines, Indonesia, Malaysia, Thailand, and Singapore to more than $1 billion. We have sent a technical team to the region and a follow-up team will visit this spring to ensure the smooth operation of these programs. We also will continue to constantly review the situations in these markets to ensure that U.S. exporters have all the necessary tools available to them.

Competitive Pressures.—The outlook for U.S. agricultural exports is heavily influenced by competitive pressures that differ by commodity and can affect price and/or quantity of sales. One of the primary sources of this pressure is the rising value of the U.S. dollar, especially against the currencies of our major competitors. This has the effect of making U.S. exports more expensive to our customers, relative to those of our competitors. Unfortunately, the dollar has been rising against the currencies of all our competitors. Given the strength of the American economy, this situation is likely to continue for the foreseeable future, putting downward pressure on the U.S. share of world trade.

There are commodity-specific competitive pressures that pose challenges to U.S. exports as well. Record production of soybeans in South America will continue to pressure prices in 1998 and these pressures will continue in future years. We expect South American production of grains and oilseeds to expand significantly in the years ahead, offering increased competition to U.S. suppliers in third country markets, and pressuring prices in the process. Likewise, Chinese corn and East European corn and feed wheat available for export have been putting downward pressure on U.S. corn prices so far this year. While the threat from Chinese corn appears to have abated as supplies have diminished, East European products will continue to pressure U.S. corn prices.

In addition, we will continue to face stiff competition in markets around the globe. Our annual review of the export promotion activities of the 22 countries that account for our major competition found that just like the United States, many of our competitors have ambitious export goals. The EU and other countries assist their producers and small business to develop foreign markets through activities similar to our Market Access Program and Foreign Market Development Program. Market promotion by EU countries is estimated at $400 million in 1995/96, with about one-half of that amount provided by EU-member governments. The rest of the funds comes from producer-funded organizations and other fees. Australia, Canada, and New Zealand have strong national government promotion agencies and rely heavily on their statutory marketing boards to carry out market development activities for producers of specific agricultural products.

In addition to market promotion activities, the EU also carries out an extensive subsidy program. Of the $7.2 billion budgeted by the EU in 1997 for export subsidies, over 85 percent was for exports of high-value products such as fresh and processed fruits and vegetables, wine, dairy products, and meat and meat products.

Fast-track Authority.—We were obviously disappointed that the President's traditional trade negotiating authority was not renewed in 1997. Like his predecessors since Gerald Ford, the President and his negotiators need this authority to gain further market access overseas, extract significant concessions from our trading partners, and play a leadership role in shaping new trade agreements. But it isn't over. The Administration is conferring with key members of Congress to secure this authority. Our preference would be for broad fast track authority, incorporating the specific goals for agriculture that were spelled out in the President's last bill.

Next Round of Multilateral Trade Negotiations.—As important as the Uruguay Round was for initiating the process of liberalizing world trade in agricultural products, a lot of work remains to be done. WTO members agreed to begin negotiations on the next phase of agricultural trade liberalization at the end of 1999. These negotiations are the best chance U.S. agriculture has for further reducing tariffs, opening new markets, and addressing unfair trade practices on a global scale. Fast track authority was critical in concluding the Uruguay Round, and renewed authority is

viewed as essential for U.S. negotiating credibility and success in future WTO negotiations. Several key issues stand out:

—Substantial further reductions in tariffs are needed.

—Tariff-rate quotas (TRQ's) should be substantially increased or effectively eliminated by cutting the out-of-quota duty.

—Export subsidies should be further cut or eliminated.

—Rigorous disciplines should be imposed on the activities of state trading enterprises.

—Tighter disciplines are needed to prevent countries from circumventing their trade commitments through disguised subsidies and nontariff measures.

—Rules on sanitary and phytosanitary measures should be tightened so countries cannot disguise protectionist intentions or pander to irrational concerns regarding public health.

Refining Our Export Assistance Efforts.—Today's competitive environment for exporters coupled with budget realities means that the Federal government must continue its efforts to do more with less. At FAS we are using the Government Performance and Results Act (GPRA) strategic planning framework to rethink our export assistance efforts from top to bottom. We continue to emphasize customer service and search for ways we can improve program delivery. This year, we will begin moving toward a one-stop application process for both our MAP and FMD programs to better coordinate our export efforts across programs, as well as simplify and reduce the paperwork burden on potential program participants. This is one example of our efforts to implement GPRA principles to guide us in allocating our export promotion resources.

In our credit guarantee programs, we will continue to expand our outreach activities to educate both potential exporters and importers about how the programs can benefit them. We will also continue to work to increase the number of U.S. firms participating in the export market through our efforts with state departments of agriculture and state legislators as well as groups such as FFA.

World Food Security.—Improving world food security continues to be a top priority. This year, we will continue to work with the public and private sectors to develop a U.S. Action Plan on Food Security that will serve as a blueprint for future U.S. policies and programs. Our food aid programs are also under review as we evaluate the changes that were made as a result of the 1996 farm bill.

Another area of emphasis is our effort to ensure that farmers and consumers around the world have access to approved products resulting from biotechnology. Properly used and regulated, biotechnology offers one of the most promising tools for meeting future demand for an abundant, affordable, nutritious, and safe global food supply. It holds the potential for reducing the use of crop chemicals and fossil fuels, adapting plant varieties that can be grown in harsh conditions, reducing losses to plant pests and diseases, increasing the shelf life and the nutritional content of foods.

Equal Employment Opportunity.—I am firmly committed to ensuring that FAS supports the civil rights of all our employees. As you can see, the challenges facing us are many, and we can only begin to accomplish these goals by effectively working together. Under the direction of Secretary Glickman, we are committed to ensuring equal opportunity; respecting the civil rights of all employees, clients, and customers; and creating a work environment that is free of discrimination and harassment, while accommodating the needs of persons with disabilities. As an Asian American, I have experienced prejudice and stereotypical assumptions solely based on my heritage. As FAS administrator, I will carefully monitor the implementation of our agency's EEO commitment and will hold each employee at every level personally accountable for his or her conduct and performance, as a public servant, in equal opportunity and civil rights.

FAS BUDGET REQUEST

Mr. Chairman, today's budget realities mean that government must be leaner and more efficient, but the era of a responsive and responsible government is not over. While there are things that government can't or shouldn't do, there are many legitimate public needs that only government can meet. Whether it's working to resolve trade disputes, supporting the American private sector as it battles in export markets against foreign competitors flush with funds from their national treasuries, or educating potential exporters, FAS has a vital role to play.

The fiscal 1999 FAS budget proposes a funding level of $145.6 million and 819 staff-years. This represents an increase of $5.6 million above fiscal 1998 funding levels but a reduction of 62 staff-years from 1998 levels. The budget proposes several initiatives that I would like to briefly review with you.

The 1999 budget proposes that the costs of operating the CCC Computer Facility, and other related FAS Information Resources Management (IRM) costs shall be funded through the FAS appropriation. The Facility serves as the Department's collection point for international production intelligence and crop estimates. Currently, these activities are funded through a reimbursable agreement with CCC. This change will shift funding for these activities from mandatory to the more appropriate category of discretionary spending. Additionally, with this shift, funding for these activities will no longer be subject to the annual limitation on CCC reimbursable agreements established by provisions of the 1996 Farm Bill.

The funding support for the CCC Computer Facility and other IRM costs is estimated at $12.0 million in fiscal 1999. The budget proposes to finance this activity primarily by reducing employment, associated administrative cost reductions, and a reduction in the FAS contribution to the Foreign Market Development (FMD) Cooperator Program from $27.5 million to $22.0 million. It is anticipated that increased cost-share contributions by participants in the FMD Program will offset reduced FAS contribution levels.

Year 2000 Efforts.—I am pleased to report that all computer hardware and application software systems will be Year 2000 compliant by the end of calendar 1998. Of the 14 FAS mission-critical systems, eight are already compliant, and the remaining systems will be re-engineered or modified during calendar 1998. Independent Verification and Validation (IV&V) of FAS systems will be performed during the latter part of calendar 1998.

The budget proposes $2.0 million to establish an overseas buying power maintenance account to assist FAS in managing unanticipated changes in the costs of overseas operations associated with exchange rate losses. This proposal responds to fiscal year 1998 conference report language that directs the Department to develop a plan for establishing an account to manage overseas currency fluctuations. Under this proposal, funds appropriated for this purpose in 1999 will be transferred to a revolving fund where they will remain until expended. Funds could be withdrawn from the account after exchange rate losses are verified. Exchange rate gains that may accrue will be deposited into the account.

The budget provides an increase of $2.0 million for pay costs and higher agency contribution levels for employees under the Civil Service Retirement System and includes $4 million for overseas administrative services provided by the Department of State in support of the International Cooperative Administrative Support Services (ICASS) program. In 1998, $4.4 million has been transferred from the Department of State for this purpose.

The budget includes an increase of $500,000 to develop a more effective FAS Government Performance and Results Act (GPRA) performance measurement and evaluation system and to re-engineer market intelligence gathering processes. FAS will enlist the help of private sector experts to develop a cross-agency performance tracking and evaluation system to determine success rates in attaining goals and objectives outlined in the FAS Strategic Plan. FAS also will evaluate and re-engineer its crop and market intelligence gathering activities, interagency partnering, and evaluation and dissemination processes to make them more efficient in terms of resource utilization and more responsive to internal and external customer needs.

For fiscal 1999, the budget includes $3.0 million for the Cochran Fellowship Program, unchanged from 1998 levels.

Export Programs

Mr. Chairman, the export promotion, food assistance and foreign market development programs administered by FAS are key to expanding global market opportunities for U.S. agricultural producers. Our program proposals provide the tools to meet these new sales opportunities, tempered by the need to reduce Federal spending.

Export Credit Guarantee Programs.—The budget proposes a new approach to presenting the estimates for the CCC export credit guarantee programs. Program levels, budget authority and outlays will reflect the level of sales expected to be registered rather than the authorized levels. This provides more realistic estimates of the costs of the guarantee programs and improves the accuracy of CCC budget estimates. This change will not restrict program use; the authorized levels remain available for use as determined by program demand and changing market conditions.

Following this new approach, the budget projects an aggregate program level of $5.0 billion for export credit guarantees in fiscal 1998 and $4.6 billion for 1999. These program levels are significantly higher than in recent years, reflecting large increases in programming in Southeast Asia and South Korea during 1998 that are expected to continue into 1999.

The 1999 program level includes $4.3 billion for the GSM–102 program and $100 million for the GSM–103 program. Additionally, the budget includes $150 million for supplier credit guarantees and $50 million for facilities financing guarantees.

Public Law 480.—The 1999 budget provides a total program level of $979 million for Public Law 480 foreign food assistance, a reduction of $133 million from 1998 levels. At this program level, 2.8 million metric tons of commodity assistance will be provided, 700,000 metric tons below the current estimate for 1998. The reduction in Public Law 480 funding proposed for 1999 will occur in the Title I program; funding for Titles II and III will remain unchanged from 1998 enacted levels. This will ensure the availability of adequate resources to meet the most serious food assistance needs.

Market Access Program.—For the Market Access Program, the 1999 budget proposes to continue the program level at $90.0 million, the maximum annual program level authorized in the 1996 Farm Bill.

Export Enhancement Program.—For the Export Enhancement Program (EEP), the budget proposes a program level of up to $320 million for fiscal 1999. While world market conditions have limited the use of EEP over the past two years, we believe it is extremely important that we maintain a strong position in order to protect U.S. agricultural trade interests. Additionally, the budget proposed a flexible multi-year program level for EEP of $1.2 billion for the fiscal years 1999 through 2003. This proposal will provide the Department with the administrative discretion to determine the annual funding level for EEP, subject to the $320 million limitation in 1999. Amounts not used in one year will remain available for use in subsequent years, subject to the export subsidy reduction commitments made in conjunction with the Uruguay Round Agreement on Agriculture. It is anticipated that this proposal will generate some $1.4 billion in savings over the five-year period that will be used to finance crop insurance sales commissions, increased EQIP funds, and other increases requested for mandatory programs in the budget.

Dairy Export Incentive Program.—For the Dairy Export Incentive Program (DEIP), the budget includes a program level of $82.3 million, somewhat below the current level due to projected tighter domestic market situation. As is the case with EEP, actual 1999 program levels for DEIP will be determined by market conditions subject to the export subsidy reduction commitments made in the Uruguay Round Agreement on Agriculture.

This concludes my statement, Mr. Chairman. I will be glad to answer any questions.

PREPARED STATEMENT OF KENNETH D. ACKERMAN

Mr. Chairman and members of the Subcommittee, I am pleased to present the fiscal year 1999 budget for the Risk Management Agency (RMA). It is my privilege to appear before you as Administrator of RMA, and I would like to express my personal gratitude to the members of this Subcommittee who have shown a continuing interest and commitment to RMA programs.

The virtual elimination of ad hoc disaster aid and subsequent passage of the 1996 Farm Bill positioned the RMA to be the primary provider of the agricultural safety net. In order to assure that American agriculture remains solid, solvent, and globally competitive into the 21st century, RMA has committed itself to transforming the crop insurance program into a broad-based safety net for producers. That is our vision. We have worked to assure a broad-based safety net consisting of many public and private alternatives, all of which are intended to improve the economic stability of agriculture. Today, I want to discuss with you an important budget issue which must be addressed in order to continue our work establishing, maintaining, and delivering this safety net for producers. However, before I do that, I would like to emphasize our mandate which has taken RMA into many new areas beyond traditional crop insurance, including the development of innovative products based on proposals from the private sector spanning the breadth of the farm risk management community. I would also like to highlight some of RMA's key accomplishments for 1997.

PROGRAM PARTICIPATION

Participation in the crop insurance program remains at a significantly high level despite elimination of the requirement that producers obtain crop insurance to participate in other major Department of Agriculture (USDA) programs. In 1997, crop insurance provided $24.3 billion in protection to more than 600,000 policyholders holding slightly more than 1.3 million policies on 181.4 million acres. We expect to have about the same level of participation in 1998 and 1999. In 1997, RMA expanded coverage on 29 insured crops to 343 additional counties in 26 States. In

1998, coverage will be expanded on 25 crops to 144 additional counties in 16 States. Further, Crop Revenue Coverage (CRC) is now available on almost 90 percent of the corn, wheat, cotton, soybean, and grain sorghum acres in the U.S. CRC helps protect producers from losses in yield, price, or combinations of both factors.

PREPARING FOR THE FUTURE

We are continuing to work with agricultural leaders nationwide to increase producers' awareness of risk management strategies and impress upon them the importance of taking active steps to protect their investments from fluctuating prices and weather disasters. Private sector participation is key to the success of this initiative. Without the active efforts of our private sector partners, our ability to help growers manage risk would be lessened. Our Risk Management Education effort is backed by a $5 million apportionment of the Federal Crop Insurance Corporation Fund, on which we will draw in the coming months to carry out educational initiatives and competitively award education proposals submitted by our private sector partners, including farmer organizations, trade associations, and educational institutions. In its role as facilitator of the education effort, RMA will work to ensure that all producers are fully aware of not only the production risks but also the economic risks facing them in today's environment and of what tools are available to them to manage these risks. This initiative directly supports our strategic goal to strengthen the safety net for agricultural producers through sound risk management programs and education, as well as our objective to increase the agricultural community's awareness and effective utilization of risk management alternatives.

As part of our continuing efforts to develop programs for a range of agricultural commodities, we announced a new program for dairy farmers on January 6, 1998. The Dairy Options Pilot Program will provide minimum pricing guarantees for dairy farmers through a cost-sharing agreement with USDA. This program offers eligible producers a financial safety net by allowing them to purchase options on the price of their milk. Under this program, when milk prices fall, producers will be able to offset losses based on projected future earnings, in effect insuring the price of their milk. The pilot program, scheduled to begin this spring, is limited to six counties in six States that RMA will select on the basis of concentration of production and other factors. Funding for this program will be provided by the Commodity Credit Corporation.

In addition, we, along with our private sector partners, are exploring other opportunities to develop additional risk management tools, including insurance for many new crops and some exciting new products.

RMA recognizes changes and new challenges in its mandate and organizational environment and is currently underway with a Business Process Reengineering project which began in November, 1997. The project will produce a blueprint for reengineering the risk management tools and compliance investigations lifecycles. Throughout this process, RMA will be responding to such factors as tightening budget and staff resources, as well as growing program demands from Congress, the Department, and key customers and partners. This process will help us achieve the goal and objectives I mentioned earlier, as well as our objective to improve program integrity and protect taxpayers funds.

STRENGTHENING THE PARTNERSHIP

After spirited negotiations, RMA and the insurance companies agreed on terms for a new Standard Reinsurance Agreement for the 1998 crop year. The new agreement reduced annual administrative costs by $30 million and average annual underwriting profits by an estimated 20 percent. Timely completion of this agreement ensured that producers will continue to receive the high level of service they have come to expect, and that taxpayers will receive good value for their investment in American agriculture.

PRESERVING THE SAFETY NET

From 1987 to 1994, disaster assistance payments averaged roughly $1.2 billion a year, while annual crop insurance outlays averaged roughly $800 million over the same period. Combined, the total Federal expenditure was roughly $2 billion annually. Since the Federal Crop Insurance Reform Act of 1994 (1994 Act), total expenditures for the crop insurance program have averaged $1.2 billion annually. Compared to historical expenditures, the reform has saved between $700 and $800 million annually, net of Noninsured Assistance Program (NAP) payments, while providing most farmers affordable risk protection. While much of these savings are due to favorable weather, crop insurance reform has produced budgetary savings that have greatly exceeded expectations. For 1999, the crop insurance program is expected to

cost $1.785 billion, which is still below the historic cost of disaster assistance payments.

To follow-up on my earlier remarks, I would now like to address the budget issue facing RMA for fiscal year 1999. The 1994 reform legislation did not fully fund the enhanced crop insurance program. Rather, about half of the amount needed to fund the administrative and operating (A&O) subsidy to participating private insurance providers—about $188 million in fiscal year 1998—became subject to an annual appropriation of discretionary spending beginning in 1998.

We are prepared to resolve this dilemma and place the crop insurance program on a firm financial foundation. USDA has drafted legislation to shift the payment for A&O subsidy from discretionary to mandatory spending, a process that requires corresponding mandatory offsets. In fiscal year 1999, USDA will provide the offsets for this funding shift from sources outside the crop insurance program. Of the $1.1 billion in offsets needed through fiscal year 2003, USDA will propose that about half come from the crop insurance program, with producers and insurance providers sharing the reductions. The balance will come from other USDA sources.

USDA is prepared to spend the time and energy necessary to craft a solution which is fair and flexible for those with an interest in the crop insurance program. By solving this funding dilemma, we will benefit producers by assuring year-in, year-out stability to the crop insurance delivery system and predictability for the program. Accordingly, we have proposed the following strategy in developing a package to accomplish the needed offsets beginning in fiscal year 2000:

—*Limit payment eligibility under the catastrophic risk protection (CAT) insurance program to $100,000 per person.*—The savings attributed to this action will be $50 million in crop year 2000, increasing to $56 million in 2003 under the baseline projections. In crop year 1997, about 9,500 producers had insurance coverage under CAT that exceeded $100,000 for all insured crops. While maintaining the essential "safety net" for producers, the proposed limitation responds to criticisms of a "free" CAT program providing potentially millions of dollars of coverage to certain large operators.

—*Reduce administrative subsidies for insurance providers from 27 percent to 25 percent of premiums for the standard plans of insurance.*—This action, combined with the reduced premium due to the limitation on CAT coverage, reduces costs by an estimated $35–40 million per year.

—*Reduce premium subsidies for higher levels of coverage.*—The smallest program cuts were made in this area in order to continue protecting farmers and encourage producers to take advantage of higher crop insurance coverage levels. Currently, the premium risk subsidy for each producer is calculated as if the per-person premium had been purchased at a 50 percent coverage of yield and 75 percent of the price election (50/75). A reduction to 50/72.5 will cause only a slight increase in producers' out-of-pocket costs to pay premiums, approximately 10 cents per acre.

—*Reduce the statutory loss ratio target from 1.075 to 1.060 beginning in fiscal year 2000.*—The savings attributed to this action are about $30 million total during fiscal year 2000–2003. To achieve this savings, premium rates would be increased, thus increasing out-of-pocket costs for producers.

The proposed changes will have the following effect on participants. In annual dollar terms, large CAT-insured producers take the largest share of the reductions ($58 million or a reduction of 15.7 percent from $370 million), followed by providers ($37 million or 6 percent from $612 million), and then by producers who elect additional coverage ($33 million or 4.3 percent from $772 million).

The time is right for moving forward with this legislative proposal. If we fail to act, there will be a $205 million shortfall in company payments as no discretionary funds have been requested to pay for these expenses. This would result in severe disruption to the Federal crop insurance delivery system and an unacceptable erosion of program effectiveness.

In proposing this legislation, our goal is to ensure that cuts are fair and that they are achieved with minimal disruption for both program participants and insurance providers. We look forward to working with you and your colleagues in the coming months on this proposal, which will protect the interests of agricultural producers and ensure the stability of the crop insurance program.

YEAR 2000

RMA is making steady progress to prepare for the technological challenges associated with the Year 2000. We have identified 48 mission critical software application systems for Year 2000 compliance. Of these, 19 are compliant, 10 will be replaced,

one is being repaired, and 18 will be retired. We are projecting that the total cost of bringing RMA into compliance will be $1.69 million.

ADMINISTRATIVE AND OPERATING EXPENSES

Discretionary account expenses are estimated to increase by $2.0 million from the fiscal year (FY) 1998 level of $64 million. This increase includes: $1,064,000 for pay costs, of which $266,000 is for annualization of the fiscal year 1998 pay raise and $798,000 for the anticipated fiscal year 1999 pay raise; $277,000 to fund increased CSRS contributions; and $659,000 for costs associated with the completion of Year 2000 conversion requirements in order to comply with Departmental mandates, Civil Rights activities, and administrative costs in support of the Risk Management Education initiative. These costs all directly support the goal and objectives of the Agency.

Mr. Chairman, this concludes my testimony. I appreciate the opportunity to address this Subcommittee on behalf of the Risk Management Agency, and I will be glad to answer any questions that you or other members of the Subcommittee may have.

BIOGRAPHICAL SKETCHES

AUGUST SCHUMACHER, JR.

August Schumacher is the Under Secretary for Farm and Foreign Agricultural Services in the Office of the Secretary of Agriculture. He provides leadership in the area of Farm and Foreign Agricultural programs and more specifically exercises general direction of programs administered by the Farm Service Agency (Commodity Credit Corporation), the Risk Management Agency (Federal Crop Insurance Corporation), and the Foreign Agricultural service.

Prior to his appointment to this position, Mr. Schumacher was Administrator of the U.S. Department of Agriculture's (USDA) Foreign Agricultural Service. As Administrator, Schumacher was a strong advocate for the interests of America's farmers both at home and abroad. He oversaw the administration of programs to foster exports of American agricultural, fish and forest products. FAS reports on international agricultural production and trade, handles USDA's responsibilities in international trade agreements and negotiations, administers the Export Enhancement, Foreign Market Development and Market Promotion Programs, coordinates USDA's role in international food aid programs and provides linkages to worldwide resources and technologies that can benefit U.S. agriculture.

Before coming to USDA, Schumacher worked for the World Bank's agricultural lending group on a series of projects on agriculture sector policy adjustment, forestry and biodiversity protection in Central Europe, Belarus and Ukraine. In addition, he has worked in China, Latin America, the Middle East and Africa.

Schumacher also served as Commissioner of Food and Agriculture for the Commonwealth of Massachusetts during 1985–90. During his tenure as Commissioner of Food and Agriculture in Massachusetts, Schumacher was heavily involved in the joint efforts of USDA and the National Association of State Departments of Agriculture (NASDA) to promote agricultural trade. He hosted the 1990 NASDA Food Expo in Boston and participated in several agri-trade missions to Europe and Japan. As Commissioner, he also fostered several state market development initiatives including the Women, Infants, and Children (WIC) farmers' market coupon program.

Schumacher is from a farm family in Lexington, Mass. He attended Harvard College and the London School of Economics. He was also a research associate with the Agribusiness Department of the Harvard Business School.

KEITH KELLY

Keith Kelly, a native of Red Lodge, Montana, is the Administrator of USDA's Farm Service Agency (FSA). As Administrator, Mr. Kelly reports to the Under Secretary of Agriculture for Farm and Foreign Agricultural Services, and is responsible for the administration of farm commodity programs, agricultural credit programs, and certain disaster and Federal crop insurance programs.

In 1990, Mr. Kelly served as the first Director of the newly-created Arizona Department of Agriculture. He was appointed by Governor Rose Mofford and was reappointed by Governor Fife Symington in 1991. Under the direction of the Arizona State Legislature, he consolidated four autonomous state agencies into a unified,

cabinet-level department with 450 employees and an appropriated budget of approximately $13 million. Mr. Kelly was instrumental in the adoption of a bilateral, livestock health agreement with the state of Sonora, Mexico, and he has actively promoted the North American Free Trade Agreement as a member of the Arizona-Mexico Commission. He negotiated the first official boxed-beef agreement for Arizona processors in the Mexican states of Sonora and Sinaloa in 1996–97. He was appointed by Secretary Glickman and U.S. Trade Representative Mickey Kantor to the Agricultural Policy Advisory Committee in 1995. Following in the foot- steps of his grandfather (Commissioner of Agriculture, 1939–1941), Mr. Kelly served as Director of Montana's Department of Agriculture (1983–1988), after serving two years as deputy director. From 1976 to 1980, he served as Administrative Assistant for Agriculture and Natural Resources for Montana's Governor's Office. He is past chairman of the National Governors Association Staff Advisory Council for Agriculture.

From 1972 to 1974, as a marketing specialist for the Montana Wheat Commission, he developed the first toll-free Grain Market News Service in the United States; and from 1974 to 1976, he was assistant director of Western Wheat Associates, based in Washington, D.C., where he developed marketing plans for U.S. wheat producers.

Mr. Kelly was raised on his parents' sheep and cattle ranch in Red Lodge. He attended Montana State University where he received a B.S. degree in Agricultural Business in 1968 and an M.S. degree in Economics/Agricultural Economics in 1973. He served in the U.S. Army Infantry, 101st Airborne Division, in Vietnam and was awarded the Bronze Star.

Mr. Kelly and his wife, the former Norma Jean Walsh of Butte, Montana, are the parents of four children.

LON S. HATAMIYA

Lon Hatamiya is the Administrator of the Foreign Agricultural Service (FAS) of the United States Department of Agriculture (USDA), where he oversees various programs that foster exports of American agricultural, fish, and forest products. FAS is responsible for USDA's obligations in international trade agreements and negotiations along with coordinating the Department's role in international food aid programs. This agency also reports on international agricultural production and trade, administers various export assistance programs, and provides linkages to worldwide resources and technologies that can benefit U.S. agriculture.

Prior to his appointment to FAS in October of 1997, Lon was the Administrator of the Agricultural Marketing Service (AMS) of USDA from 1993 to 1997, where he was responsible for over 50 federal programs. During his tenure, AMS received two "Hammer Awards" from the National Performance Review in recognition of increased efficiency and cost savings within a federal government program.

Lon was born and raised in Marysville, California, where his family has been farming for the past 90 years. He graduated with honors from Harvard University, with a B.A. in Economics. He received his M.B.A. in Entrepreneurial Studies and International Business from the Anderson Graduate School of Management at the University of California, Los Angeles (UCLA), and his J.D. from the UCLA School of Law. He is admitted to practice law in California.

Lon has worked in the private sector in various capacities over the last fifteen years. As a purchasing manager with the Proctor and Gamble Company in Cincinnati, Ohio, he assisted in the development of material acquisition and allocation strategies for their production facilities around the world. Lon has also served as a consultant to the Sony Corporation in Japan, developing a marketing strategy for broadcast equipment in Western Europe; and to the Port of Long Beach, developing a long-term intermodal transportation plan. In addition, Lon was an attorney with the national firm of Orrick, Herrington & Sutcliffe, in the practice of public finance, corporate, and political law. In the vast third Assembly District in Northern California, Lon was the Democratic nominee and the first Japanese American to run for the California State Legislature in the last decade.

Lon, before his appointment by President Clinton to USDA in September 1993, was involved in the general management of his family's farming business, H.B. Orchards Company, Inc., in Marysville, California, which grows 1,200 acres of prunes, peaches, walnuts, and almonds. He was also founder and President of BHP Associates, Inc., an economic development, education, and agribusiness consulting firm in Sacramento, California.

In 1991, Lon was selected for the California Agricultural Leadership Program of the California Agricultural Education Foundation, comprising top leaders of California agriculture. He was appointed by the California State Assembly in 1992 to serve

on the Rural Economic Development Infrastructure Panel. He also served on the Boards of Directors of Planned Parenthood of the Sacramento Valley and the Marysville Chapter of the Japanese American Citizens League (JACL); as President of the Sacramento Chapter of the JACL, he was recognized for his longtime work on obtaining reparations for Japanese Americans interned during World War II.

Lon currently serves as a member of the National Advisory Council of Minorities in Agriculture, Natural Resources, and Related Sciences (MANNRS); as a member of the Board of Governors of the Japanese American National Museum; and served on the USDA/Hispanic Association of Colleges and Universities (HACU) Leadership Council.

Lon and his wife Nancy are the parents of two sons, Jon and George.

DAIRY OPTIONS PILOT PROGRAM

Senator COCHRAN. Before proceeding with my questions, I am going to yield to the distinguished Senator from Wisconsin, Senator Kohl, for any comments, statement, or questions that he might have. Senator.

Senator KOHL. Well, that is very kind of you, Senator Cochran. I do appreciate it. I have three questions which I would like to address to the panel with respect to the dairy issue.

USDA's Risk Management Agency is finalizing the dairy option pilot project rule, as you know. The Extension Service in Wisconsin and dairy farmers in Wisconsin are quite anxious to begin using this new marketing tool. The success of the program will be determined by how many dairy farmers actually adopt this new marketing tool after the pilot project expires.

I want to see to it that throughout Wisconsin this pilot project is maximized in terms of its exposure to Wisconsin dairy farmers. My concern is that it may be used in as little as six counties, I understand, and it may be used for as few as 6 months, and then it may move on. You know the dairy industry in Wisconsin, as well as other places, but in Wisconsin, because we are so important to the dairy industry in the country and it is such an important industry in our State, as you know. And it is in dire straights, as you also know. We want them very much to use new methods to market their products like the options program.

I would like to feel that you are going to give Wisconsin more of an opportunity to participate in it than what I fear may be the case. Could I get hopefully a favorable response from you right now?

Mr. ACKERMAN. Thank you, Senator. I appreciate the support that you and many others have given to this program. We think it is a very important one.

At this point, as you note, the comment period on the rule for the dairy options pilot program is closed. We are reviewing the comments right now. At an appropriate point, once the comments are reviewed, we will be making decisions on where the first set of States and counties will be that will be initiating the program. We are hoping that will be done in an expeditious way. We have gotten quite a lot of interest around the country in the program and we take that as a very healthy development.

As you note, the dairy options pilot program is designed to start small. We intend in the first 6 months—in the first round of it—to start in six States, six counties per State. The reason for this is that it is a brandnew program. We have never done this before and are not sure that it works. We want to make sure that it

works, and once we have gained a little bit of experience, then we will be able to enlarge it. But as you note, on the first round, we will be limited in size to six States and six counties per State.

Also, it is designed as a temporary program. Any individual farmer would be in the program for 6 months, and the reason again is to teach the farmer how to use exchange traded options and futures contracts. This is very new to dairy producers. Dairy futures have only existed for a couple of years. Once farmers have been through it, we hope that this will enable them to use the markets on a permanent basis with the education and experience they have gained.

Senator KOHL. I do appreciate that and I appreciate the program and its potential value to dairy farmers, and I am hopeful that I can work with you to see to it that Wisconsin dairy farmers get the maximum exposure as the program unfolds. It is intended to be a 3-year program.

Mr. ACKERMAN. That is correct.

Senator KOHL. With a 6-month kind of a startup phase, and hopefully then to go on for another 2½ years. So, my hope is that we can work to maximize Wisconsin dairy farmers' exposure, and I am sure that you would be more than happy to do that.

Mr. ACKERMAN. That is correct, and we would be happy to do that with you.

DAIRY EXPORT INCENTIVE PROGRAM

Senator KOHL. Thank you.

Now, the second question. In the first 2 years, middle of 1995 through the middle of 1997, of the GATT implementation period, the United States notified WTO that about 141,000 metric tons of nonfat dry milk had been exported through the dairy export incentive program [DEIP]. It is my understanding that the U.S. Government approved contracts totaling that amount, but only some 91,000 metric tons were actually exported; 141,000 were reported. The difference is approximately 50,000 metric tons was reported as exported, but apparently never left the United States.

The question I am asking is when will the Department reannounce this tonnage so that the product can actually be exported.

Mr. SCHUMACHER. Senator, this is a very, very important question, one that we are working on a great deal. That is, the amount that was registered and then canceled. I am going to ask Lon or Chris where are we in terms of getting announcements on those tonnages out.

Mr. GOLDTHWAIT. We have met with the representatives of the dairy industry a number of times on this question. We have told them that for any tonnages that were canceled within this same GATT counting period, there is no problem. That tonnage will be reannounced probably around the beginning of May.

With respect to tonnage from prior years, we have this issue under study. We are looking very carefully at whether there is a way to reannounce that tonnage which would not be inconsistent with our GATT commitments. That review is still ongoing and we hope to conclude it rather shortly. Obviously we would like to do something about this quickly.

The other thing we have undertaken to do—in fact, already done—is to make certain flexibilities available to the exporters with respect to their sales under the DEIP program so that fewer contracts will be canceled in the future. Such flexibilities may involve changing, for example, the buyer in the purchasing destination if the first buyer is unable to fulfill those contracts.

So, we have this question very much under study and we certainly appreciate the importance of the DEIP program, its benefit to America's dairy farmers.

Senator KOHL. Thank you. I would like to stay in touch with you as you move ahead with that.

Mr. SCHUMACHER. Absolutely.

Senator KOHL. Hopefully we can maximize the exports.

Mr. SCHUMACHER. We are using the full funding. I think Chris and Lon's people are working very hard on that issue under some criticism from a certain number of our competitors, but I think it is vitally important. I think we are approaching $1 billion in dairy exports, and that then does help a little bit on the price.

STATE TRADING ENTERPRISES

Senator KOHL. All right. I thank you so much.

Last question, gentlemen. Users of State trading enterprises are the most vocal in calling for the total elimination of, quote, traditional export subsidies. What measures does USDA suggest to ensure that State trading enterprises like the New Zealand Dairy Board, that their anticompetitive advantages, which they have and use, are also addressed and hopefully eliminated?

Mr. SCHUMACHER. That is a very vital issue—not only the single desk trading of the New Zealanders but also the Australia Wheat Board and the Canadian Wheat Board. It is something that we are working on in terms of the next round. It is one of our two or three top priorities, Senator.

I am going to ask Lon to address this specific issue. It is one that our friends in Canada, Australia, and New Zealand—they are all friends—but they still have these State trading organizations or single desk trading and it is a very difficult issue because it does give them a competitive advantage.

Mr. HATAMIYA. Mr. Kohl, let me answer that briefly, if I could.

Under the WTO Agriculture Committee, we continue to bring up State trading enterprises as a major focus of discussion. It is a target for us to take a look at. We are looking for transparency in the marketplace. STE's do not provide that. We proposed a questionnaire form of approaching STE's. They are among a number of the highest priorities we are going to be looking at for our future negotiations in the WTO leading into the 1999 and 2000 round. So, not only are STE's important, but tariff reductions, tariff rate quotas, export subsidies, as well as other issues are major points of contention that we will continue to address at that appropriate level.

Mr. SCHUMACHER. There is one additional issue, and that is, as I mentioned in my opening remarks, we have been aggressively using the liquidity stabilization provided by our GSM. In the situation of Asia across the board, liquidity is the problem right now, and State trading has not been as effective in the sense that they are having some problems on that side.

So, I think the ability to fully use the authorities that Congress has provided to us in the GSM is certainly helping American farmers maintain market share, and it is a tool that we continue to use firmly around the world. Certainly there has been some strong criticism from some of our good friends for our timely use of that, and there are certainly interesting statements from some of their capitals.

Senator KOHL. Well, I thank you and I thank you for your cooperative attitude and your willingness to work together. Thanks a lot.

Thank you very much, Mr. Chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Senator. We will insert your prepared statement in the hearing record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR KOHL

Mr. Under Secretary, we appreciate your willingness to testify before the subcommittee today regarding the Farm and Foreign Agriculture Service Agency's proposed budget.

My constituents have kept me abreast of the difficulties the new farm program has caused in your attempts to deliver new farm and conservation programs and risk management products to farmers. Your task is further complicated, by the reduction of USDA's work force by 22,000 employees over the past few years.

I am particularly interested in your plans and goals for expanding the U.S. market share for dairy products like cheese. Currently, the world prices for dairy products are 30 to 40 percent under the U.S. price. If the U.S. is going to be a major exporter then either the U.S. price must drop to the world market or the world market must go up. I expect probably a combination of the two will happen. If this is the case, the dairy industry is in for additional stress over the next five to ten years. Your leadership and expertise will play a very important role during this period.

A tremendous number of challenges, such as reining in state trading enterprises, transfer pricing issues, World Trade Organization strategy for the next round of discussions, and expanding exports need to be addressed if the industry is to become a successful player in the international market. I will be particularly interested in hearing today how we can make trade agreements work better for farmers in rural Wisconsin.

NEEDS FOR DISASTER ASSISTANCE

Senator COCHRAN. Mr. Secretary, let me ask a couple of general questions about the budget request and then get to some specifics with the other members of the panel who are here with you today.

The supplemental request, for example, is under consideration by the Senate on the floor today, and we hope to complete action on it by the end of the day. Since the request was submitted by the administration, there have been some additional disasters that have occurred in Georgia particularly and elsewhere in the country.

I hope that you will help us try to assess the needs for disaster assistance that we should try to fund in this supplemental. We will still have an opportunity to negotiate in conference with the House and work out differences between the two bills that are passed by the two bodies. But I hope that we can have up-to-date information from the administration to work with and your assistance in that regard could be very helpful to us.

CUTBACK IN FOREIGN MARKET DEVELOPMENT COOPERATOR PROGRAM

In connection with our foreign agriculture activities, I noticed that in the budget request, there is a cutback in funds for the Cooperator Program, where the Government makes available money that is matched with private sector money through trade associations, like the U.S. Wheat and American Soybean associations and other groups like that, to try to help open up new markets and expand our market share around the world.

With the cutback proposed by the administration in these funds, what will the impact be insofar as our total commitment to market development around the world? Is this going to have a negative consequence at a time when we need to be doing more maybe rather than less?

Mr. SCHUMACHER. First, Senator, on the first question, on the Georgia and other disasters, we will get back to you. I visited Gainesville with Commissioner Ervin a year or so ago. It is the home of the original poultry industry and I was very sad to see a number of the poultry houses knocked down. So, we are going to work carefully and we will get back to you very quickly on the impact of recent disasters.

On the Cooperator Program, the cooperators and I work very closely. That program has been going since 1954. They have done an absolutely outstanding job of increasing our market share—particularly value-added products—and also maintaining our market share on bulk commodities. Our exports would be down, I believe, without the strong support and the cost sharing of the Cooperator Program. They simply do an outstanding job here and particularly overseas.

The budget provides $22.0 million for the Cooperator Program. MAP is fully funded and the Emerging Markets Program is fully funded. We are putting a complete package together and making that a bit more efficient so we can look at all the funds that the cooperators will have access to.

We are hoping to get a bit more cost sharing from the cooperators. There was report language in last year asking for that.

So, we would like to work with you very closely. We think that should be sufficient, but there may be differences of opinion on that.

FISCAL YEAR 1998 MAP ALLOCATION

Senator COCHRAN. For the Market Access Program, $90 million is requested in the budget, which is the amount mandated by law to be spent on the program. The program is not a discretionary program that we fund. We simply go along with the direct funding that the law makes available for the program.

But my question is, are those funds being used? In this fiscal year, for example, there has been a holding back on the allocation of funds and making those funds available for the purpose for which they are to be spent.

Can you tell us how much of the $90 million in this fiscal year has been spent and are there any intentional delays in the process to try to keep from spending that money?

Mr. SCHUMACHER. Well, I know the cooperators very well and the MAP participants. I think they are pretty aggressive on using this program. I would like to defer to Lon to discuss the fiscal year 1998 MAP allocation process.

It is one of the most important programs that we have. We have fought very hard to maintain the funding at the $90 million level. We have made a lot of changes in the program to benefit small businesses and cooperatives. There have been legislative changes made. So, I will defer to Lon.

Mr. HATAMIYA. Mr. Chairman, let me agree with Under Secretary Schumacher. To the contrary, we are being as active as possible with the use of all tools, as he has mentioned. The MAP program is now under a new uniform export strategy application process that may have delayed slightly the allocation of those funds but for the long term will make more efficient use of all of the tools provided, not only the Cooperator Program, but the MAP funds, as well as the Emerging Markets Program. We are trying to coordinate each one of these, in addition to the Cochran program, to ensure that all of the available funds are most efficiently used.

As Mr. Schumacher has said, we are actively pursuing every avenue of export development. On Friday, I returned from a trip to Asia, the second in 3 months, to ensure that we are an active exporter in that very important market. I led a delegation of agricultural leaders to Japan and Korea to ensure that our presence was felt. Many of those are participants within the MAP and Cooperator Program. I think they expressed their general positive impressions as to the use of these funds.

Again, we are trying to streamline and make most efficient this process, and I think that is working quite well.

REASONS FOR DECLINES IN ASIAN EXPORTS

Senator COCHRAN. Thank you. That is very reassuring. We will continue to follow the use of those funds and hope that there will not be any delays or backing away from the commitment to be aggressive in the use of those moneys.

In looking at the statements that were submitted about our export situation, I noticed that even last year, we saw declines in our export sales in the Asian marketplace. While we were increasing our exports in other places in the world, we were ahead of the downward trend in agriculture exports. It seemed like nobody else was talking about financial problems in Asia until just a few months ago, but the agriculture exporters could already tell that something was wrong.

What were the reasons for the declines that agriculture exporters had in the Asian markets? Given all the tools that you have and the growing economies that seemed to be doing well a year ago, why were they not buying more of the U.S.-produced commodities?

Mr. SCHUMACHER. I will defer to Lon, but I think we began to see a strengthened dollar, for example in Japan—the yen I think has strengthened from 80 to, what, 130, Lon? And that started about 18 months ago and that has certainly affected our high value products. The inability to stabilize and grow is having a softening effect on our high-value product exports, especially the meats and some of the horticulture.

Mr. HATAMIYA. I think in addition to that, the strength of the dollar in the Asian marketplace, not only in Japan but also throughout the region. We have seen a nearly 50 to 70 percent reduction in the currencies of many of the countries in that region. That led to the decline and softening of agricultural exports in the United States into that market in the latter part of last year.

Also, China had a bumper crop in a lot of the grains. They are also becoming much more competitive in some of the higher value products as well. With decreased values in the currency, it makes American products less competitive.

We are trying, as you mentioned, to utilize every tool we have available. We are trying to minimize the impacts that it might have in 1998 with use of GSM–102, with the use of other tools that the Congress has provided us, and so we are hoping to, again, minimize the decrease in exports into that very important market region.

CHINESE IMPORT RESTRICTIONS

Senator COCHRAN. A couple of months ago, I read in the paper where China had suspended the importation of some of the commodities from the United States. I think cotton was one of them. They just shut down the ports to U.S.-grown cotton.

Has that changed now? Have they changed their mind and let those goods flow into the country, or are we still under some kind of embargo there that is commodity-specific from China?

Mr. SCHUMACHER. Lon, do you have any information on that? Chris?

Mr. GOLDTHWAIT. I believe, Senator Cochran, the situation was as follows. The Chinese woke up one morning and suddenly decided that they had cotton stocks in the interior regions of China that they had not counted before. What they actually did was not place an embargo or stop deliveries that were on the water, but they simply ceased purchasing. So, we have seen much less purchasing in the past 2 to 3 months from China.

At the same time, however, we have seen increased sales of cotton both to Latin American destinations and into some other markets like Turkey. So, all in all, our cotton exports, if not exactly where we would like them to be, are doing I think relatively better than, for example, some of the grains.

Senator COCHRAN. Thank you very much.

I have some other questions, but at this time I am going to yield to my good friend from Arkansas for any questions he has.

REDUCTIONS IN FSA STAFF-YEARS

Senator BUMPERS. Mr. Chairman, thank you very much.

I want to take this opportunity to accede to a request by Senator Byrd because it touches on a question that I had also. Secretary Schumacher, without going through the details of the RIF, the proposed fiscal year 1999 budget assumes an additional reduction of 855 non-Federal county committee employees. That is almost a 10-percent reduction. It assumes an additional reduction of 263 Federal employees, about a 4-percent reduction.

Can you tell me the percentage of reductions nationwide of the non-Federal county committee employees as compared with the

percentage of Federal staff reductions since the reorganization took place on October 1, 1995?

Mr. SCHUMACHER. Yes; I will get the exact number from Keith, but there have been more county employees laid off than Federal employees, and this is a problem.

What I want to do is—and it is something I am particularly looking at—to be fair to all of our employees. To minimize further difficulties and protect farm programs and delivery of services, we are doing three things, Senator.

First, we are looking at ways we can make cuts in administrative overhead at the headquarters, regional, and State levels so that we have less need to reduce county employees to meet our budget targets. This is very important, and we are working very hard. This initiative is called administrative convergence. The Secretary has charged us with getting on with it and getting it done by October so that we not cut county people who actually deliver programs.

Second is collocation. We are really trying to work very hard to collocate all our offices and make further savings and cut administrative costs so we can minimize further cuts in county office employment.

Then the third is responding to budget realities that will require some cuts. What we are trying to do is be fair, to be equitable, and to look at workload efficiency.

On the exact numbers, Keith, do you have the precise numbers for the Senator?

Senator BUMPERS. Mr. Kelly?

Mr. KELLY. Yes; Senator Bumpers, compared to the 1993 ceiling, prior to reorganization, the cuts will be in the aggregate about 33 percent for county employees and slightly under 26 percent for the Federal employees by fiscal year 1999.

Senator BUMPERS. What was the latter figure?

Mr. SCHUMACHER. Twenty-six percent.

Senator BUMPERS. What was the latter figure?

Mr. KELLY. Thirty-three percent for county employees and 26 percent for Federal employees. The primary reason the cuts fall heavier on the county employee side is that the 1996 farm bill brought about significant workload decreases in certain activities there. The non-Federal county work force was reduced by 14.9 percent in response to workload changes as compared to 5.8 percent for Federal employees because of the farm bill impact. The non-Federal county employees had a lesser workload. That is where the cuts fell the heaviest.

Senator BUMPERS. Senator Byrd also asked for those same statistics in West Virginia, the percentages.

Mr. KELLY. I will get that. I do not have them at hand for the 5-year period, but I will get them for you.

Senator BUMPERS. I will submit this question and other questions by Senator Byrd, with the chairman's permission, for the record and you can respond directly to him. OK?

Mr. KELLY. OK.

Senator BUMPERS. I had a question along the same line. I am not sure it is true, but staff indicates to me that despite—let us see. Your 1999 budget would make 1,100 additional staff-year reductions, and earlier this year there was a RIF of 152 employees, all

of which were non-Federal county employees. In spite of these RIF's, both at the county and Department level, apparently FSA is hiring new personnel. Is that true?

Mr. KELLY. That is correct. We have been hiring for agricultural credit positions.

Senator BUMPERS. How do you rationalize that?

Mr. KELLY. Because of changing workload, Senator. Again, going back to the farm bill, the workload is decreased on some of the traditional farm programs that we had. However, on the credit side, we have seen the work increase to cover servicing of our agricultural credit portfolio to ensure that we reduce the delinquencies.

So, we added, I believe, 150 Federal county employees or hires this last year on the agricultural credit side. We advertised the jobs to all sources, which meant that non-Federal county employees could apply for them, and our hope and desire was to hire those county employees that were being RIF'd, if they were qualified.

Senator BUMPERS. Well, needless to say, Senator Byrd and I are both hearing from our people back home about what they consider to be the unfairness of these RIF's.

SINGLE FSA PERSONNEL SYSTEM

Mr. KELLY. Senator, that is why we would be very supportive of one personnel system, as the Secretary has recommended—a Federal personnel system—because there are some inequities between the two personnel systems. Having one system would certainly solve the problem, because the RIF's and/or the reallocation of employment would be all within the same pot of people. Now it is not the case. We have separate ceilings for non-Federal county staffing and Federal staffing, including Federal county employees.

Senator BUMPERS. Mr. Kelly, it would be helpful to me and I think to Senator Byrd both if you would address a letter to us explaining these RIF's and why they were necessary and the percentages and so on. Obviously we have a parochial interest in our States, so if you could include the RIF's in our States. We want to be sure that, even if we agree with the RIF, for example, Arkansas and West Virginia are not being discriminated against on the numbers.

Mr. KELLY. Senator, I will be glad to provide that. I want to reemphasize what the Under Secretary said. We want a fair and equitable treatment for all employees, and we are working internally within our administrative capability to try and make the two different systems look and behave as one within the limits on what we can do administratively.

[CLERK'S NOTE.—See questions Senator Byrd submitted for the record.]

FLOOD RISK REDUCTION PROGRAM

Senator BUMPERS. Secretary Schumacher, what is the status of the flood risk reduction program?

Mr. SCHUMACHER. Let me just consult here.

Senator BUMPERS. Do you have somebody else to defer to on that?

Mr. SCHUMACHER. Yes; Dennis, are you aware of where we are on that one?

Mr. KAPLAN. No.

Mr. SCHUMACHER. I better come back to you on that one, Senator, rather than taking time here.

Senator BUMPERS. OK.

Mr. SCHUMACHER. Randy mentioned we are still working on that one, but we will certainly get back to you with a note on that, Senator.

MARKET ACCESS PROGRAM

Senator BUMPERS. The what is now apparently called the Market Access Program used to be the Market Promotion Program. Is that correct?

Mr. SCHUMACHER. That is correct.

Senator BUMPERS. I would like you, if you would, to provide me with the number of grants and the amounts of the grants made under that program in 1997. Can you supply that for me?

Mr. SCHUMACHER. Yes; we will. We have made a lot of changes in this program. Of course, a lot of guidance has come from you and members of your committee and the Congress that has radically changed this program over the last few years and I think it is working pretty well.

[The information follows:]

Market Access Program Allocations, Fiscal Year 1997

Trade organizations	*Allocation*
Alaska Seafood Marketing Institute	$2,965,056
American Brandy Association—Export	36,294
American Forest and Paper Association	6,280,192
American Jojoba Association	176,324
American Seafood Institute/Rhode Island Seafood Council	592,923
American Sheep Industry Association	95,141
American Soybean Association	2,203,929
Asparagus U.S.A	162,938
Blue Diamond Growers	1,412,689
California Agricultural Export Council	525,178
California Cling Peach Growers Advisory Board	727,009
California Kiwi Fruit Commission	66,095
California Pistachio Commission	815,018
California Prune Board	2,538,590
California Strawberry Commission	471,614
California Table Grape Commission	1,987,929
California Tree Fruit Agreement	704,566
California Walnut Commission	2,566,006
Cherry Marketing Institute	154,361
Chocolate Manufacturers Association	721,310
Cotton Council International	9,261,438
Eastern U.S. Agricultural and Food Export Council	799,696
Florida Department of Citrus	4,247,525
Hop Growers	103,000
Kentucky Distillers' Association	499,401
Mid-America International Agri-Trade Council	190,833
Mohair Council	75,000
National Association of State Departments of Agriculture	564,788
National Dry Bean Council	306,760
National Grape Cooperative	664,261
National Honey Board	132,953
National Peanut Council	837,544
National Potato Research and Promotion Board	1,290,688
National Renderers Association	301,885
National Sunflower Association	821,958
New York Wine and Grape Foundation	165,673
North American Blueberry Council	92,952

Trade organizations	*Allocation*
North American Export Grain Association	94,225
Northwest Wine Promotion Coalition	119,287
Ocean Spray International, Inc	319,848
Oregon Seed Council	180,540
Oregon-Washington-California Pear Bureau	974,151
Pet Food Institute	596,075
Raisin Administrative Committee	2,444,619
Southern United States Trade Association	3,097,777
Sunkist Growers, Inc. (cooperative)	2,064,157
Texas Produce Export Association	42,222
The Catfish Institute	304,905
The Popcorn Institute	500,000
United Fresh Fruit and Vegetable Association	177,093
USA Dry Pea and Lentil Council	550,918
USA Fresh Sweet Cherry Promotion	840,401
USA Poultry and Egg Export Council	2,290,770
USA Rice Federation	2,911,598
USA Tomato	481,772
U.S. Apple Association	438,707
U.S. Dairy Export Council	1,881,135
U.S. Feed Grains Council	2,865,352
U.S. Livestock Genetics Export Inc	739,981
U.S. Meat Export Federation	8,498,273
U.S. Wheat Associates	2,023,893
Washington Apple Commission	2,470,410
Western United States Agricultural Trade Association	4,481,370
Wine Institute	3,051,004
Total	90,000,000

Senator BUMPERS. I am well aware of that.

I have a figure here that shows that the European countries spend $400 million on market promotion and about one-half of that comes from their members. Presumably the other one-half comes from the exporter or the exporters. Is that correct?

Mr. SCHUMACHER. I think that probably is correct.

Senator BUMPERS. In other words, one-half is coming from the EU members, the other one-half must be coming from the exporters.

Mr. GOLDTHWAIT. That is correct. The same situation pertains to the Market Access Program where the participants put up funding of their own to match what we are providing.

MARKET PROMOTION SPENDING BY AMERICAN PRODUCERS

Senator BUMPERS. Mr. Goldthwait, since you are the guru on this subject, do you have any way of knowing how much American agricultural interests spend on market promotion, export market promotion?

Mr. GOLDTHWAIT. Including what is not covered under the program?

Senator BUMPERS. Well, I am trying to figure out for comparative purposes. Apparently in Europe half of the expenditures for export promotions is paid for by the companies who do the exporting or the agricultural interests who do the exporting. I would like to have a comparative figure of what American companies pay for that.

For example, in my State we have Riceland Foods who do a lot of exporting, and there are hundreds of other similar companies. I would just like to know if you have a figure or if you can get a fig-

ure on how much the private companies in this country spend to promote agricultural exports. I am sure ADM spends a lot.

Mr. GOLDTHWAIT. We can provide you with an estimate of the total farm market promotion expenditures of the private sector. Under the Market Access Program, whereas in fiscal year 1996 our outlays—I am including a little carryover from the previous year—were $92 million, the private sector participants contributed roughly $115 million.

Senator BUMPERS. $115 million?

Mr. GOLDTHWAIT. Yes; so, they more than matched what the Government provided.

Senator BUMPERS. Now, is that the Market Access Program?

Mr. GOLDTHWAIT. Yes.

Mr. SCHUMACHER. Yes; one of the concerns we have, Senator, is export restitutions, for example, on a lot of the high-value products such as beef, wine, and all the other high-value products that is creating a lot of problems for us in Europe. I think as we move into the next round, we have to really work at eliminating those export subsidies, particularly on high-value products that are putting our industry at a competitive disadvantage in addition to market promotion.

EEP EXPENDITURES

Senator BUMPERS. How much did we spend last year on the EEP program?

Mr. SCHUMACHER. On just the EEP itself, we did not spend any.

Senator BUMPERS. I know it is a mandatory program, but you spent a lot of money on it, did we not?

Mr. SCHUMACHER. We allocated the funds. We did not use the program last year.

Senator BUMPERS. You did not?

Mr. SCHUMACHER. Did not. We did for the Dairy Export Incentive Program, but we did not use the money for the Export Enhancement Program last year.

REDUCTION IN PUBLIC LAW 480

Senator BUMPERS. The budget request calls for a reduction in title I of Public Law 480. What is the purpose of that?

Mr. SCHUMACHER. The administration has proposed a reduction in the title I program of $133 million from last year's amount. We have fully funded titles II and III, but because of the need to balance the budget, the administration felt that this was an area for which less funds would be proposed.

Senator BUMPERS. Mr. Chairman, I have a few other questions that I will submit for the record and give our panel sufficient time to answer those questions.

IMF SUPPLEMENTAL

Senator COCHRAN. Thank you very much, Senator Bumpers.

On the subject of the Asian market again, we are including in a supplemental bill funds for the IMF at $18 billion at the request of the administration. Our committee approved that and we will be taking that up and trying to work with the House to get some level

of funding so that we can continue to participate in helping to stabilize market conditions and encourage reforms in some of those areas so that our trade opportunities will continue to be available.

How strongly do you feel that we need those funds approved by this Congress? When we go to the floor and try to answer questions from opponents of the funding, what are some of the arguments that you think are most effective to persuade the general public and Senators to vote for that?

Mr. SCHUMACHER. Mr. Chairman, when Lon and Chris and I were working over the Christmas holidays to make this program operational, particularly with Korea and then the additional funds for other countries, we could not make it operational without an IMF program in place because of the creditworthiness score. These are funds Congress provides from the taxpayers, and we simply cannot in good faith, to Congress and particularly the taxpayers, make the allocations and make it operational without a sound IMF program in place. So, the IMF had to come first.

As I said in my opening statement, the improvement we made in the hides and skins to help cattle or the stability and the sanctity of the contracts on cotton could not have been done unless the IMF was there first, a very important issue.

Initially the IMF was very helpful because they looked at some of the problems in the number of countries that affected agricultural trade, in Korea on transparency, on port procedures, and consistency with WTO and phytosanitary issues, and Indonesia on some of the monopoly practices. They require the tariffs on food to drop from 20 to 40 down to 5. They noted yesterday that soybeans now is at zero tariff. That contributed heavily by the IMF negotiators as they made those funds available.

So, two points. First we cannot operationalize the GSM without the IMF standby in place, and second, the IMF has strategically made a number of requirements which will help trade in agriculture.

Senator BUMPERS. Mr. Chairman, would you yield for just an observation?

Senator COCHRAN. Senator Bumpers.

REASONS FOR DECLINES IN ASIAN EXPORTS

Senator BUMPERS. I was just curious. Are you seeing a measurable decline in exports to the Asian markets?

Mr. SCHUMACHER. Yes.

Senator BUMPERS. At this moment?

Mr. SCHUMACHER. Yes.

Senator BUMPERS. How significant is it?

Mr. SCHUMACHER. We are monitoring it pretty carefully. Certainly in Korea—meat was down substantially. In Indonesia—last year, Senator Bumpers, we exported $776 million to Indonesia. Probably that will be cut in half this year, affecting particularly high-value products. We are working very hard to maintain our important cotton market in Indonesia, and I think GSM is operating for cotton in Indonesia as we speak. It is a major market for cotton. We want to keep that market open. We will also be providing some Public Law 480 assistance that is now being negotiated with Indonesia which will hopefully include rice, wheat, and soybeans.

Senator BUMPERS. Thank you, Mr. Chairman.

GOAL FOR NEXT ROUND OF TRADE NEGOTIATIONS

Senator COCHRAN. You have mentioned a couple of times the WTO, the World Trade Organization, and the next round and the negotiations that you are preparing for leading up to the next round. What specifically are the administration's goals for the next round, and do you have the funds included in this budget request to staff and support the effort that we will need to make in order to achieve success?

Mr. SCHUMACHER. That is a very, very good question. I am going to ask Mr. Hatamiya to briefly outline the four or five key goals and then the issue of the budget on our trade policy side.

Mr. HATAMIYA. Mr. Chairman, I think I previously mentioned in an answer to Senator Kohl about some of the highest priorities of what we hope to achieve in the next round of the WTO negotiations, one being the State trading enterprises, seeing some reforms there, also looking at tariffs and tariff reductions, reductions in tariff rate quotas, and also reforms in that round.

Reforms to export subsidies is another important factor, as well as bringing some rationality to sanitary/phytosanitary measures. Many of those are false trade barriers that are placed in front of us, and we think it is necessary to address those so that there is a common international standard that is utilized.

We are using the avenue of the WTO Agricultural Committee to continue those discussions, but those are the highest priorities we are looking at the current time. We think it is necessary to make changes there because it is important. The United States has the most open and freest market in the world. We would hope that other trading partners do the same.

Senator COCHRAN. I had a letter the other day from the president of the American Farm Bureau Federation suggesting that I go to Geneva. Is that where the WTO——

Mr. SCHUMACHER. In May there will be a followup to Singapore in Geneva in preparation for the next round. That is correct, sir.

CONGRESSIONAL PARTICIPATION IN WTO NEGOTIATIONS

Senator COCHRAN. I have not discussed that with anyone, but I am curious to know whether you think it would be helpful in the process of preparing for or observing the negotiations in Geneva, if representatives of this committee or our Agriculture Committee would go to Geneva and participate in that process?

Mr. SCHUMACHER. We would be honored.

Senator COCHRAN. How long will it take? [Laughter.]

Mr. SCHUMACHER. I think the meetings are for 4 or 5 days. In Singapore, when Deputy Secretary Rominger went, there were 47 representative agricultural groups that attended and that was quite a long distance from the United States. So, there is tremendous interest in the next round by the agricultural community. We are working very closely with all the representatives and a representative of this committee. We would be very honored to have you attend.

Senator COCHRAN. What are the dates of the scheduled negotiations in May?

Mr. HATAMIYA. I think it is the 18th through the 20th.

FSA REORGANIZATION

Senator COCHRAN. Thank you very much.

Senator Bumpers mentioned the layoffs, the RIF's, that were occurring in the organization of the Farm Service Agency. Mr. Kelly, you spoke to that some and so did Mr. Schumacher. There seems to be a good deal of concern out in the States—I hear this from my own State—about whether or not the reorganization of the Department's agencies in the States is complete or what other changes are expected to be made or planned, the absence of any clear indication from Washington as to what is going on, or when will the next shoe fall. It has everybody sort of anxious and concerned, and it has had a negative effect on morale. That is my assessment of the situation.

What can you tell us about the plans for the continued reorganization of the States and county offices?

Mr. SCHUMACHER. Well, I will defer to Keith, but I think there are two themes, Senator, that the Secretary and I and Keith are operating under. One is administrative convergence, which will start to take place during this calendar year, and which has created some uncertainty, particularly among the administrative staffs at the Washington level, the regional level, and the State office level. But we feel we can make savings on the administrative side, so we avoid layoffs at the county level where programs are actually working directly with farmers.

The other one is the service centers and the collocation, a very important issue. We feel that we should be all under the same roof—Keith's shop, Rural Development, and the NRCS—to better service farmers and to make continued efficiencies. We do not need three Xerox machines or two carpools or whatever. There should be one. Again, those savings could then be used keeping county-level employees employed to service farmers.

There is some uncertainty and we will try and minimize that. We welcome any comments from your State and other States where there are particular questions. We will try and address them so we can provide good information to those people who feel unsure as these changes approach.

Keith?

Mr. KELLY. Yes, Senator; those are the two themes, as the Under Secretary mentioned. On service center collocation, we are about 60 percent completed. The idea again is to achieve cost savings by creating service centers for "one-stop shopping" with the objective of customer service for farmers and ranchers in the communities.

The other one, probably what you had in mind when you referred to the other shoe falling, is administrative convergence. The goal there is to streamline administrative costs, which probably fall heaviest on the headquarters. We have too many people buying pencils and papers when we can all do it one and the same way and more efficiently if we combine administrative staffs of our Natural Resources Conservation Service, Rural Development, and the FSA.

Policymaking and program operation still stay with the individual agencies. So, for example, the Farm Service Agency will continue setting policy and implementing its agricultural credit and

other programs. It is just the administrative services that are going to be merged. I believe that we are targeting October 1 for that to take place and be phased in.

Again, Under Secretary Schumacher said it correctly. It does create uncertainty out there, and it is probably in part because it is following a significant reorganization over the last several years. As was mentioned earlier I believe by Senator Bumpers, the agricultural credit programs of the old Farmers Home Administration and various programs of the old ASCS were consolidated. I am not sure we had completely worked all of the bugs out of that reorganization. Now we are starting on administrative convergence. But I think what the farmers and ranchers will get is a much more streamlined, cost effective, and efficient delivery of services for the programs available out there.

Senator COCHRAN. Well, I think that is the emphasis we want to make, and that is to be sure that we not forget the farmer in the process and the landowner who has to come to the service center or the Farm Service Agency office, whatever you want to call it, and get information and file farm plans and deal with the requirements of the Federal farm programs. So, I know that you will try to ensure that that is kept in mind by the administrators up and down the line.

But the employees are important too, the employees of the service centers. We hear from them. They are constituents too. They are people too. I hope that they are all treated fairly and you will ensure that that is the case.

Mr. SCHUMACHER. Absolutely.

Mr. KELLY. Senator Cochran, it would certainly support fairness if we were all under the Federal employment system. It would be much more fair to the employees if they all had equal chances and options. Right now it is a challenge to manage the two different systems.

Senator COCHRAN. I was glad to hear something about your background. I notice that your grandfather was the commissioner of agriculture, whatever the name of it is, in Montana. You have a long heritage of doing this kind of work.

Where is Red Lodge exactly in Montana?

Mr. KELLY. Senator, Red Lodge is 30 miles north, as the crow flies, from Yellowstone National Park on the northeast corner.

Senator COCHRAN. That is pretty country up there.

We share a constituent named Steven Ambrose who spends one-half of his time in Mississippi and the other one-half in Montana. He is the fellow who wrote that book about the Lewis and Clark expedition out there. "Undaunted Courage" is the name of the book. It is quite a masterpiece. You ought to read it if you have not read it.

Is Red Lodge very far from where the Lewis and Clark expedition traveled through Montana?

Mr. KELLY. Senator, it is not too far because they did travel up 15 miles from Red Lodge. There is the Clark Fork River that drains into the Yellowstone River, and that was named for George Rogers Clark.

I would hazard a guess that your Mr. Ambrose probably spends his summer months in Montana and the winter months in Mississippi. [Laughter.]

PROPOSED RISK MANAGEMENT TOOLS

Senator COCHRAN. You are absolutely right.

One other issue that has been touched on and I wanted to ask some more about is the crop insurance program. The statement that you filed with the committee has some interesting suggestions for reform, additional legislative provisions. Mr. Ackerman makes some specific recommendations for changes in the law. These are all very interesting, and I hope they will be carefully considered by the Congress, the legislative committee. We cannot make these legislative changes, though, and we have to kind of deal with the law as it is.

We notice you talk about other risk management tools besides crop insurance. Specifically what are these tools that you are talking about and are there requests for funding that we need to consider in this next budget cycle?

Mr. ACKERMAN. Thank you, Mr. Chairman. A very specific example is the one that Senator Kohl raised earlier in the hearing, the dairy options pilot program. This is a new tool for us. It is different from the options pilot program that existed within FSA a number of years ago. It is a noninsurance tool. It is a way for dairy farmers to ensure price with a subsidized tool based on options traded on the organized futures exchanges. It is a new idea and one that we very much want to test because we think there is a demand for it.

Other examples of tools that we are looking at are new types of insurance policies based not on a crop-by-crop premise but on a whole-farm premise. We have had a number of ideas suggested to us by the private sector along those lines.

There are a number of others, just to give you a sense of the range of ideas that are percolating out in the country. We have one idea that we have been looking at that has been recommended by a number of the farm groups. It is based on a Canadian program, the NISA, which is basically a risk management savings account where farmers would put part of their income every year into an account that would grow over time and provide a nest egg, a safety net, for them if they had a loss. It is a tool that would potentially require legislative changes to implement in this country, but one that has gained some popularity in Canada where it has been in effect and which is gaining a fair amount of recognition here among many of the farm groups. So, there is a range of ideas like that that we are considering.

GAO REPORT ON EXPENSE REIMBURSEMENT TO PRIVATE COMPANIES

Senator COCHRAN. There is a recent GAO report, dated March 20, 1998, on the subject of crop insurance, increases in insured crop prices and premium rates, and the administrative expense reimbursement paid to companies. There are some interesting findings that we have come across here.

Has this been made available to you, or do you have any information about this GAO report? Of course, that is done at the request of the Congress. It is not your investigation.

Mr. ACKERMAN. Senator, I have seen a draft of it, but we have not yet examined it in detail.

Senator COCHRAN. I was curious. You have probably been provided a draft and asked for comments or reactions.

Mr. ACKERMAN. That is correct.

Senator COCHRAN. One thing that we noticed here talking about the expenses, and that is relevant to this appropriations process that we are going through, it says that higher insured crop prices and higher premium rates led to a 13-percent overall increase in premiums. That is a disincentive to buy the insurance if the farmer gets hit with that kind of an increase.

The report noted, we concluded that FCIC could reduce the reimbursement rate another 3 percentage points below the 27 percent level we found to be justified in 1994 and 1995 to a level of 24 percent of premiums and still adequately reimburse the companies for their administrative expenses.

What is your reaction to that? Is that a fair assessment of the situation?

Mr. ACKERMAN. Well, Senator, without getting into the details of the report because, as I say, we have not analyzed it in detail yet—we did go through a process with the industry last year. We renegotiated the standard reinsurance agreement, and as part of that process, made a significant reduction in the expense reimbursement to companies. It fell from approximately 29 percent of net book premium the prior year to 27 percent of net book premium, plus the elimination of what is called excess loss adjustment. All totaled, that is about $40 million a year and that was coupled with a significant additional underwriting risk that we put on them last year.

Certainly this is something we are monitoring very closely. In our legislative proposal, to close the gap on mandatory spending, we do propose an additional reduction beginning in the year 2000. We are trying to be cautious in the way that we do this, however. The delivery system is very important to this program. We rely on the companies to deal face to face with farmers, and generally our experience with agents and companies around the country has been very favorable. They do a good job. We want to make sure that, while we are tightening our belt and finding savings, we do it in a way that is moderate and nondisruptive. That is why, for instance, in our proposal we did propose going down to a 25-percent reimbursement rate, but we began it in the year 2000 so that companies can plan for it, build it into their business plans, and be able to absorb it.

Senator COCHRAN. As you know, we are in conference right now in the legislative committee with the House trying to work out the ratio of mandatory spending to other creative devices for coming up with the money to support this program. It is quite a challenge dealing with the constraints the administration has put on us, with insistence that so much of the money be allocated to Food Stamp Program activities, and Budget Committee provisions which restrict us in the leeway that we have within which to negotiate. But we are working hard to try to come up with a funding mechanism for the crop insurance program, and we will continue to work with both the legislative committee and the Budget Committee and the

administration to try to resolve it so that we save the program, that we have a risk management program in place that the farmers can rely upon and not just take a chance on the ad hoc responses to these disaster situations which we are trying to deal with right now with the supplemental.

But we appreciate your bringing your best efforts to bear on the process and we thank you for your cooperation with our committee.

FSA DATA COLLECTION

Let me ask a couple of questions about the acreage determinations. There is a memorandum of understanding between APHIS and FSA which would provide collection insuring of crop acreage data in boll weevil eradication zones for the purpose of administering that program. We had report language in the appropriations bill last year and we are curious to get the response of the administration to what language, if any, we need to include in this year's appropriations bill to help make sure that there is an accurate process and a fair process for collecting crop acreage data information.

The Department has the new collection procedures. We are curious to know whether they are working. Do we have the funds in the budget to support the program? I need your reaction to that.

Mr. SCHUMACHER. Do you have a comment on that?

Mr. KELLY. Senator, I will get back in detail with you. With regard to the acreage report collection, that is an agreement that we work out with the APHIS boll weevil eradication program staff, to collect the acreage report data that is necessary to ensure that the proper mapping is done out there in the States.

Right now most acreage reporting is voluntary, and support for it is included in the user fee proposal in the budget. If this proposal is adopted through the appropriation process, then the funding for acreage reporting would depend upon actual collection of user fees from private individuals and companies.

BOLL WEEVIL ERADICATION

Senator COCHRAN. One other concern that I have heard expressed is the decline in support from the FSA for loans to help pay the costs of boll weevil eradication expenses. There is a request in here that is substantially less than last year. The budget shows the loan program level would decline from $40 million in fiscal year 1997 to $30 million in fiscal year 1999.

We are curious to know what the explanation is, if any, for $4 million which is for the APHIS Federal cost share of the boll weevil eradication program, why the program level is declining like that. We have farm income being pressured with low prices at market for cotton and people are planting less cotton now than they did before because of the drop in prices and the continued increases in costs of production. Now it looks like the available loan support to help pay the costs of the boll weevil eradication program is going to drop as well.

Is it realistic to expect farmers are going to continue to participate in the program if they have a hard time getting help from the Government?

Mr. KELLY. Senator, I acknowledge that because of the need to meet budget targets the request is down somewhat from last year. It is hoped that it would come close to meeting the demands of the various States to carry out the boll weevil eradication program. I will acknowledge that it is somewhat short.

Senator COCHRAN. Well, we are concerned about that and hope that you will be responsive to requests to help make sure that we have a program that works.

I note that APHIS is really the lead agency for this program, but what is your impression of the status of the program and the need for funds to achieve complete boll weevil eradication? Is this something that your agency is actively involved in trying to support?

Mr. KELLY. Senator, we work closely with APHIS on the boll weevil eradication program, and we are actively supporting it. It is the old adage, an ounce of prevention is worth a pound of cure. Having come from Arizona as a State director of agriculture, the boll weevil eradication program was very successful in reducing costs to cotton farmers. Thus the whole pesticide issue and ground water contamination was significantly reduced because of a very concentrated eradication program. So, personally, given where I came from, I support it.

I stand corrected on my answer to the previous question. Our loan level is about $21 million in 1998 compared to $40 million in 1997, and our request is going up to $30 million in 1999. So, there is support and a commitment within our agency for the boll weevil eradication program.

Senator COCHRAN. We appreciate that and we appreciate your continuing attention to that problem and support for the goals of the eradication program.

RESOURCES FOR THE COCHRAN FELLOWSHIP PROGRAM

I notice there were a couple of mentions of the Cochran Fellowship Program and there is a budget request for $3 million. We had in the past some additional funds made available from the AID Program and from the emerging markets program. What are the other resources that the Administrator has to work with in making these program benefits available throughout the world? What are the prospects next year in this next budget cycle for additional funds that can be used for the Cochran Fellowship Program?

Mr. SCHUMACHER. I think you are correct, Mr. Chairman, funds were allocated from the Emerging Markets Program and I think some from the USAID. I think, Lon, do you have some of the details?

Mr. HATAMIYA. Yes; I do. Mr. Chairman, for fiscal year 1998, in addition to the $3 million you mentioned in appropriated funds, we are expecting to receive $1 million from the Emerging Markets Program and an additional $2.3 million from USAID, for a total of $6.3 million for this program, which I believe is the most ever. We are anticipating the number of participants in the program, an estimated 760, to be well above where participation has been in the past.

Again, let me repeat, this has been a tremendous program. We see the benefits worldwide in terms of increased exports sales. When we bring Cochran fellows into the United States, they gain

an increased knowledge as to markets in the United States, our export capability, the reliability of U.S. producers, and that continues to benefit American agriculture not only currently but hopefully into the future.

Senator COCHRAN. We appreciate having that information. If we could have a report for the record showing the countries that had participants selected and how many there were and where they went, what they did when they were here, some kind of capsule report of the program for our hearing record, that would be helpful.

Mr. HATAMIYA. Mr. Chairman, we can do that for you. No problem.

[The information follows:]

COCHRAN FELLOWSHIP PROGRAM

In fiscal year 1997, a total of 707 participants from 45 countries received training under the Cochran Fellowship Program. The following provides the fiscal year 1997 participant levels by region and by country:

—Asia: 154 participants from seven countries: Korea (20 participants), Malaysia (21), China (35), Thailand (17), Indonesia (18), Philippines (26), and Vietnam (17).

—Eastern Europe: 182 participants from 13 countries: Turkey (19), Poland (56), Hungary (9), Czech Republic (10), Slovakia (11), Albania (6), Bulgaria (11), Slovenia (12), Croatia (10), Latvia (8), Estonia (9), Lithuania (7), and Rumania (14).

—Latin America: 87 participants from seven North, Central, and South American countries: Mexico (37), Venezuela (13), Trinidad and Tobago (9), Barbados and Other West Indies (3), Panama (6), Colombia (14), and Chile (5).

—Africa: 61 participants from African countries: Cote d' Ivoire (9), Tunisia (10), South Africa (30), Namibia (2), Kenya (5), Uganda (2), and Senegal (3).

—New Independent States: 223 participants from the New Independent States of the Former Soviet Union: Russia (53), Ukraine (45), Kazakstan (23), Kyrgyzstan (8), Uzbekistan (27), Turkmenistan (8), Tajikistan (5), Armenia (16), Moldova (21), Georgia (10), and Azerbaijan (7).

In fiscal year 1998, the Cochran Fellowship Program will continue work in the above mentioned countries. In addition, pilot programs will be started in Brazil, Bosnia, Costa Rica, Guatemala, and Tanzania, and the program will be expanded in size (increase in the number of participants) in Kenya, Uganda, and Senegal.

We expected to provide training to about 760 participants in fiscal year 1998. Delay in receipt of U.S. AID and EMP until May, 1998, however, will most likely reduce the number of participants from countries in the NIS and Eastern Europe during fiscal year 1998.

The benefits of 1997 the Cochran Fellowship Program to U.S. agriculture can be categorized under the following topics:

I. *Sales of U.S. Agricultural Commodities.*—An immediate benefit of the Cochran Program is the sale of U.S. agricultural commodities or products that come about from information gained and/or direct contacts provided by participant training. Each year we receive information from past participants, from U.S. companies and associations, and from various agricultural offices about sales of products or commodities that are directly and indirectly related to Cochran Program training activities. The following provide examples of some of our most recent sales information:

FAS/Fish and Forestry Products Division reports that a Cochran trip to U.S. lumber mills for Polish furniture manufacturers was very effective in promoting U.S. exports of hardwood lumber. The trip: (i) created personal relationships that resulted in each participant making orders for U.S. hardwood lumber, (ii) cleared up misunderstandings about contract specifications, and (iii) may result in future exports of U.S. hardwood totaling $25 million.

Another report from Poland states that a 1997 participant purchased over 300 metric tons (about $500,000) of U.S. prunes and several tons of U.S. almonds and sunflower seeds. Another participant started imports of U.S. shelled peanuts, his first order in June, 1997, amounting to $25,000.

A 1995 Polish participant reports that he gained ideas on how to use U.S. popcorn. Today he imports over 100 containers/year of U.S. popcorn (30 containers by June 1997) for use in caramel corn and other popcorn snacks.

The Agricultural Office in Sweden reported that Latvian and Estonian importers contracted for $300,000 per month of U.S. consumer and confectionery products after their program at the Food Expo in Chicago.

A 1996 Slovenian feed mill team returned from their Cochran Program and ordered 20,000 MT of soybean meal—the first of many purchases.

A 1997 Colombian participant has finalized arrangements to be a distributor of a line of U.S. consumer ready products and expects to import 14 containers (@$400,000) by the end of the calendar year.

Almost immediately after a 1997 joint Cochran/CoBank/National Cattlemen and Beef Association (NCBA) program for Mexican bankers on the GSM–103 Livestock Program, there were five livestock sales registered with USDA (about $2.2 million), and two other sales were reportedly in the works ($3 and $4 million respectively).

The New Jersey Department of Agriculture reports that New Jersey seafood exports to China have doubled since a Cochran Seafood Buyers program in September 1995. Exports now exceed $1 million per year.

The Agricultural Office in Malaysia states that "the Cochran NASDA/FMI program has proven to be very effective in generating sales of U.S. high value products as the participants are importers and supermarket managers. Although specific figures are lacking, the FAS office has received feedback from FMI exhibitors/suppliers who indicated that they had received trade leads from the participants and are very positive in establishing business ties."

A Vietnamese participant stated recently that his company has been importing 2–3 containers per month of U.S. pistachios since June, 1997. Another Vietnamese supermarket owner has imported 3 containers of consumer ready products to test the market for U.S. products. Sales thus far are encouraging.

A 1997 Armenian supermarket owner reports that he has widened his U.S. product lines to include deli meats, fish, baby food and cookies after participation in his Cochran Consumer Foods Program.

II. *Constraints to Imports of U.S. Agricultural Commodities and Products.*—Many constraints to the export of U.S. agricultural products can be categorized as sanitary and phytosanitary (SPS) restrictions to trade or market access barriers. Cochran training through agencies such as the Food Safety Inspection Service (FSIS); Grain Inspection, Packers & Stockyards Administration (GIPSA); Animal and Plant Health Inspection Service (APHIS), State Departments of Agriculture, Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA), and with private agribusinesses, provide technical information to country counterpart agencies and help to improve the opportunities to export U.S. products into countries.

During 1997, 59 Cochran fellows from 18 countries participated in 24 programs directly related to providing information on the safety of the U.S. food and fiber system as well as providing direct contact with U.S. counterparts.

The Agricultural Office in Stockholm reports that the meat inspection program for two Latvian veterinarians has been used to help establish new sanitary border inspection procedures. He states that "such education is essential support to the already growing import and transit markets for a widening array of meat and meat products."

The Tunisian Agricultural Office reports that the Veterinary Team "is in the process of developing with APHIS a live cattle and bovine embryo protocol for U.S. imports in Tunisia, as well as a memorandum of agreement with Texas A&M University for promoting the exchange of faculty and qualified students in areas of mutual interest, such as infections and parasitic diseases of food animals and nutrition."

The Agricultural Office in Indonesia states that the participant "has used his food safety training to develop a draft regulation on Food Security as well as input into drafts of the Indonesian Food Law Regulations."

The Agricultural Office in Vienna writes: "The new Chief Veterinary Officer in Slovenia is a Cochran alumnus, which bodes well for relations between his office and FSIS as well as this office as we work toward agreement on sanitary inspection certificates to allow U.S. red meat into Slovenia."

The Agricultural Office in Korea states: "The Cochran Program provides the resources to address food safety issues, perhaps the largest, singularly most restrictive barrier for U.S. products in the Korean market."

III. *Foster Business to Business Contacts.*—One of the major objectives of Cochran training is to put the international participant in direct contact with U.S. agribusiness. Even if immediate sales do not result, follow-up contact with participants in their home country may lead to future international opportunities for U.S. business.

Cochran fellows make contact with thousands of U.S. agribusinesses through product or commodity tours, technical discussions, or via participation at trade

shows. Participation in commodity- or topic-specific trade shows or association meetings allow participants first-hand contact with a wide-range of U.S. agribusinesses. Several of the trade shows that were attended in 1997 by Cochran fellows include the Food Marketing Institute/National Association of State Department of Agriculture (FMI/NASDA) Food Expo, Produce Marketing Association (PMA) Show, Institute of Food Technologists, World Dairy Expo, World Beef Expo, San Francisco Seafood Show, International Poultry Expo, International Baking Industry Expo, American Seed Trade Conference, National Building Products Expo, Woodworking and Furniture Supply, High Point Furniture Show, National Homebuilders Association Expo, Wine Spectator Showcase, National Restaurant Show, National Barrow Show, World Pork Expo, American Feed Industry Association Show, All Candy Exposition, and the Fancy Food Show.

The Agricultural Trade Office (ATO) in Guangzhou writes that the Chinese Supermarket Program ". . . is beneficial to American agricultural products because (the team) were so impressed with the high quality and diversity of U.S. products that some of them are considering carrying more products in their stores. As a result, the largest supermarket chain in China is scheduled to host an American Food Promotion in December 1997 at 11 major stores."

The Director of the Appalachian Hardwood Manufacturers writes about a Polish team: "We hope that our members were able to make good contacts with these companies and begin a business relationship. These were new companies to our exporters who were interested in exporting to Poland. This service allows American companies to have access to new business and contacts that would be difficult to establish on their own."

"During the last visit of the U.S. Meat Export Federation representative to Poland, we had a chance to meet with several former participants. Most, who traveled to the 1995 International Meat Industry Convention and Expo in Chicago, started to import pork and offal from U.S. suppliers. ELKOPOL company became a major player on the Polish market, importing large quantities of U.S. tripe and pork offal. All claimed that as a result of their Cochran trip, they build their first contacts with U.S. suppliers of meat and meat products." (Agricultural Office, Warsaw)

A Russian textile company employee wrote: "The Memphis Cotton School offered excellent coverage of all facets of textile production contract buying. They also provided us with prospects for increased cotton purchases from the U.S. in the future."

IV. *FAS Agricultural Affairs Offices.*—The primary contact for Cochran activities in each country is FAS's Agricultural Affairs Office and Agricultural Trade Offices (ATO). FAS staff describe the benefits of Cochran training programs to their offices in terms of initiating and maintaining contacts with public- and private-sector decision makers, opening lines of communication that are useful for the resolution of trade issues, building good relations with international governments, influencing trade policy issues, and using former Cochran private sector businesses as contacts for U.S. exporters.

"Among the South China Supermarket Executives, (the training) planted the seed of goodwill and friendship without which business relationships can hardly be established and sustained." (ATO/Guangzhou)

The FAS Office of Agricultural Affairs (OAA) in Seoul, Korea, stated: "As noted by predecessors, the Cochran Fellowship Program is perhaps the single most important tool available to OAA for achieving desired dual objectives of development of domestic agricultural systems and enhancement of U.S. agricultural interests in Korea."

The FAS Agricultural Attache in Vietnam states: "FAS/Hanoi is extremely pleased with the development of the Cochran Program in Vietnam. The program has served to expand our contacts and increase our knowledge and understanding of the agricultural sector. The implementation phase of the program will help develop the linkages necessary to expand the market for U.S. agricultural products here in Vietnam."

The Agricultural Officer in South Africa writes, "From our perspective on what the program has done to promote both U.S. agricultural interests and USG policy objectives to support the new multi-racial democracy in South Africa, the Cochran Program has been one of the key ingredients of our program activities in this country and the region."

SUBMITTED QUESTIONS

Senator COCHRAN. Thank you.

I do not have any other questions at this time. We do have a few that we will submit for the record so that we will understand the

budget request as we have to before we make a decision on the committee print. But we thank you very much for your cooperation and your assistance to the committee.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

FARM SERVICE AGENCY

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Question. Mr. Schumacher, in your testimony you mention that the Department has entered into a contract with an independent consultant who is examining further steps, if any, can be taken to improve the efficiency of our farm and rural program delivery system. Is this the same study that was proposed last year to see if FSA and NRCS should be merged together into one agency?

Answer. The study currently being conducted by Coopers and Lybrand is the same study that was proposed last year.

DISASTER SUPPLEMENTAL

Question. Supplemental appropriations provided a total of $95 million for the Emergency Conservation Program (ECP) in 1997. At the end of fiscal year 1997, $79 million was the unobligated balance. As of March 12, 1998, approximately $9.7 million of that total still remains unallocated. How much of the remaining balance of $79 million has been used for disasters occurring in 1997?

Answer. Because of the nature of this program it is not unusual for the ECP to have a large unobligated balance at the end of the fiscal year. For fiscal year 1997, the unobligated balance reflected funding that was allocated to States but not obligated before the end of the fiscal year. Therefore, although it may appear that the funding is available for use, the majority of it had been allocated to the States. Also, the large unobligated but allocated balance was due to the timing of receiving supplemental appropriations during the fiscal year.

The beginning unobligated balance for fiscal year 1998 was $79 million, of which $57 million had been allocated to States during fiscal year 1997 and the remaining $22 million is available for new allocations starting in fiscal year 1998.

As of December 31, 1997, a total of $3.1 million had been allocated to several States for damages caused by natural disasters, such as droughts, flooding, Hurricane Norma, and tornadoes.

Question. Has any of the unobligated funds of $79 million been used for the recent disasters occurring in 1998? If so, how much?

Answer. As of March 24, 1998, a total of $11.3 million has been allocated to several States for damages caused by recent natural disasters, such as flooding, ice storms, tornadoes, and typhoons.

Question. Is the $9.7 million of unallocated money available to meet disaster needs in fiscal year 1998?

Answer. Yes it is. We expect to get additional requests for ECP funds because of the high level of damage caused by recent natural disasters. It is very likely that all of this funding will be allocated well before the end of the fiscal year.

Question. Please list all items and activities which are covered under the ECP program, i.e. irrigations systems, fences, etc.

Answer. Items and activities covered under ECP practices are:

EMERGENCY CONSERVATION PRACTICES

Practice EC1, Removing Debris from Farmland. This practice provides assistance to remove debris from farmland damaged by natural disasters and return that farmland to productive agricultural use.

Practice EC2, Grading, Shaping, Releveling, or Similar Measures. This practice provides assistance to grade, shape, and relevel farmland damaged by natural disasters and return the land to agricultural use.

Practice EC3, Restoring Permanent Fences. This practice provides assistance to restore or replace farmland or ranch land fencing damaged by natural disasters.

Practice EC4, Restoring Structures and Other Installations. This practice provides assistance to restore structures and installations such as dams, terraces, and waterways damaged by natural disasters.

Practice EC5, Emergency Wind Erosion Control Measures. This practice provides assistance to apply emergency wind erosion control measures such as contour or

cross slope chiseling, or deep plowing on similar measures, to farmland damaged by natural disasters.

Practice EC6, Drought Emergency Measures. This practice provides assistance to provide water conservation and enhancement measures to permit grazing of range or pasture, emergency water for livestock, or emergency water supply for existing irrigation systems for orchards and vineyards, on land suffering from severe drought.

Practice EC7, Other Emergency Conservation Measures. This practice is to allow other emergency conservation practices not covered above.

Question. Please explain how initial ECP needs and estimates are collected. If these estimates/needs turn out to be incorrect, what is the procedure to reallocate this money among other States?

Answer. Initial estimates on the amount of ECP funds needed are obtained from the local county FSA office where the damage has occurred and communicated through the State office to the National level. ECP funds, if available, are then allocated based on these estimates. If ECP funds are not available, these estimates serve as the basis for allocations should funding become available. If initial estimates exceed the funds actually needed, the funds are returned to the National level and made available as needed for disasters in other States provided the appropriations act making those funds available did not restrict the use of these funds. If initial estimates are less than the funding needed, additional funds are provided, if available.

Question. How does the Agency distinguish between unobligated and allocated funds?

Answer. Allocated ECP funds are funds made available to States to cover estimated needs as reviewed at the National level. Obligated ECP funds are those which have been officially approved for disbursement to pay for completed emergency conservation work; unobligated funds are all funds that have not been officially obligated. All allocated funds are potentially obligated funds, but because there is a time lag between allocation and obligation, a snapshot of the program's unobligated funds at any given time includes both allocated funds that have not yet been obligated and funds at the National level that have not been allocated, if any.

In instances where a State's allocation exceeds the amount actually needed for obligations to cover completed emergency measures, the allocated but unobligated funds are, as noted above, returned to the National level and may be reallocated to another State as needed.

USER FEES

Question. The fiscal year 1999 President's budget proposes user fees to cover the costs of collecting and processing information of interest to private individuals and companies. Please explain this user fee proposal more fully. Which groups of people would be affected by this?

Answer. In 1999, FSA proposes to begin to charge fees to cover the costs of collecting and processing information of interest to private individuals and companies, such as crop insurance companies, appraisers, agricultural consultants, other agencies, etc. Information products developed from these collections shall be priced at the full costs of processing and dissemination. In FSA county offices, the information would include acreage and production reports, Highly Erodible Land Conservation and Wetland Conservation certifications, CRP/WRP data, and other miscellaneous requests for producer and crop data which are requested throughout the year by private and public individuals and companies. These requests may range from one report to all of these sources of data and can be area specific because of different farming practices, farmland values, conservation and water rights issues, pesticide and herbicide regulation issues, landlord and tenants rights disputes, real estate appraisals, and other types of land development issues. An estimated $10 million would be collected through fees from these businesses and other agencies, which would be available for salaries and expense obligations.

Question. Is this collection of user fees supplementing existing appropriations for these activities?

Answer. The collection of user fees is substituting for, not supplementing, existing appropriations. If fees are not realized, up to 223 non-Federal county office staff years could not be funded. Potential constraints on realizing significant revenue are that FSA cannot provide any information that would violate the Privacy Act without specific permission from the applicable program participant, and the volume of fee waivers could also impact revenue.

Question. What level of appropriations will be spent on these activities in each of fiscal year 1998 and 1999 without the implementation of user fees?

Answer. User fee collections are a proposed source of funding and would finance payroll in order to save budget authority of $10 million. It has been estimated that these additional fees could generate $10 million to fund FSA salaries and expenses, but these estimates are tentative. To date, there has been no determination of how customers would be charged or what the actual charge per request would be. FSA does not have any data to indicate the current level of expense for these activities.

SALARIES AND EXPENSES

Question. The net fiscal year 1999 program level, not including the Common Computing Environment (CCE) earmark of $30 million, totals $946 million. This is $17 million less than the fiscal year 1998 program level of $963 million. The fiscal year 1999 budget request proposes an increase of $17.8 million in transfers for administrative expenses. The increase will support an increase of 200 full time equivalents (FTE's) at the county level, updated computer systems, systems development and support. What will be the result of an even further decrease in Federal staff years and non-Federal county staff years?

Answer. FSA has several sources of funds to support staffing levels, including funds carried forward from the prior year under authority of a general provision in annual appropriation acts. Although total S&E available funds have decreased by $36.5 million, the fiscal year 1999 ACIF account proposes a requested level of $227.673 million, an increase of $17.8 million to provide an adequate level of personnel qualified to perform farm loan activities. The fiscal year 1999 Budget proposes a net reduction of 1,118 staff years for fiscal year 1999, of which 263 are Federal staff years and 855 are non-Federal county office staff years. This is composed of a staff-year decrease of 1,060 FTE's required by lower funds carried forward from the prior year and the direct appropriation, partly offset by an increase of 205 FTE's funded through reimbursements and user fees. While lower available funds necessitate lower staffing, the decrease is also attributable to somewhat lower workload (except for farm loan workload) under the 1996 Act. The staffing reductions we are proposing for fiscal year 1999 may require a reexamination of our county office structure. Any closure decisions will be made in light of cost effectiveness and quality of service to the producer.

Question. Will additional county offices be closed?

Answer. Under the 1994 plan, a total of 373 FSA county offices were scheduled to be closed by the end of fiscal year 1997. Five county offices were closed at the beginning of this fiscal year to achieve this closure plan goal. As of January 1998, there have been no additional closures in fiscal year 1998. We expect to be able to use the results of the outside contractor study in guiding our actions to achieve any required office closures through a solid independent workload analysis of the county-based agencies.

Question. What will the decrease be in Federal staff years and non-Federal county staff years from fiscal year 1998 to fiscal year 1999 if the new user fee collections are not realized?

Answer. The anticipated collection of $10 million would fund 223 county staff years, and the total county staffing reduction would be 855 versus 1,078 FTE's. If the fiscal year 1999 proposed user fee legislation is not enacted, the Agency would need an increase of $10 million in direct appropriation to fund 223 county office staff years. The user fee collections would not impact Federal staff years.

Question. The fiscal year 1999 budget request proposes a decrease of $10.9 million for a 263 reduction of Federal staff years. The total reduction for staff years for fiscal year 1999 is 1,118, with the remaining reduction resulting in 855 non-Federal county office staff years. Was this reduction of staff years included in the total 2000 FTE's that were to be eliminated as proposed last year or an additional reduction of staff years?

Answer. Yes, the reduction of staff years was included in the original total of 2,119 FTE's that were to be eliminated as proposed in last year's budget for fiscal year 1998. This fiscal year, FSA is using $50.8 million in carryover funding from fiscal year 1997, in lieu of appropriations which were reduced by Congress in 1998, for salaries and expenses to fund non-Federal staff years. Consequently, a more modest reduction of Federal and non-Federal staff years was necessary in fiscal year 1998 because of the use of available carryover funds. This allowed the Agency to operate consistent with its anticipated fiscal year 1998 workload. The remaining reductions were achieved through buyouts, a reduction-in-force, the offering of early outs without voluntary incentive payments, and normal attrition.

Question. Due to the proposed staffing reductions, closure of FSA county offices will have to be reexamined. Does the Agency have preliminary estimates as to how many and the location of these offices that may be consolidated or closed?

Answer. Once the Agency has an opportunity to analyze the impact of the results of the independent study which will assess Agency workload estimates and identify criteria for determining the most efficient use of office staffing and to consider the prospective impact of administrative convergence on county office operations, FSA will be in a better position to identify the number of offices and the specific locations of consolidations and closures, where necessary.

Question. Mr. Kelly, you state that you will keep the Committee apprised of any prospective closures. How do you plan to keep the Committee apprised?

Answer. We intend to continue providing periodic status reports on possible office closures, consistent with guidance from the Secretary, to ensure that you and other interested Members of Congress are apprised of our plans in this area.

Question. For the Service Center Implementation/Common Computing Environment, the fiscal year 1999 budget request proposes an increase of $30 million for FSA's salaries and expenses. Natural Resources Conservation Service and Rural Development will also contribute funds to this project. How much have these agencies proposed to contribute?

Answer. The Natural Resources Conservation Service and Rural Development will contribute $15 million and $7 million, respectively, during fiscal year 1999 towards the Common Computing Environment.

Question. Will the CCE project being completed in fiscal year 1999 require any more financing?

Answer. Hardware and software acquisitions for the Common Computing Environment will be procured in three phases over several years. Phase I will take place in late fiscal year 1998 and throughout 1999 at a cost of about $100 million. Phases II and III will take place in fiscal years 2000 and 2001 at a cost of about $250 million. This would complete the hardware and software acquisition for the Service Centers. Funding sources for the Common Computing Environment beyond fiscal year 1999 have not been identified.

Question. Why does this require an earmark as proposed by the Agency?

Answer. The $30 million requested under FSA Salaries and Expenses (S&E) will be combined with funds from the Commodity Credit Corporation, the Natural Resources Conservation Service, and the Rural Development agencies to start the USDA Service Center Common Computing Environment. The appropriations language we are proposing merely denotes that $30 million of the FSA S&E request is for the CCE and is not available for any other purpose, including staffing.

Question. Does the Agency or the Secretary of Agriculture have a proposal to convert FSA non-Federal county committee employees, with their career tenure, to Federal civil service status? If not, what has been proposed by the Secretary?

Answer. The Secretary of Agriculture is on record as supporting pending legislation introduced by Congresswoman Eva Clayton favoring converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status. Conversion of these FSA non-Federal employees to Federal civil service status would greatly improve our program delivery and would eliminate the challenges FSA currently faces in operating two different personnel systems for employees in county offices.

Question. Carryover funds used in fiscal year 1997 for staffing expenses will not be available for fiscal year 1998 resulting in a decrease of $37.8 million. Due to the lack of these carryover balances, non-Federal county office staff years will result in a proposed net decrease of 855 FTE's from fiscal year 1998 to 1999. Were these numbers included in the target reduction number of 2,500 FTE's that you announced last year?

Answer. Yes, the reduction of staff years was included in the original total of 2,119 FTE's that were to be eliminated as proposed in last year's budget for fiscal year 1998. For fiscal year 1998, FSA is using $50.8 million of the available fiscal year 1997 carryover balance of $63.8 million to finance fiscal year 1998 staffing and related costs, leaving an unused balance of $13 million. In fiscal year 1999, FSA will use the remaining $13 million to help finance staffing costs. Because of the use of fiscal year 1997 carryover funds, a more modest reduction of Federal and non-Federal staff years was necessary in fiscal year 1998. These lower reductions were achieved through buyouts, a reduction-in-force, the offering of early outs without voluntary incentive payment, and normal attrition.

Question. Wasn't the Agency aware of these unavailable funds last fiscal year?

Answer. Yes, the Agency was aware of the funding situation last fiscal year and took action to notify the Department. The carryover balances, which resulted largely from States not filling funded vacancies in 1997 in anticipation of the large budgeted reductions for 1998, were taken into account by Congress in appropriating lower than requested salaries and expenses funding for 1998. The total available funds for non-Federal county office activities in fiscal year 1998 included funds car-

ried forward from the prior year. For fiscal year 1998, FSA is using $50.8 million of the available fiscal year 1997 carryover balance of $63.8 million to finance fiscal year 1998 staffing and related costs, leaving a balance of $13 million. In fiscal year 1999, FSA will use the remaining $13 million to help finance staffing costs.

Question. There is much frustration in the State FSA field offices under the current environment at USDA. State Directors feel that they do not know what is expected of them nor do they know what human resources will be available from year to year. Without clear goals and a strategic short term and long term plan of operation the field offices are left to make inadequate management decisions. Does USDA know how FSA will proceed in the future with the structuring of their field offices and does a strategic plan of operation exist? If yes, has this been communicated to all State Directors?

Answer. A strategic plan has been developed for the Agency which is included in the USDA strategic plan. FSA is committed to implementing the concepts in the Blair House Papers giving more responsibility and accountability to State Directors. An FSA SED conference is being held March 24 through 27, 1998, in Arlington, Virginia. This conference has been scheduled to discuss such issues as administrative convergence, outreach/civil rights, farm loan programs, farm programs, management issues and strategic planning. A notice will also be released this week delegating the responsibility for insuring budget and personnel ceiling constraints to SED's. A task force has reviewed the current delivery system, but no final decision has been made on the structure of field offices.

Question. Have State Directors been given the criteria used to determine their staff ceilings and their budget so they can make management decisions necessary to stay within the budget? If not, why?

Answer. In an August 22, 1997 memo, State Directors were issued personnel ceilings for Federal and non-Federal employees for fiscal year 1998. After the FSA 1999 appropriations are passed, State Directors will be issued ceilings for fiscal year 1999. The analysis for determining the allocation of ceilings to each State has not been determined at this time. Plans are currently being implemented to delegate to State Directors the authority to manage budgets, ceilings and personnel within their respective States.

Question. What is the Agency's plan to respond to and address discrimination complaints?

Answer. FSA is currently staffed with nine EEO counselors located in various FSA State offices. The counselors are available to FSA employees in the pre-complaint process. By the end of April 1998, FSA will be fully staffed with 11 full-time counselors. FSA has established 15 Fact Finder positions in Montgomery, Alabama, to perform fact finding inquiries into program complaints FSA-wide. This staff will report to the Director, Civil Rights and Small Business Utilization Staff. Within the next four to six months, FSA will be implementing a mediation program in the pre-complaint process. This program is intended to reduce the number of formal EEO complaints, speed up the complaint process, and preserve ongoing working relationships. Prior to implementation of this mediation program, all counselors will receive mediation training which will give them the necessary skills to act as intermediaries.

Question. USDA created the service center concept during reorganization. Service centers are used to provide "one stop shopping," thus the Agency's customers can perform all of their business transactions at one place rather than traveling to several places. Has the service center concept been integrated in all State field offices?

Answer. The Service Center concept is still in the process of being implemented in all State field offices. The office closure/opening/collocation and the LAN/WAN/VOICE installation phases of this initiative will be completed by December 1998. These two initiatives provide the foundation for business process reengineering and subsequent information technology investment. Integration of business processes is under evaluation, with pilot testing currently underway. When the pilot testing is completed and the new business processes are identified, these processes will be implemented in all Service Centers and the Service Center concept fully implemented.

Question. Why does the administration call a USDA office a "service center" when in many cases only one Agency (FSA, NRCS, or RD) is housed in the office?

Answer. The National Food and Agriculture Council (FAC), at the request of the Secretary, is reengineering, modernizing, and streamlining the processes of county-based Service Centers. The National FAC established the Service Center Implementation Team (SCIT) to design and implement the changes required to achieve an integrated Service Center environment that will provide customers with "one stop service." Under the service center concept, customers will be provided services by trained and knowledgeable USDA employees who are willing and able to accommodate customer requests, regardless of a particular Agency's presence in a Service

Center. While there are many specific benefits for both customers and the partner agencies, the primary benefit is that of achieving the Secretary's vision of a more efficient delivery of USDA programs to rural America.

Question. USDA is planning to undergo administrative convergence, using one administrative support staff for all field offices. Has the USDA thoroughly studied all options for administrative convergence?

Answer. The Secretary of Agriculture announced administrative convergence plans in July 1997 to consolidate the administrative support functions of the USDA county-based agencies to reduce costs and streamline offices. Phase one created the Administrative Convergence Action Team (ACAT), comprised of nearly 200 USDA employees, representing each of the impacted agencies and every aspect of operations. The ACAT was successful in developing the initial report that included a thoughtful series of options which set a solid foundation for the success of this critically important project. In phase two, Deputy Secretary Rominger and members of the Subcabinet developed the proposed framework for administrative convergence. Based on this proposed framework, the Secretary initiated the implementation phase of administrative convergence on March 16, 1998.

Question. Have plans for implementation been determined and have State field offices been notified?

Answer. Following the Secretary's initial review of the proposed framework, USDA's State leaders were given the opportunity to comment before the final decision was made. A number of thoughtful and important questions were raised and can only be answered during the next phase leading up to implementation, which is projected to occur by October 1, 1998.

Question. Will this convergence be considered as the Agency undergoes the service center implementation/common computing environment?

Answer. Yes, the Secretary is committed to the continued re-invention of basic business processes and the successful establishment of a common computing environment.

Question. The proposed fiscal year 1999 budget assumes a reduction in non-Federal county employees and a reduction in Federal employees as well. What is the rationale for proposing a major reduction while at the same time the Department has hired Coopers & Lybrand to study the workload requirements of the field delivery system?

Answer. The net reduction in staffing is driven by further declines in expected workload stemming from the 1996 Farm Bill and the need to make hard choices to balance the Budget. The Department entered into a contract with Coopers & Lybrand to conduct a study of the farm and rural program delivery system of the county-based agencies, FSA, NRCS, and RD, to be completed by September 1, 1998. The study will clearly identify the purposes Agency operations are intended to achieve, provide an independent assessment of Agency workload estimates, consider the prospective impact of administrative convergence on county office operations, identify criteria for determining the highest value use of office staff, evaluate office operations efficiencies gained so far, and assemble a profile of the USDA customer base as defined by eligibility for program benefits. Finally, the study will identify alternative decision systems or organizational structures for matching USDA resources with customer needs and preferences. We expect to be able to use the results of the Coopers & Lybrand independent workload analysis of the county-based workload study in guiding our actions to determine the most effective use of office staff which may result in office closures or additional consolidations. At the time of completion of the study, all recommendations will be analyzed to see what further steps, if any, can be implemented to improve the National, State, and county-based delivery systems.

Question. Does the Secretary support the conversion of county employees to Federal status?

Answer. Yes, the Secretary supports converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status. Conversion of FSA non-Federal employees to Federal civil service status would eliminate the difficulties FSA currently has in operating two different personnel systems for employees in county offices. These difficulties include the fact that non-Federal FSA employees cannot compete for FSA Federal vacancies on an equal footing with Federal employees, non-Federal employees who are RIF'd are not entitled to assistance and priority placement under the Career Transition Assistance Program, and FSA is required by law to establish separate supervisory reporting lines for non-Federal and Federal employees located in the same county office.

Question. Why has the Department made the decision to fill ACO positions, Federal only?

Answer. The Secretary favors Federal control of Farm Loan Programs (FLP) to maintain uniform management and accountability. The Office of General Counsel has advised that if non-civil service (county committee) employees are involved in loan making or loan servicing decisions, the 90-day finality rule would apply to those decisions which would create additional liability for the Department.

FSA has established Agricultural Credit Officer (ACO) training type positions in county offices to perform loan making and servicing according to supervised credit principles when there are not enough fully trained and experienced credit officers to provide supervised credit in the manner needed by FSA. Delegating farm loan making authority and some servicing authorities exclusively to Federal employees facilitates the effective delivery of FLP in county offices by having all ACO's under the same personnel system, supervisors, and guidelines. It promotes Federal control of FLP by ensuring that direct line authority extends from the Secretary to Federal employees in local county offices and eliminates FLP liability from the 90-day finality rule.

Question. The county committee system is the backbone for the field delivery system. Retaining county committee authority in decision making is very important to the farming community. Under what authority did the Department remove from the county committees the eligibility determination to apply for guaranteed loans?

Answer. The Department of Agriculture Reorganization Act of 1994, § 227(a), says in part that the Secretary shall use the services of committees in carrying out the agricultural credit programs under the Consolidated Farm and Rural Development Act. The statute does not dictate to what extent the county committees will be used nor is committee action to determine eligibility required. The degree of committee involvement in FSA farm loan programs is discretionary. The Secretary determined that allowing credit officials to determine eligibility for loan guarantees would reduce application processing time and streamline the approval process. The removal of county committees from the loan eligibility process is consistent with recommendations from USDA's Civil Rights Action Team and has the full support of lenders using the guarantee program.

We agree that county committee input is very important to the farming community and the success of FSA programs. The grass roots knowledge that county committees have and the advice that they give is very valuable to making decisions regarding farm loan programs, and we continue to capitalize on that knowledge and rely on their advice. It is not, however, essential for the county committee to be involved in determining eligibility on every loan guarantee application, nor is it an effective use of the committees' time.

Question. Reports have surfaced that the Department has developed a task force report on the field delivery system. Is this the case?

Answer. A task force was appointed to address the interim and long-term needs of FSA's delivery system. This is still in the developmental stage for the Agency. The Secretary has also contracted with Coopers and Lybrand to provide alternative approaches to organizing and staffing USDA's county-based operations in delivering services that are clearly linked to Federal policy and program priorities and that can be managed to meet Federal budget targets. The study will (1) identify the purposes Agency operations are intended to achieve, (2) provide an independent assessment of Agency workload estimates, (3) consider the prospective impact of administrative convergence on county office operations, (4) identify criteria for determining the highest value use of office staff, (5) evaluate office operations efficiencies gained so far, and (6) assemble a profile of the USDA customer base as defined by eligibility for program benefits.

ACREAGE STATISTICS

Question. Does USDA have authority to allow producers to report their planted acreage? Does USDA have authority to share planted acreage data with private organizations who need such data?

Answer. Section 374(a) of the Agricultural Adjustment Act of 1938 (1938 Act) provides broad authority for collecting land and crop information in support of programs administered by USDA. The statute states that "The Secretary shall provide for ascertaining, by measurement or otherwise, the acreage of any agricultural commodity or land use on farms for which the ascertainment of such acreage is necessary to determine compliance under any program administered by the Secretary." In addition, the 1938 Act and the Federal Agriculture Improvement and Reform Act require the collection of acreage information for all quota tobacco and quota peanuts and as a condition of eligibility for the Noninsured Crop Disaster Assistance Program, respectively.

However, information collections are subject to approval by OMB under the Paperwork Reduction Act of 1995. USDA's approval for these collections has lapsed as the result of OMB concerns about the practical utility of the information being collected. USDA continues to accept reports during negotiations with OMB for reapproval.

Information sharing with private organizations is limited by the Privacy Act, 5 U.S.C. 552a, which prohibits disclosure of information regarding farm operations without written consent of the individuals to whom the records pertain. One exemption authorizes disclosure under the Freedom of Information Act (FOIA), 5 U.S.C. 552(a)(b)(2). However, FOIA restricts disclosure of information including, but not limited to, Social Security Number, farm number, yields, crop bases, tillable acres, and acreage information related to USDA-administered conservation programs.

Question. Have other groups, organizations or agencies expressed interest in working with FSA to obtain accurate crop acreage data?

Answer. Within USDA, interest in access to detailed or summary-level information has been asserted by the Animal and Plant Health Inspection Service; Cooperative State Research, Education and Extension Service; Economic Research Service; National Agricultural Statistics Service; Natural Resources Conservation Service; Risk Management Agency; and World Outlook Board. USDA's Office of the Inspector General classifies FSA's collection of this information as a key internal control for $11 billion in annual program disbursements.

Beyond USDA, many State governments and local entities use the FSA-collected land and crop information in support of State and local programs, such as pesticide and fertilizer control programs and local crop forecasts and analysis. Private crop insurance agents, reinsured by USDA, also use and rely on FSA-collected information to verify crop data reported by producers for crop insurance.

Appeals for continued collection and sharing of the information have been received from the American Farm Bureau Federation, American Sugar Cane League, National Cotton Council, National Farmers Union, and a variety of rural land interests, such as the American Society of Farm Managers and Appraisers.

Question. What is the status of any cooperative efforts between USDA and NASA which decides the use of NASA facilities, personnel and/or equipment to collect data using remote sensing, satellite or other advanced technology?

Answer. USDA and NASA are in the final stages of establishing a Memorandum of Understanding (MOU) on Cooperation and Coordination in Science and Technology Research, Development, Transfer, Utilization and Commercialization. The purpose of the MOU is to provide a framework for the continued cooperation and coordination in the area of remote sensing.

Both parties view this agreement as important for improving the capability to collect data needed to improve precision agriculture technologies, global crop-condition assessments, and natural resource management. The Secretary signed the proposed MOU for USDA on February 27 and has forwarded the document to the NASA Administrator for his signature.

FSA COMBINATION LEASES

Question. During 1997 FSA proposed classifying all combination leases, those with a share and cash provision, as share leases. Based on concerns expressed by landlords and tenants who participate in such leases, FSA delayed implementation of the proposed procedure. Since these leases are utilized in areas where low prices for cotton and other commodities are causing production financing difficulties and since the change would generate minimal savings, if any, would the Agency consider allowing those who have historically utilized combination leases continue to do so thereby making the change apply only to new leases or to those combination leases where both parties agree to the new determination?

Answer. The reclassification of combinations leases does not mean that producers are prohibited by FSA from continuing to use such leases. Audits conducted by the Office of the Inspector General (OIG) confirmed that the majority of combination leases actually result in share leases unless a disaster affects the crop. This meant that even though the terms of the lease resulted in a crop share, FSA was recognizing the lease as a cash lease in most cases. This resulted in AMTA payments going to the operator when a portion should have gone to the owner. OIG views combination leases that are considered cash leases as a tool for allowing landlords to evade payment limitations. The change corrects this inequity. The final regulation will be issued in the near future and will address the issue of which leases/producers will be subject to its requirements.

BOLL WEEVIL ERADICATION PROGRAM AND LOANS

Question. Since the program is continuing to expand, please provide the Committee with an analysis of whether the program can succeed without significant funding for Federal cost sharing and for the FSA loan program—particularly while prices are low and acreage is in decline.

Answer. We believe the boll weevil eradication program can succeed with fewer Federal cost-share funds and a flexible loan program. Cotton acreage has fluctuated significantly over the last two years, largely due to recent changes in farm legislation. These swings in acreage make it more difficult to provide the cash flow for the eradication program in each new area. High acreage during the expensive few years of eradication will result in high overall program costs. If acreage then declines in the post-eradication phase as loans are being repaid, grower assessments may not be sufficient to retire existing debt on schedule.

Question. Is it accurate that USDA and Land-Grant University analyses have concluded that the boll weevil program has generated significant economic and environmental benefits in the Southeastern States?

Answer. A report written by USDA and University of Georgia researchers summarized the tremendous economic and environmental benefits of boll weevil eradication in Georgia. According to the study, cotton production has increased dramatically each year since the program was completed in 1990. Average yield has increased from 482 pounds per acre in the pre-eradication period (1971 to 1986) to 733 pounds per acre in the post-eradication period (1991 to 1995). Acreage has increased from an average of 288,000 to 770,000, and average gross crop revenues have increased from $70 million to $400 million per year. In addition, net crop revenues (gross revenues less insect pest management costs and amount of damage) have increased from $187 to $451 per acre.

The report also identifies environmental advantages to growers and residents of the State due to a significant decrease in insecticide use in Georgia cotton. The average number of insecticide treatments has decreased from 14.4 per acre in the pre-eradication period to 5.4 per acre in the post-eradication period. In most cases, the materials used are more specific, and the amount of active ingredient applied during each treatment has been reduced from pounds per acre to a few ounces per acre.

Question. How much of the APHIS funds go directly to the field and how much are attributed to administrative overhead?

Answer. Approximately 86.1 percent of APHIS' funding is allocated to the field for program delivery costs while 13.9 percent is allocated for Agency and program-level support costs.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the Agency's annual performance goals linked to the Agency's mission, strategic goals, and program activities in its budget request?

Answer. The annual performance goals measure incremental achievement of the Agency's strategic goals and, ultimately, the Agency's mission. As such, many of the annual performance goals in the Annual Performance Plans are similar to the strategic goals encompassed in FSA's strategic plan. Furthermore, the Annual Performance Plan reflects the program activities in the Agency's budget request, summarized on a GPRA basis, including FTE staffing and funding associated with achievement of annual performance goals.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. As a part of the budget process this year, a fiscal year 1999 Annual Performance Plan was developed and submitted which contained performance goals relating to the Agency's strategic plan. The Annual Performance Plan encompasses all program activities included in the Agency's budget, and reflects the program activities associated with identified performance goals. Both the Annual Performance Plan and the fiscal year 1999 budget discuss the need for resources relative to achieving program performance goals. This linkage also enables decision-makers to assess the FTE's and funding requirements of the strategic plan goal encompassing the program activities associated with achieving annual performance goals.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Difficulties associated with establishing this linkage included developing outcome measures for each of the program activities encompassed in the budget, while maintaining an Annual Performance Plan that is informative and concise and establishing quantitative performance goals for program activities to show a definite cause and effect relationship between the funding requested for program activities and the expected outcome. There were also some timing problems associated with

linking available funding (e.g., receipt or establishment of budgetary allowances) with related performance goals.

Question. Does the Agency's Performance Plan link performance measures to its budget?

Answer. As part of the budget process discussed previously, regarding linking performance goals to budget activities, performance measures were incorporated in budget material to indicate expected performance to be achieved, based on available funding.

Question. Does each account have performance measures?

Answer. Performance measures were developed for each FSA budget account. Performance measures were developed for the strategic goals and annual performance goals and then linked to budget accounts. Budget accounts were aggregated where appropriate to tie in with strategic goals.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure was aligned with the structure reflected in the Strategic Plan. As such, annual performance goals, measures, indicators, and baselines were developed for each strategic goal and management initiative. The budget account structure, however, differs from the performance planning structure. The budget account structure encompasses program and salaries and expenses funding requirements but does not separately address certain administrative and support functions, such as outreach, equal employment opportunity, and information technology initiatives. Instead, these functions are aggregated and reflected in the Agency's salaries and expense accounts by goal. Also, the performance plan will report whether or not annual performance goals were achieved with available funding for those activities. The budget justification is not currently developed to justify these types of resources primarily on a performance budget basis.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. Presently, there are no plans to change the FSA account structure for fiscal year 2000, since there is linkage between the account and activity structure in the budget and GPRA program activities.

Question. How were performance measures chosen?

Answer. Performance measures were developed by Agency representatives within their respective areas of responsibilities. The FSA Corporate Affairs Group worked closely with Agency representatives from program and administrative areas to ensure performance measures captured significant, vital operations. This ongoing interaction continues as the Agency strives to develop a greater number of outcome measures reflecting results, or impacts, of Agency programs.

Question. How did the Agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. In many instances data collection systems and verification methods were already established prior to the development of performance measures. As such, managers were able to utilize existing technology, processes, and resources to collect and evaluate data. Instances in which data collection systems and/or verification methods were not available required consideration of several factors to evaluate the cost versus the benefit of data collection and verification methods. Factors considered included actual/anticipated policy or organizational changes within program and administrative operations, available technology and funding, internal and external risk factors, and the degree to which FSA operations influence performance results.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. As reflected in the Annual Performance Plan, some performance measures exist for which resulting data may not be available for inclusion in the fiscal year 1999 Annual Performance Report, which is due in March 2000. Instances in which data is not available will be reflected in the Annual Performance Report accompanied by an explanation supporting the reason data is unavailable and anticipated timeframes to obtain the data. However, prior to preparation of the fiscal year 1999 Annual Performance Plan Report, FSA will diligently strive to develop systems facilitating the collection and evaluation of all required data.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The Agency was diligent in ensuring that the most critical performance goals were included in the FSA Annual Performance Plan. Lower-level, less critical performance goals were evaluated for inclusion in Division and Branch level plans.

As such, we recommend that the subcommittee track all of the annual performance goals in the 1999 Annual Performance Plan.

Question. In developing your Annual Performance Plan, what efforts did your Agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. During the development of the 1999 Annual Performance Plan, Agency managers were apprised of the distinction between output and outcome measures and were encouraged, to the extent possible, to develop outcome measures in their area of responsibility. We also worked with OMB and USDA staff offices to assist in this effort. Currently, the majority of the performance measures in the Annual Performance Plan are outputs rather than outcomes. Furthermore, output measures are often most appropriate for evaluating achievement of annual performance goals, for often outcomes will take multiple years to be achieved and evaluated. The Corporate Affairs Group, however, will continue working with program managers to develop outcome measures, where applicable.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Agency program managers understand the distinction between output and outcome measures. However, developing outcome measures is often not feasible for interim timeframes, such as the short-term timeframes encompassed in Annual Performance Plans.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. Management initiative number 3 in the Annual Performance Plan focuses strictly on customer satisfaction. Specifically, performance measures have been developed to evaluate customer satisfaction with each of FSA's major programs. The management initiative also includes a discussion regarding the strategies that will be implemented to achieve greater customer satisfaction, including electronic warehouse receipts, paperwork reduction, and various automation techniques to issue payments in a more timely manner. In the recent past, the Agency has also used national customer (producer) satisfaction surveys.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The Agency's Strategic Plan was completed in September 1997, at which time development of the Annual Performance Plan commenced. However, budget timeframes required submission of preliminary budget documents in July 1997. As such, the budget and Annual Performance Plan were prepared to accommodate the timeframes associated with each of these initiatives. However, for fiscal year 2000, the Annual Performance Plan will be prepared prior to the start of the budget process. As such, the annual performance goals included in the fiscal year 2000 Annual Performance Plan will be a primary influence in budget development.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. The ability to assess the impact of proposed budget changes on targeted performance will vary among program areas depending on the extent and nature of proposed funding changes. For instance, the ability to effectively administer farm loan programs is dependent on adequate funding levels. As such, farm loan program personnel can immediately assess the impact on performance and the achievement of various goals, such as delinquency rates that are related to loan servicing, if proposed budget numbers are changed, up or down.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the Agency can be properly managed to achieve the desired results?

Answer. In most instances, FSA will be able to measure and evaluate program performance throughout the year. However, data will not be available for all measures included in the 1999 Annual Performance Plan until new software and/or systems are in place.

Question. The Government Performance and Results Act requires that your Agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. No, we have not faced that difficulty. The program activities in the Annual Performance Plan are linked and crosswalked to the budget account structure.

As a result, performance goals have been developed for each program activity in the Annual Performance Plan that define the level of expected performance.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Since there is linkage between the budget and the activities in the Annual Performance Plan, we believe, at this time, there is no need to modify the budget account structure. However, until we have had time to evaluate data reported on the achievement of performance goals, we cannot speculate on whether modifying our budget account structure would make linkage to the budget clearer.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your Agency and to this committee than the present structure?

Answer. We do not propose to modify the budget structure because linkage exists between the Annual Performance Plan and program activities in the budget.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. At the present time, we do not think modifying the budget account structure would necessarily strengthen accountability for program performance.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. The discussion of external factors is primarily reflected in FSA's Strategic Plan. The measures in the Annual Performance Plan are linked to the goals, objectives, and measures in the Strategic Plan. Therefore, the same external factors identified in the Strategic Plan will influence achievement of annual performance goals. Including external factors in the annual performance plan would be a repetitious presentation of information and would compromise our efforts to make the plan as concise as possible.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. Management assesses risk in the administration of their daily operations and determines the impact on resource estimates and achieving targeted levels of performance. This discussion was not included in the Annual Performance Plan, for a variety of alternatives are utilized to manage risk, and including this discussion would result in a voluminous document.

Question. What impact might external factors have on your resource estimates?

Answer. That depends on the extent and type of external factors. For example, with unfavorable weather conditions, it may become impossible to achieve performance goals established for Agency program activities, such as for the Non-Insured Disaster Assistance Program (NAP), with available or requested resources. Another possible impact might be increased difficulty in determining the appropriate level of resources needed to achieve a desired program outcome.

Question. Through the development of the Performance Plan, has the Agency identified overlapping functions or program duplication?

Answer. The discussion of partnerships and coordination in the FSA Strategic Plan reflects government and private entities with whom FSA administers complementary program functions. The same partnerships and coordination also apply to the program activities included in the Annual Performance Plan.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. The Performance Plan does not identify overlap or duplication of functions or programs. However, the Agency is involved in several cross-cutting issues to streamline and consolidate duplicative and overlapping functions. For example, the USDA Service Center initiative will collocate the county-based agencies (FSA, NRCS and RD). Another major initiative underway is the administrative convergence of the NRCS, FFAS, and RD mission areas.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that, to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The Agency has established measures enabling FSA to compare targeted to actual performance. However, the Agency is continuing efforts to develop measures which will better reflect program performance. As such, newly developed performance measures will need sufficient time to mature to facilitate a comparison between actual and targeted levels of performance.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Agency managers develop estimates in view of their existing knowledge of program operations and anticipated political and economic environment. Changes

in these estimates, and the resulting impact on resource estimates, require a coordinated effort between Agency program managers and budget representatives.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The Agency has identified a need to revise the September 1997 Strategic Plan. However, the Annual Performance Plan was not the primary influence in the decision to revise the Strategic Plan. Instead, other factors, such as administrative convergence and the change in Agency leadership, are the primary factors influencing the need to revise the Strategic Plan.

QUESTIONS SUBMITTED BY SENATOR BURNS

CONSERVATION RESERVE PROGRAM

Question. Mr. Kelly, what is the process whereby contracts are being presented for acreage in the Conservation Reserve Program?

Answer. Producers may offer land for the Conservation Reserve Program (CRP) through three different methods. One method is through the CRP general signup where offers are submitted at the local FSA office during a specified signup period. The local FSA and Natural Resources Conservation Service (NRCS) make eligibility determinations and collect environmental benefits data. All offers are evaluated based on the environmental benefits index (EBI) and ranked using the EBI. After offers are determined acceptable, NRCS, in conjunction with the producer and conservation district, develops a conservation plan to implement the offered conservation practices. After the conservation plan is approved, the CRP contract is approved by the local county FSA committee.

The second method to participate is through the CRP continuous signup. Continuous signup allows producers to enroll at any time during the year for certain highly desirable environmental conservation practices such as filter strips, riparian buffers, contour grass strips, and grass waterways. Producers apply for enrollment in the continuous signup at the county FSA office. This is a non-competitive process because of the relatively small acreages of these practices and extraordinarily high level of environmental benefits to be obtained. All other land and producer eligibility requirements apply.

The third way to participate is through the Conservation Reserve Enhancement Program (CREP) where Federal and State resources are combined to target areas of environmental importance to the State and nation. States are expected to contribute significant resources toward the enhancement program such as additional funding for longer-term (beyond the CRP contract) producer obligations. All CREP agreements are subject to all CRP land and producer eligibility requirements. CREP agreements have been signed with the Governors of Illinois, Maryland, and Minnesota.

Question. Last year there was a great deal of concern about the way the program was being administered. Can we foresee these same problems in the coming year?

Answer. We are very pleased with the results of signup 16 and have noted that only a few concerns have been raised. We agree that some questioned whether USDA could implement signup 15 under the aggressive schedule we announced. However, the FSA and NRCS employees conducted the largest CRP signup ever and announced the acceptability of contracts using the least amount of time that has ever been used. After signup 15, FSA and NRCS convened a group of employees from all levels of the Agencies to identify policies and processes that could be modified to improve and streamline the program. As a result, there have been no major issues raised under signup 16. Although there are isolated areas where concerns have been raised, we believe that these issues can be resolved administratively.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FSA STAFF REDUCTIONS

Question. You have stated that "The Farm Service Agency is the agency that family farmers and ranchers interact with most frequently." Still, is spite of this agency's importance to family farmers, the fiscal year 1999 budget would make 1,100 additional staff year reductions. Earlier this year, the agency conducted a RIF of 152 employees, all of which were non-Federal county employees. Is it true that in spite of this year's RIF, FSA is hiring new personnel?

Answer. Yes. Although the Agency is going through an overall downsizing, we did identify a need to shift staff resources from the farm programs to the farm loan pro-

grams. To accomplish this, a training type Agricultural Credit Officer (ACO) position was created to develop staff as credit officers. Initially, these new positions were being advertised internally to FSA, both under the county committee (non-civil service) and through merit promotion for FSA Federal employees. The position descriptions and qualifications were almost identical and the State Executive Director and/or State Committee selected the person who was considered best qualified for the job. Since FSA has separate ceilings for the county committee (non-civil service) and Federal positions and is in a downsizing mode, the employee selected remained in whatever system (Federal or non-civil service), they came from, allowing what was, in effect, a transfer of staff resources from one program to another and meeting what we believe was the spirit of the interchangeability provision of the reorganization act. Unfortunately, based upon opinions from the Office of the General Counsel, we learned that loans approved and servicing actions taken by county committee employees (non-civil service employees) would be subject to the 90-day finality rule which could have an adverse effect on the farm loan program. In addition there were issues raised concerning possible conflicts of interest since the non-civil service employees) are actually employed by the farmer-elected committees. Given these issues, the Agency in consultation with the Secretary's office determined that a change in policy was appropriate and that these ACO positions would be filled solely as Federal positions They were, however, advertised as "all sources" which allowed non-civil service county committee employees to apply. However, in some cases, non-civil service employees may be disadvantaged when applying for a Federal vacancy through being blocked for consideration by a veteran or a displaced Federal employee with Career Transition Assistance Program (CTAP) reemployment rights. As of March 27, 1998, 125 of these positions had been filled; 48 were formerly FSA non-civil service employees, 53 were FSA Federal employees, and 24 were from outside FSA.

Question. If so, what is barring RIF'd employees from filling the open positions before you open the announcements to public applicants?

Answer. Non-civil service county committee employees do not have Federal civil service status and for this reason cannot be considered as internal candidates for Federal positions. Therefore, in order to consider non-civil service county committee employees for Federal vacancies, the vacancy announcement must be open to members of the general public. Non-civil service county committee employees who are RIF'd do not have reemployment priority rights to any Federal civil service vacancies, as Federal employees who have been separated under the Career Transition Assistance Program do.

Question. In regard to RIF's, do you think non-Federal employees are being treated fairly?

Answer. FSA extends re-employment priority rights to non-civil service employees for comparable non-civil service vacancies. Because Federal Career Transition Assistance Program (CTAP) provisions apply only to Federal civil service employees, displaced non-Federal county committee employees do not receive any priority consideration for Federal vacancies. FSA believes this is an inequity and would have no objection to extension of CTAP coverage to FSA non-civil service employees so that they have priority for USDA vacancies, consistent with the CTAP coverage that Federal FSA employees receive.

Question. If not, what steps can be taken to make the situation more equitable?

Answer. Because of statutory distinctions between non-civil service county employees and Federal employees, action by Congress to convert all of our non-civil service county committee employees, with status, to Federal positions would eliminate the inequities that now exist and would provide us with additional flexibility in carrying out required reductions and in shifting staff resources between programs. Absent this, exemption of the farm loan programs from the 90-day rule would allow us to revisit the issue of utilizing non-civil service employees fully in the farm loan programs with some additional changes in our current handbooks and regulations. In addition, extension of Career Transition Assistance Program coverage, as indicated in the above answer, would also help to alleviate some of the inequities that now exist.

Question. You mention that "the Secretary favors converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status." What specific steps are being taken to execute this intention?

Answer. The Secretary of Agriculture is on record as supporting pending legislation introduced by Congresswoman Clayton, as contained in H.R. 2185, favoring converting FSA non-Federal county committee employees, with their career tenure, to Federal civil service status. Conversion of these FSA non-Federal employees to Federal civil service status would eliminate the challenges FSA currently faces in operating two different personnel systems for employees in county offices.

Question. What problems are stopping this process?

Answer. There are other aspects of the bill which have created concerns. Specifically, we have technical concerns regarding language that provides funding for farm ownership and operating loan programs. We also have some concerns with Section 201 of the bill which modifies restrictions on FSA lending to farmers if they have received debt forgiveness on a prior loan or if they are delinquent on an existing loan.

COMBINATION LEASES

Question. In 1997, FSA proposed a change to classify farm leases that contained elements of both "cash" and "share" leases (so-called "combination" leases) as share leases. This change would limit the ability of landowners to participate in the Agricultural Market Transition Assistance program (Freedom to Farm). Because of the timing of the proposed change, it was delayed until this year to avoid the need to redraft leases for the 1997 crop year that had already been executed. I have heard from producers in my State that they still feel the proposed change is unnecessary and unfair. Has the Farm Service Agency taken into consideration the effect of the combination lease ruling on the Agency's farm credit portfolio?

Answer. On the contrary, this change means that landowners who may have been previously considered as cash leasing their land can earn AMTA payments. The change will have some impact on the Agency's farm credit borrowers because borrowers who are land owners will receive more money and the operators will receive less money. However, nationwide, there are very few combination leases. The combination ruling has no effect on the agency's farm credit portfolio. The 1996 Act took away the authority to lease FSA inventory land. There are fewer than 447 leases on inventory land, including non-farm property, currently in effect. None of these leases are combination leases.

Question. What policy objectives will be realized by the combination lease ruling?

Answer. It is our opinion that treating all combination leases as share leases will result in more consistent administration of program provisions by county committees and will be more equitable to all producers. Additionally, treating all combination leases as share leases will eliminate their use as a means to circumvent payment limitation provisions.

Question. If the objectives include savings, what level of savings will be achieved?

Answer. The payments earned by the farm will not change; only the distribution of payment between producers on the farm will change. We recognize that there will be some savings if an affected producer reaches the payment limitation. This would be verification that fewer producers will be circumventing that provision as a result of this new policy. However, as previously indicated, the change was made to treat producers consistently and equitably and to ensure the integrity of the payment limitation provisions, not to achieve savings.

Question. Will this change not result in landlords amending their leases to totally "cash" leases and, therefore, have a detrimental effect on tenants?

Answer. Both totally cash and totally share leases are normal leases used throughout the country. We do not believe that cash leases are detrimental to producers. The type of lease negotiated is dictated by various factors, including provisions of the 1996 Act.

Question. Why do you believe this change does not refute the claim that the Freedom to Farm provisions were to provide farmers with "certainty" of Federal assistance?

Answer. This change does not impact the "certainty" of Federal assistance since the amount of payment earned by the participating farm does not change and is not tied to market prices. As previously indicated, the purpose of the change is to treat all producers consistently and equitably, and to stop the circumvention of payment limitation rules. The Statement of Managers that accompanied the 1996 Act directed USDA to ensure that production flexibility contract payment shares could be changed annually to reflect the changes in leasing arrangements on a farm.

NON-INSURED ASSISTANCE PROGRAM (NAP)

Question. The Crop Insurance Reform legislation of 1994 created the NAP program to assist farmers whose production losses are not covered by crop insurance. Congress is now considering an emergency supplemental appropriations bill to assist dairy, maple, and other producers who have suffered from recent storms. Still, as in the case of maple or dairy, the NAP does either not cover these losses or does so in a way that does not reflect actual losses. Is there any way to amend these programs to ensure all farmers are treated fairly and consistently?

Answer. The 1996 Act Sec. 196 (a)(2)(A) specifically excludes livestock (and by inference, livestock products) in the NAP definition of eligible crops: ". . . the term 'eligible crop' means each commercial crop or other agricultural commodity (except livestock)".

NAP covers maple sap production losses, on a yield per-tap basis, which are directly related to a natural disaster. Future year production losses are not covered.

Sec. 196 (a)(2)(B) specifically includes otherwise ineligible crops under the food or fiber restriction. The crops specifically included are: floriculture, ornamental nursery and Christmas tree crops, turfgrass sod, seed crops, aquaculture (including ornamental fish), and industrial crops.

Except for Christmas trees and some woody ornamental nursery crops, NAP does not cover losses to trees, including maple trees or wood lots.

Under NAP, Christmas trees do not have to be intended for harvest in the year of disaster or loss. The value of the Christmas tree at the time of loss is considered when assessing damage.

Regarding the assertion that NAP needs to be made more fair for all producers, it is FSA's position that NAP is equally available to all producers of crops determined eligible. To allow payments on crops currently not eligible for NAP benefits would require a change to the statute.

EFFECT OF USER FEES

Question. During last week's hearing, when asked who would bear the brunt of proposed FSIS user fees, Secretary Woteki responded by saying that "economists" have determined that meat and poultry consumers would pay those costs at the supermarket. We know that you could lay all the economists in the world end to end and they still wouldn't reach a conclusion. Rather than an answer based on economic theory, perhaps the answer to my question last week lay with economic common sense. Do you think the meat and poultry companies are more competitive in the retail markets or with their suppliers?

Answer. We know that the meat packing industry has become quite concentrated. For example, the four largest packers accounted for 82 percent of steer and heifer slaughter in 1994, versus 72 percent in 1990 and 36 percent in 1980. Although a concentrated industry, USDA studies and ongoing monitoring of the market find competition exists. The number of meat packers bidding for supplies varies by region. The poultry industry is characterized by vertical integration with poultry growers producing birds under contract with large integrators. It is not unusual to find slaughter plants engaged in some further processing.

Meat packers and poultry firms sell to processors, wholesalers/distributors, and directly to large retail food chains and restaurants. They face a large number of buyers who can and do procure from multiple sources.

Question. Which of these two groups is more "captive" to the companies?

Answer. The Department would not use the word "captive" to describe the relationship of meat and poultry companies to any other market sector. However, given the level of concentration in the meat and poultry slaughter and processing industries, these industries are most likely able to exert some influence on both the price they pay for live animals and birds and the price they receive from wholesale or retail customers. The overall industry is structured so that a relatively few packers and processors purchase most of the live animals and birds from a relatively large number of producers and then sell their products to a relatively large number of wholesale and retail buyers.

Economic studies have consistently found that consumer demand for meat and poultry products is relatively inelastic. This means that the quantity demanded by consumers is relatively insensitive to price changes. In markets where demand is inelastic, consumers will bear most of a cost increase. This is what we expect will happen with user fees. Because user fees would be small compared to the base price of meat and poultry, the quantity purchased by consumers would show little change. Producers are unlikely to see an appreciable change in either the price they receive or the quantity they can sell to meat packers and poultry integrators.

Question. How many beef cattle or poultry producers have loans with the Farm Service Agency?

Answer. FSA does not track loans by type of producer.

Question. Did FSIS consult with you about the effect of proposed user fees on agricultural producers?

Answer. No, FSIS did not consult with FSA about any possible effects of user fees on producers.

FLOOD RISK REDUCTION PROGRAM

Question. What is the status of this program?

Answer. The 1996 Act authorizes the Secretary to offer flood risk reduction contracts to producers on farms that are frequently flooded and that have contract acreage under the production flexibility program. Producers can receive in advance up to 95 percent of the projected production flexibility contract payments the producer would otherwise have received from the time of enrollment in the Flood Risk Reduction Program through September 30, 2002. In return, producers must terminate their production flexibility contract with respect to the enrolled acreage, comply with swampbuster and conservation compliance provisions, and forgo future disaster payments, crop insurance payments, conservation program payments, and loans for contract commodities, oilseeds, and extra long staple cotton. There has been no activity to date, and the fiscal year 1999 Budget reflects no proposal for program implementation.

BOLL WEEVIL ERADICATION LOAN PROGRAM

Question. What is the identified need for this program?

Answer. This loan program is an important component of USDA's overall boll weevil eradication strategy. Already regions of this country are benefiting from complete boll weevil eradication. The benefits of this program include reduced chemical applications, higher net farm income, increased land values, and other attributes important to the vitality of rural America. This program benefits not only farmers, but everyone interested in a clean environment and economic prosperity.

These loans are used to enhance the funding of the Boll Weevil Eradication Program and are made to participating States' individual boll weevil eradication foundations. There are still large regions of the country where the Boll Weevil Eradication Program is either in the very early stages or has not yet begun. With this in mind, it is very important that we continue assisting affected regions to help protect the environment and to help sustain rural economies.

QUESTIONS SUBMITTED BY SENATOR BYRD

Question. Chairman Cochran, Senator Bumpers, members of the Subcommittee, and Undersecretary Schumacher, I am pleased to be here today to review the U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA) programs. As result of the USDA Reorganization Act of 1994 and the 1996 Farm Bill, FSA staff reductions are occurring nationwide and the traditional cornerstone of the FSA's mission has been significantly altered. I have been contacted by FSA employees in my State of West Virginia who are concerned about further staff reductions. These employees are also concerned about the equity of treatment between Federal and non-Federal county committee FSA staff when separated from their jobs. I have several questions regarding the FSA in this regard. The proposed fiscal year 1999 budget assumes an additional reduction of 1,078 non-Federal county committee employees—a 9.9 percent reduction. It also assumes an additional reduction of 223 Federal employees—a 3.8 percent reduction. Can you tell me the percentage of reductions nationwide of the non-Federal county committee employees as compared with the percentage of the Federal staff reductions since the reorganization took place on October 1, 1995?

Answer. The percentage of reductions nationwide of employees from the 1993 baseline streamlining plan to the fiscal year 1999 budget is a decrease of 25.9 percent at the Federal office level and 33.3 percent at the non-Federal county level, a total FSA reduction of 30.8 percent. Headquarters employees were reduced 34.9 percent over this same period.

Question. In West Virginia?

Answer. Due to reduced funding levels, the fiscal year 1999 staffing reductions proposed in the fiscal year 1999 Budget would reduce non-Federal county office staffing by 855 staff years and Federal office staffing by 263 staff years. I cannot provide any specific details on any reductions that may take place in West Virginia in fiscal year 1999 because specific Agency or USDA plans for reducing employees or numbers of offices, by State, have not been finalized as Congress has yet to act on the President's proposals.

Question. The Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 explicitly stated that Federal employees who were transferred to the FSA from the former Farmers Home Administration's farm credit program and the non-Federal county committee FSA employees who were transferred from the former Agricultural Stabilization and Conservation Service, would be used

interchangeably to carry out the programs of the new FSA. However, I understand that a decision was made several months ago by the FSA that the non-Federal county committee employees would be excluded from carrying out certain aspects of the farm credit program. Specifically, I understand that non-Federal county committee employees are not eligible to approve loans or to fully participate in the Agricultural Credit Officer training program that the FSA recently implemented. Please explain how this restriction on non-Federal county committee employees is not in conflict with Congress' intent that all FSA employees be used interchangeably.

Answer. FSA is fully supportive of using non-Federal county committee employees and Federal civil service employees interchangeably to implement FSA programs in local county offices. In fact, the Secretary has gone on record as supporting Congresswoman Clayton's bill to convert non-Federal county committee employees to Federal civil service status. Because of statutory distinctions between non-Federal employees and Federal employees in such areas as supervisory/employee reporting relationships, applying for civil service jobs, Career Transition Assistance Program (CTAP) entitlements, leave transfer, etc., we feel that legislation converting non-Federal employees is necessary to make these positions truly interchangeable.

FSA has been using both non-civil service county committee employees and Federal civil service employees in comparable positions interchangeably. It is true that after the reorganization that established FSA, county level trainee type positions were established so employees could learn the intricacies of the farm loan program and become credit officers. These new positions are Agricultural Credit Officers (ACO's) and are different from the Credit Specialists and Loan Technicians transferred from FmHA and the County Executive Director and Program Assistant positions transferred from ASCS. Initially, these new positions were being advertised internally to FSA, both under the county committee (non-civil service) and through merit promotion for FSA Federal employees. The position descriptions and qualifications were almost identical and the State Executive Director and/or State Committee selected the person who was considered best qualified for the job. Since FSA has separate ceilings for the county committee (non-civil service) and Federal positions and is in a downsizing mode, the employee selected remained in whatever system (Federal or non-civil service), they came from, allowing what was, in effect, a transfer of staff resources from one program to another and meeting what we believe was the spirit of the interchangeability provision of the reorganization act.

Unfortunately, based upon opinions from the Office of the General Counsel, we learned that loans approved and servicing actions taken by county committee employees (non-civil service) would be subject to the 90-day finality rule which could have an adverse effect on the farm loan program. In addition, there were issues raised concerning possible conflicts of interest since the non-civil service are actually employed by the farmer elected committees. Given these issues, the Agency in consultation with the Secretary's office determined that a change in policy was appropriate and that these ACO positions would be filled solely as Federal positions. They were, however, advertised as "all sources" which allowed non-Federal county committee employees to apply.

Question. Given the ongoing restructuring within the Agency, does this restriction disadvantage non-Federal county committee employees in pursuing new staff positions required for the Agency's evolving mission?

Answer. As mentioned above, we have advertised the ACO positions so that non-Federal county committee employees can apply and be considered. As of March 27, 1998, FSA has filled 125 ACO positions, of which 48 were formerly FSA non-Federal employees, 53 were formerly FSA Federal employees, and 24 were from outside FSA. In some cases, non-Federal county committee employees may be disadvantaged when applying for a Federal vacancy through being blocked for consideration by a veteran or a displaced Federal employee with Career Transition Assistance Program reemployment rights. In addition, it does not allow us to truly use our existing employees interchangeably.

Question. Does FSA plan to repeal the restriction? If not, why?

Answer. We are in the process of finalizing revisions in the handbook that deals with conflicts of interest and ethics which will make all FSA employees, Federal and non-civil service, subject to the same rules. (Non-civil service county committee employees are not always covered by conflict of interest or ethics statutes; however, the Agency has and will continue to make them subject to these statutes through regulation.) We are also looking at ways to ensure that the farmer-elected county committee cannot, or is not perceived as being able to, unduly influence the decision of a non-civil service employee involved in the farm loan program. However, even with these changes, we will still be faced with the 90-day finality rule and the additional liabilities created in the farm loan program if non-civil service county committee employees are fully involved in the program. We are hopeful that there will be

some movement in Congress to convert to Federal status our non-civil service employees, with status and credit for their years of service in the county committee system. If this does not happen, we may, in consultation with the Secretary's office, need to reassess the policy of filling the Agriculture Credit Officer positions as only Federal. We do recognize the Senator's concern that we fully comply with the interchangeability requirement of the reorganization act and the need to be fair to all of our employees.

Question. I am particularly interested in the effect that the FSA's policy excluding non-Federal county committee employees from carrying out certain aspects of the farm credit program had on the Agency's recruitment of Federal Credit Officer positions, classified as trainee level. I understand that while the FSA was conducting the reduction in force (RIF) of 150 non-Federal county committee employees, the Agency was simultaneously hiring persons from outside the FSA for the new trainee level Credit Officer positions. Given the experience and knowledge of the Agency's mission and clientele possessed by the RIF'd employees—who in my State have a minimum of 8 years with FSA—why did FSA not initiate opportunities for qualified non-Federal county committee employees to fill these new positions?

Answer. As mentioned in the previous response, FSA was initially filling these new type positions in a way that allowed all employees (non-civil service and Federal) to apply within their respective personnel systems and allowed us to stay within our separate county committee non-civil service and Federal ceilings. For the reasons cited, this policy was changed; however, FSA did announce the ACO positions with an area of consideration that permitted non-civil service employees to apply. As noted above, 48 non-civil service employees were selected among the 125 ACO vacancies. Although our county committee non-civil service employees are paid with Federal funds, carry out what is considered Federal work and work under a personnel system which we have made very similar to the Federal system, they are supervised by non-Federal farmer-elected county committees and are not, therefore, considered Federal. We are, therefore, not able to non-competitively reassign RIF'd non-civil service employees to these ACO positions.

Question. For employees who have likely served USDA and farmers well over the years, would such an approach help mitigate the emotional and economical impact of downsizing on those RIF'd?

Answer. FSA encouraged non-Federal employees to apply for the Federal ACO positions. Of the 125 ACO positions filled as of March 27, 48 (38.4 percent) were filled with non-Federal employees. Action by Congress to convert all of our non-civil service county committee employees, with status, to Federal positions would alleviate the problems outlined in your question. This would also provide us with additional flexibility in carrying out required reductions and in shifting staff resources between programs. Absent this, an exemption in the 90-day finality rule for farm loan programs would alleviate one concern and would allow us to revisit the issue of using all employees interchangeably.

Question. Would such an approach comply with Congress' intent that all FSA employees be used interchangeably?

Answer. FSA has extensively cross-trained county employees and is using non-civil service and Federal employees in comparable positions interchangeably. Conversion of non-civil service employees to Federal status with credit for their years of service under the county committee system would allow us to use all employees interchangeably. Absent this type of action by Congress we will continue to face challenges in truly being able to treat employees under the two systems identically as far as career advancement and opportunities for various positions within FSA. We will, however, continue to do all we can, within the constraints of the various statutes, to be as fair as possible to all our employees (non-civil service and Federal), and to utilize these employees as effectively and efficiently as possible so we can continue to provide quality service to farmers and ranchers.

Question. I understand that there is yet another component complicating the downsizing—that is, that the non-Federal county committee employees who have been RIF'd might not be on equal competitive footing with their FSA Federal employee counterparts for vacancies or new job openings, due to the Federal Career Transition Assistance Program. I would like to hear your views on this matter and, if this situation is inequitable, the Agency's options on implementing a downsizing plan that is equitable and fair for all affected FSA employees. This concludes my questions, Mr. Chairman, and I look forward to working with you, the Ranking Member, and other Subcommittee members in conjunction with the Undersecretary, on these important issues confronting the Farm Service Agency.

Answer. Non-Federal county committee employees who are RIF'd do not have reemployment priority rights to any Federal civil service vacancies, as Federal employees who have been separated do under the Career Transition Assistance Pro-

gram (CTAP). FSA believes that this is an inequity and would have no objection to extension of CTAP coverage to FSA non-civil service employees so that they have priority for USDA vacancies, consistent with the CTAP coverage that Federal FSA USDA employees receive.

QUESTION SUBMITTED BY SENATOR LEAHY

Question. Mr. Under Secretary, one thing that became very clear in the wake of the January ice storm is that there are some significant gaps in FEMA and Department of Agriculture programs. As I visited farms hit by the ice storm, I was struck by the fact that most of these farmers did not expect to get Federal assistance because of the type of damage the storm inflicted and the nature of their crops. The greatest agricultural damage in Vermont was suffered by maple sugarers and dairy farmers, neither of which fits neatly into existing assistance programs. The result of these gaps was a great deal of confusion about who to turn to for help and what kind of help could be provided. FEMA came out with a report not long ago which helps to lay out some of the holes in our Federal disaster safety net. In particular, the report urges the Small Business Administration and the Department of Agriculture to work together to identify their legislative authorities and clarify how each can better serve farmers in future disasters. Is the Department working with FEMA and the Small Business Administration to identify and fill these gaps in disaster assistance? I hope that one result of this FEMA report will be a document that clearly lays out for farmers of all types of crops the kind of assistance they are eligible for in the event of a natural disaster.

Answer. Representatives of FSA, the Small Business Administration (SBA), and the Office of Management and Budget (OMB) met on March 20 to discuss gaps in the Federal disaster safety net. These gaps surfaced in a report prepared by the Federal Emergency Management Agency (FEMA) following the New England ice storms.

Both FSA and the SBA are taking a hard look at their respective statutory and regulatory authorities to determine exactly where the gaps exist. A list of unmet needs will be established. Once specific unmet needs are identified, FSA, SBA, OMB, and FEMA will meet again and work together to determine what can reasonably be done to meet these needs.

FOREIGN AGRICULTURAL SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

EXPORT SUBSIDY PROGRAMS

Question. Please provide the total amount of bonus awards to U.S. exporters under the Export Enhancement Program and the Dairy Export Incentive Program in fiscal year 1997 and estimated for fiscal year 1998.

Answer. The Export Enhancement Program (EEP) was not operational during fiscal year 1997. For fiscal year 1998, the CCC budget baseline has an estimate of $150 million for EEP, but the program is currently not being operated. For fiscal year 1997, Dairy Export Incentive Program (DEIP) bonus awards totaled $121.5 million. It is difficult to estimate fiscal year end 1998 awards as bonus levels fluctuate significantly with changes in market conditions. However, the fiscal year 1998 estimate for DEIP bonuses in the CCC budget baseline is $98.7 million.

Question. You indicate that the fiscal year 1999 budget includes a $82.3 million program level for the DEIP. What is the fiscal year 1999 maximum GATT-allowable limit for this program?

Answer. The fiscal year 1999 maximum subsidies under the Uruguay Round Agreement are as follows:

Non-fat dry milk	$97,926,000
Other dairy products (whole milk powder)	5,762,000
Cheese	4,317,000
Butterfat	36,215,000
Total	144,220,000

COCHRAN FELLOWSHIP PROGRAM

Question. The fiscal year 1999 budget maintains the $3.0 million fiscal year 1998 level of funding for the Cochran Fellowship Program. Is additional funding still

being provided by USAID and through the emerging markets program to supplement the direct appropriations for this program? How much is being provided for fiscal year 1998? What additional funding is expected for fiscal year 1999?

Answer. In fiscal year 1998, the Cochran Fellowship Program requested $2.3 million from USAID for the program in the New Independent States (NIS), and $1.12 million from the Emerging Markets Program (EMP) for implementation of the program in Vietnam, the NIS, and in Eastern Europe. Agreements with both U.S. AID and EMP are still pending, but we believe funding will be forthcoming by at least May, 1998. We are expecting $1.8 million from USAID and $1.12 million from EMP

In fiscal year 1999, we are requesting $2.5 million from USAID for the NIS, and about $1 million from the EMP for continuation of our programs in South Africa, Brazil, and Eastern Europe. The NIS Coordinator at the State Department has indicated his support for the Cochran Program in 1999. We also have preliminary support from EMP for our program in South Africa. We do not at this point have specific agreements or amounts in place.

Question. Please provide the fiscal year 1997 and 1998 program participant levels by country and region.

Answer. In fiscal year 1997, a total of 707 participants from 45 countries received training under the Cochran Fellowship Program.

The following provides the fiscal year 1997 participant levels by region and by country:

Asia.—154 participants from seven countries: Korea (20 participants), Malaysia (21), China (35), Thailand (17), Indonesia (18), Philippines (26), and Vietnam (17).

Eastern Europe.—182 participants from 13 countries: Turkey (19), Poland (56), Hungary (9), Czech Republic (10), Slovakia (11), Albania (6), Bulgaria (11), Slovenia (12), Croatia (10), Latvia (8), Estonia (9), Lithuania (7), and Romania (14).

Latin America.—87 participants from seven countries: Mexico (37), Venezuela (13), Trinidad & Tobago (9), Barbados & Other West Indies (3), Panama (6), Colombia (14), and Chile (5).

Africa.—61 participants from seven countries: Cote d' Ivoire (9), Tunisia (10), South Africa (30), Namibia (2), Kenya (5), Uganda (2), and Senegal (3).

New Independent States.—223 participants from 11 countries: Russia (53), Ukraine (45), Kazakstan (23), Kyrgyzstan (8), Uzbekistan (27), Turkmenistan (8), Tajikistan (5), Armenia (16), Moldova (21), Georgia (10), and Azerbaijan (7).

In fiscal year 1998, the Cochran Fellowship Program will continue work in the above mentioned countries. In addition, pilot programs will be started in Brazil, Bosnia, Costa Rica, Guatemala, and Tanzania, and the program will be expanded in size (increase in the number of participants) in Kenya, Uganda, and Senegal.

We expected to provide training to about 760 participants in fiscal year 1998. Delay in receipt of U.S. AID and EMP funding until May, 1998, however, will most likely reduce the number of participants from countries in the NIS and Eastern Europe during fiscal year 1998.

Question. Please provide examples of success of the 1997 Cochran Fellowship Program.

Answer. The benefits of 1997 the Cochran Fellowship Program to U.S. agriculture can be categorized under the following topics:

I. *Sales of U.S. Agricultural Commodities.*—An immediate benefit of the Cochran Program is the sale of U.S. agricultural commodities or products that come about from information gained and/or direct contacts provided by participant training. Each year, we receive information from past participants, from U.S. companies and associations, and from various agricultural offices about sales of products or commodities that are directly and indirectly related to Cochran Program training activities. The following provide examples of some of our most recent sales information:

—FAS/Fish & Forestry Products Division reports that a Cochran trip to U.S. lumber mills for Polish furniture manufacturers was very effective in promoting U.S. exports of hardwood lumber. The trip: (i) created personal relationships that resulted in each participant making orders for U.S. hardwood lumber, (ii) cleared up misunderstandings about contract specifications, and (iii) may result in future exports of U.S. hardwood totaling $25 million.

—Another report from Poland states that a 1997 participant purchased over 300 metric tons (about $500,000) of U.S. prunes and several tons of U.S. almonds and sunflower seeds. Another participant started imports of U.S. shelled peanuts, his first order in June, 1997, amounting to $25,000.

—A 1995 Polish participant reports that he gained ideas on how to use U.S. popcorn. Today he imports of over 100 containers/year of U.S. popcorn (30 containers by June 1997) for use in caramel corn and other popcorn snacks.

—The Agricultural Office in Sweden reported that Latvian and Estonian importers contracted for $300,000 per month of U.S. consumer and confectionery products after their program at the Food Expo in Chicago.

—A 1996 Slovenian feed mill team returned from their Cochran Program and ordered 20,000 metric tons of soybean meal—the first of many purchases.

—The Agricultural Office in Cote d' Ivoire reports that a 1997 participant bought 5,000 metric tons (@ $500,000) of U.S. corn on a commercial basis upon his return. He also purchased poultry equipment ($32,000) and day old chicks.

—A 1997 Colombian participant has finalized arrangements to be a distributor of a line of U.S. consumer ready products and expects to import 14 containers (@ $400,000) by the end of the calendar year.

—Almost immediately after a 1997 joint Cochran/CoBank/National Cattlemen & Beef Association (NCBA) program for Mexican bankers on the GSM–103 Livestock Program, there were five livestock sales registered with USDA (about $2.2 million), and two other sales were reportedly in the works ($3 and $4 million respectively).

—The Agricultural Office in Vladivostok, Russia reports that three Russian participants signed sales contracts for U.S. fruit and vegetables at the Produce Marketing Association (PMA) exhibition in October 1997.

—The Agricultural Office in South Africa reports that after training, a South African company interested in U.S. soybeans for food began working to purchase a large volume of U.S. soybeans.

—The New Jersey Department of Agriculture reports that New Jersey seafood exports to China have doubled since a Cochran Seafood Buyers program in September 1995. Exports now exceed $1 million per year.

—The Agricultural Office in Beijing states: "As a result of the fiscal year 1996 Supermarket Team, an upscale grocery home delivery service is now purchasing two containers a month of mixed grocery products."

—The Agricultural Office in Malaysia states that "the Cochran NASDA/FMI program has proven to be very effective in generating sales of U.S. high value products as the participants are importers and supermarket managers. Although specific figures are lacking, the FAS office has received feedback from FMI exhibitors/suppliers who indicated that they had received trade leads from the participants and are very positive in establishing business ties."

—A Vietnamese participant stated recently that his company has been importing 2–3 containers per month of U.S. pistachios since June, 1997. Another Vietnamese supermarket owner has imported 3 containers of consumer ready products to test the market for U.S. products. Sales thus far are encouraging.

—A 1997 Armenian supermarket owner reports that he has widened his U.S. product lines to include deli meats, fish, baby food and cookies after participation in his Cochran Consumer Foods Program.

II. *Constraints to Imports of U.S. Agricultural Commodities and Products.*—Many constraints to the export of U.S. agricultural products can be categorized as sanitary and phytosanitary (SPS) restrictions to trade or market access barriers. Cochran training through agencies such as the Food Safety Inspection Service (FSIS); Grain Inspection, Packers & Stockyards Administration (GIPSA); Animal and Plant Health Inspection Service (APHIS), State Departments of Agriculture, Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA), and with private agribusinesses, provide technical information to country counterpart agencies and help to improve the opportunities to export U.S. products into countries.

During 1997, 59 Cochran fellows from 18 countries participated in 24 programs directly related to providing information on the safety of the U.S. food and fiber system as well as providing direct contact with U.S. counterparts.

—The Agricultural Office in Stockholm reports that the meat inspection program for two Latvian veterinarians has been used to help establish new sanitary border inspection procedures. He states that "such education is essential support to the already growing import and transit markets for a widening array of meat and meat products."

—The Tunisian Agricultural Office reports that the Veterinary Team "is in the process of developing with APHIS a live cattle and bovine embryo protocol for U.S. imports in Tunisia, as well as a memorandum of agreement with Texas A&M University for promoting the exchange of faculty and qualified students in areas of mutual interest, such as infections and parasitic diseases of food animals and nutrition."

—The Agricultural Office in Indonesia states that the participant "has used his food safety training to develop a draft regulation on Food Security as well as input into drafts of the Indonesian Food Law Regulations."

—The Agricultural Office in Vienna writes: "The new Chief Veterinary Officer in Slovenia is a Cochran alumnus, which bodes well for relations between his office and FSIS as well as this office as we work toward agreement on sanitary inspection certificates to allow U.S. red meat into Slovenia."

—The Agricultural Office in Korea states: "The Cochran Program provides the resources to address food safety issues, perhaps the largest, singularly most restrictive barrier for U.S. products in the Korean market."

III. *Foster Business to Business Contacts.*—One of the major objectives of Cochran training is to put the international participant in direct contact with U.S. agribusiness. Even if immediate sales do not result, follow-up contact with participants in their home country may lead to future international opportunities for U.S. business.

Cochran fellows make contact with thousands of U.S. agribusinesses through product or commodity tours, technical discussions, or via participation at trade shows. Participation in commodity- or topic-specific trade shows or association meetings allow participants first-hand contact with a wide-range of U.S. agribusinesses. Several of the trade shows that were attended in 1997 by Cochran fellows include the Food Marketing Institute/National Association of State Department of Agriculture (FMI/NASDA) Food Expo, Produce Marketing Association (PMA) Show, Institute of Food Technologists, World Dairy Expo, World Beef Expo, San Francisco Seafood Show, International Poultry Expo, International Baking Industry Expo, American Seed Trade Conference, National Building Products Expo, Woodworking & Furniture Supply, High Point Furniture Show, National Homebuilders Association Expo, Wine Spectator Showcase, National Restaurant Show, National Barrow Show, World Pork Expo, American Feed Industry Association Show, All Candy Exposition, and the Fancy Food Show.

—The Agricultural Trade Office (ATO) in Guangzhou writes that the Chinese Supermarket Program ". . . is beneficial to American agricultural products because (the team) were so impressed with the high quality and diversity of U.S. products that some of them are considering carrying more products in their stores. As a result, the largest supermarket chain in China is scheduled to host an American Food Promotion in December 1997 at 11 major stores."

—The Director of the Appalachian Hardwood Manufacturers writes about a Polish team: "We hope that our members were able to make good contacts with these companies and begin a business relationship. These were new companies to our exporters who were interested in exporting to Poland. This service allows American companies to have access to new business and contacts that would be difficult to establish on their own."

—"Thanks for introducing the group to us. This is good old fashioned teamwork between the private business sector, entrepreneurial business persons in the developing countries, and the American government. It can be a win-win for all." (Chairman, McClane Group, Temple, TX)

—"During the last visit of the U.S. Meat Export Federation representative to Poland, we had a chance to meet with several former participants. Most who traveled to the 1995 International Meat Industry Convention and Expo in Chicago started to import pork and offal from U.S. suppliers. ELKOPOL company became a major player on the Polish market, importing large quantities of U.S. tripe and pork offal. All claimed that as a result of their Cochran trip, they build their first contacts with U.S. suppliers of meat and meat products." (Agricultural Office, Warsaw)

—A Russian textile company employee wrote: "The Memphis Cotton School offered excellent coverage of all facets of textile production contract buying. They also provided us with prospects for increased cotton purchases from the U.S. in the future."

IV. *FAS Agricultural Affairs Offices.*—The primary contact for Cochran activities in each country is FAS's Agricultural Affairs Office and Agricultural Trade Offices (ATO). FAS staff describe the benefits of Cochran training programs to their offices in terms of initiating and maintaining contacts with public- and private-sector decision makers, opening lines of communication that are useful for the resolution of trade issues, building good relations with international governments, influencing trade policy issues, and using former Cochran private sector businesses as contacts for U.S. exporters.

—"Among the South China Supermarket Executives, (the training) planted the seed of goodwill and friendship without which business relationships can hardly be established and sustained." (ATO/Guangzhou)

—The Cochran Fellowship Program is an important tool for promotion of a broad array of U.S. agricultural interests in the central European region, particularly

in the spheres of market development and combating technical barriers to trade. (Agricultural Affairs Office/Vienna)

—"Post has built upon the Cochran Program relationships and expects those ties to enable us to further obtain marketing and regulatory information and influence policy discussions." (Agricultural Affairs Office/Nairobi)

—The FAS Office of Agricultural Affairs (OAA) in Seoul, Korea, stated: "As noted by predecessors, the Cochran Fellowship Program is perhaps the single most important tool available to OAA for achieving desired dual objectives of development of domestic agricultural systems and enhancement of U.S. agricultural interests in Korea."

—The FAS Agricultural Attache in Vietnam states: "FAS/Hanoi is extremely pleased with the development of the Cochran Program in Vietnam. The program has served to expand our contacts and increase our knowledge and understanding of the agricultural sector. The implementation phase of the program will help develop the linkages necessary to expand the market for U.S. agricultural products here in Vietnam."

—The Agricultural Officer in South Africa writes, "From our perspective on what the program has done to promote both U.S. agricultural interests and USG policy objectives to support the new multi-racial democracy in South Africa, the Cochran Program has been one of the key ingredients of our program activities in this country and the region."

Question. Are available resources sufficient to extend fellowships to all countries seeking to participate in the Program? If not, what additional funding would be required to meet these requests?

Answer. Currently, the Cochran Program is funded by three sources of funds: appropriations, USAID, and EMP. Of the 707 participants in the Cochran Fellowship Program in 1997, 375 participants (53 percent of the total) were funded by appropriations, 161 participants (23 percent of the total) were funded by EMP, and 171 participants (24 percent of the total) were funded by USAID.

Funding from USAID and the emerging markets office is extremely important to maintaining the Cochran Program at its present level of involvement around the world. USAID funding is essential to implementation of Cochran Program activities in the New Independent States, and EMP funding provides for essentially all Cochran Program activities in South Africa and Namibia, Brazil, Vietnam, and for about 50 percent of our participants in 13 Eastern European countries.

The demand for the Cochran Fellowship Program is expanding every year. The 1998 increase in appropriations has enabled us to initiate pilot programs and expand the size of our programs in several African and Latin American countries. In most current countries, the demand for fellowships far exceeds the available funding, but we have been able to prioritize our programs to achieve most of our objectives.

FAS Agricultural Offices in Nigeria, Ghana, Pakistan, and several Middle Eastern countries requested the initiation of the Cochran Program in 1998. We were unable to meet these requests because of funding.

We have been working with several Cochran countries on follow-up to participant training, and on evaluation of the results of the training. Formal Cochran alumni groups have been formed in Poland and Ukraine and they are requesting assistance, mostly in terms of information and contacts with U.S. industry. We currently have a data base of over 4,000 Cochran fellows and would like to initiate a more sustained system of follow-up and evaluation, using Internet as well as distance learning technology. This type of follow-up would keep us in regular contact with former fellows and continue to track the results of the program.

MARKET ACCESS PROGRAM

Question. I note that the availability of funds for the fiscal year 1998 Market Access Program was not announced until February 17, 1998. Why is there a delay in the announcement of funds for this program—nearly 5 months into the fiscal year?

Answer. Last fall, the Foreign Agricultural Service (FAS) began a new initiative—known as the Unified Export Strategy (UES)—to more effectively coordinate strategic planning and resource allocation processes across the various agricultural export assistance programs administered by FAS. The UES was developed to streamline the application process for these programs and facilitate better use of complementary marketing tools and resources. Through the submission of a single proposal, organizations may apply for assistance under the Market Access Program, the Foreign Market Development Cooperator Program, the Emerging Markets Program, Section 108, and make recommendations for trade policy initiatives, Cochran Fellowships, or Export Credit Guarantee programs.

The UES was more difficult to implement than originally anticipated because FAS needed to accommodate a wide range of commodity strategies without unduly limiting flexibility and imposing new information requirements. As a result, the program announcement was delayed until mid-February. FAS established an April 20 deadline for receipt of applications in order to give applicants sufficient time to prepare their proposals under the new UES system.

Question. When do you expect fiscal year 1998 MAP allocations to be made?

Answer. FAS intends to announce 1998 MAP allocations on June 1, 1998.

Question. The Secretary indicated to this Committee that the Department has taken steps to make the Market Access Program more targeted and friendly to small businesses. What specific steps have been taken in this regard?

Answer. Within the MAP's brand program, FAS continues to give priority assistance to cooperatives and small-sized entities. The Commodity Credit Corporation reimburses up to one-half of the eligible costs MAP brand participants incur to promote their brands in targeted markets. In fiscal year 1997, 84 percent of all brand promotion funds were allocated to cooperatives and small companies. In addition, cooperatives and small entities continue to benefit from generic activities, including participation in subsidized trade shows and retail promotions organized and coordinated by nonprofit trade organizations and state regional trade groups—SRTG's.

On February 25, 1998, CCC issued a proposed rule which would make several changes to the MAP to make it more friendly to small businesses. These changes include incorporating into the MAP allocation process the level of export contributions made by U.S. industry participants; authorizing reimbursement of certain travel expenses for brand participants and certain necessary packaging and labeling design expenses; extending the activity payment deadline following the end of an activity plan year; and permitting reimbursement to participants based upon issuance of a credit memo as an alternative to a transfer of funds. CCC has received public comments and intends to publish a final rule prior to the start of the 1998 MAP.

Question. The explanatory notes on the fiscal year 1999 request indicate that $250,000 in Commodity Credit Corporation funds will be available in each of fiscal years 1998 and 1999 for Market Access Program evaluations. Can you please tell us specifically what program evaluations are being funded or are planned in each of these years?

Answer. During fiscal year 1998 the FAS Compliance Review Staff (CRS) anticipates performing financial and compliance reviews of the export promotion activities for 49 of the 64 participants under the Market Access Program (MAP). The fiscal year 1999 CRS MAP review schedule will not be known until September, 1998. However, we currently anticipate the number of reviews will be comparable to our fiscal year 1998 review coverage.

Question. Please provide the allocations made under the fiscal year 1997 Market Access Program.

Answer. Fiscal year 1997 Market Access Program allocations are provided for the record.

[The information follows:]

Market Access Program allocations, fiscal year 1997

Trade organization	*1997 MAP allocation*
Alaska Seafood Marketing Institute	$2,965,056
American Brandy Association—Export	36,294
American Forest & Paper Association	6,280,192
American Jojoba Association	176,324
American Seafood Institute/Rhode Island Seafood Council	592,923
American Sheep Industry Association	95,141
American Soybean Association	2,203,929
Asparagus USA	162,938
Blue Diamond Growers	1,412,689
California Agricultural Export Council	525,178
California Cling Peach Growers Advisory Board	727,009
California Kiwi Fruit Commission	66,095
California Pistachio Commission	815,018
California Prune Board	2,538,590
California Strawberry Commission	471,614
California Table Grape Commission	1,987,929
California Tree Fruit Agreement	704,566
California Walnut Commission	2,566,006
Cherry Marketing Institute	154,361

Trade organization	*1997 MAP allocation*
Chocolate Manufacturers Association	721,310
Cotton Council International	9,261,438
Eastern U.S. Agricultural and Food Export Council	799,696
Florida Department of Citrus	4,247,525
Hop Growers of America	103,000
Kentucky Distillers Association	499,401
Mid-America International Agri-Trade Council	190,833
Mohair Council of America	75,000
National Association of State Departments of Agriculture	564,788
National Dry Bean Council	306,760
National Grape Cooperative	664,261
National Honey Board	132,953
National Peanut Council	837,544
National Potato Research & Promotion Board	1,290,688
National Renderers Association	301,885
National Sunflower Association	821,958
New York Wine and Grape Foundation	165,673
North American Blueberry Council	92,952
North American Export Grain Association	94,225
Northwest Wine Promotion Coalition	119,287
Ocean Spray International, Inc	319,848
Oregon Seed Council	180,540
Oregon-Washington-California Pear Bureau	974,151
Pet Food Institute	596,075
Raisin Administrative Committee	2,444,619
Southern United States Trade Association	3,097,777
Sunkist Growers, Inc	2,064,157
Texas Produce Export Association	42,222
The Catfish Institute	304,905
The Popcorn Institute	500,000
United Fresh Fruit and Vegetable Association	177,093
USA Dry Pea & Lentil Council	550,918
USA Fresh Sweet Cherry Promotion	840,401
USA Poultry and Egg Export Council	2,290,770
USA Rice Federation	2,911,598
USA Tomato	481,772
U.S. Apple Association	438,707
U.S. Dairy Export Council	1,881,135
U.S. Feed Grains Council	2,865,352
U.S. Livestock Genetics Export, Inc	739,981
U.S. Meat Export Federation	8,498,273
U.S. Wheat Associates	2,023,893
Washington Apple Commission	2,470,410
Western United States Agricultural Trade Association	4,481,370
Wine Institute	3,051,004
Total	90,000,000

OFFICE OF THE INSPECTOR GENERAL (OIG) RECOMMENDATIONS

Question. The Office of the Inspector General has recommended that FAS (1) streamline functions of the Market Access Program and the Foreign Market Development Cooperator Program by requiring firms to submit a single strategic plan and by consolidating their program and financial data into a single accounting system, (2) issue regulations for the Foreign Market Development Cooperator Program, and (3) establish a process to validate the size of companies participating in the Market Access brand promotion program. Is the agency responding to these recommendations? What is being done?

Answer. FAS has developed and implemented a new resource allocation process whereby organizations have the opportunity to combine their FMD and MAP applications and strategic plans into a single submission called the Unified Export Strategy (UES). For the fiscal year 1998 MAP and fiscal year 1999 FMD programs, each applicant will submit a single, strategically coordinated proposal for various USDA market development programs including not only the MAP and FMD programs, but also requests for assistance under the Emerging Markets Program, Cochran Fellowships, Section 108, and several Export Credit Guarantee programs. The new UES application will make FAS programs more cost effective by facilitating better coordi-

nated export strategies, improving accountability for results, streamlining application procedures, and eliminating duplicative information requirements.

Beginning with the fiscal year 1999 FMD program, FAS will track, monitor, and control resources expended under the FMD program with the financial management system currently used for the MAP. Also in fiscal year 1999, FAS will make available an electronic venue for submitting reimbursement claims under the FMD via the Internet. The electronic submittal of reimbursement claims is currently available and operational under the MAP. This new feature will reduce the paperwork burden on program participants and FAS, decrease financial errors and discrepancies, and expedite the payment process to program recipients.

FAS is in the process of drafting a proposed regulation and intends to issue a final rule governing the FMD program by January 1999.

FAS currently requires the State Regional Trade Groups (SRTG's) and other non-profit trade associations participating in the MAP to review and validate the size of companies participating in brand promotions. The FAS Compliance Review Staff audits the effectiveness of this control during their reviews of MAP participants. Beginning with the 1998 MAP, FAS will require a size certification statement for all companies applying for brand funds through an SRTG or any other non-profit trade association.

INTERNATIONAL COOPERATIVE ADMINISTRATIVE SUPPORT SERVICES PROGRAM

The prepared testimony indicates that the fiscal year 1999 FAS budget request includes $4 million for overseas administrative services provided by the Department of State in support of the International Cooperative Administrative Support Services (ICASS) program, and that, in fiscal year 1998, $4.4 million has been transferred from the Department of State for this purpose.

Question. What is the International Cooperative Administrative Support Service program?

Answer. ICASS program was developed in response to National Performance Review (NPR) initiatives that introduce a more entrepreneurial spirit and a greater sense of teamwork among foreign affairs agencies in managing their overseas administrative responsibilities. Under ICASS, the Department of State continues to be the main administrative service provider overseas. However, FAS and other foreign affairs agencies have increased input into administrative policy decisions, service standards, and encouraging innovation at post. At post and in Washington, the ICASS Council and the ICASS Working Group have generally served to build a team approach to management while also increasing the transparency of decision-making. Under ICASS, administrative support costs are more equitably spread which reflects how the benefits of services are distributed; therefore, non-State agencies will incur an increased share of administrative costs.

Question. Why has the State Department transferred funds to the FAS to support the program this year?

Answer. In fiscal year 1998, the Department of State transferred $4,408,000 to FAS to fund the costs of administrative services previously funded by the Department of State, but are now the funding responsibility of FAS. FAS is only one of many Federal agencies with overseas offices and personnel which received transfers from the State Department budget.

Question. Where is the $4 million increase for this program reflected in the fiscal year 1999 FAS budget request?

Answer. The budget transfer associated with the implementation of ICASS took place in fiscal year 1998 and is incorporated into the fiscal year 1998 budget base of $140.0 million. Accordingly there is no increase requested for ICASS in the fiscal year 1999 budget request

BUDGET ACTIVITY STRUCTURE

Question. The explanatory notes indicate that based on an agency-wide survey measuring the allocation of staff time and including program costs, the distribution of Foreign Agricultural Service resources by activity is as follows:

	Percent
Market Access	24.0
Market Development, Promotion and Outreach	22.2
Market Intelligence	24.4
Financial Marketing Assistance	18.4
Long-Term Market and Infrastructure Development	11.0

The notes indicate that changes proposed for fiscal year 1999 not associated with a specific program will continue to be pro-rated among budget activities based on

this distribution. How have you reached your conclusion that this is an appropriate distribution of the agency's resources?

Answer. The activity structure of the fiscal year 1999 FAS budget reflects implementation of the Government Performance and Results Act and transition to a performance-based management system. In this regard, FAS has adopted a budget activity structure that incorporates five of the policy objectives included in the FAS strategic plan. In developing an allocation model, costs that are directly associated with a specific policy objective are assigned to that objective. Agency costs that are not specifically associated with a single objective are pro-rated into each objective based on a distribution formula. This formula, which is re-evaluated annually, reflects the percentage of time FAS staff devote to each policy objective based on an agency-wide survey. We believe this process best displays the costs associated with individual policy objectives.

OVERSEAS CURRENCY FLUCTUATIONS FUND

Question. In response to the conference report on the Fiscal Year 1998 Agriculture Appropriations Act, the fiscal year 1999 budget includes a request to earmark $2 million to establish a revolving fund account to enable the Foreign Agricultural Service to manage overseas currency fluctuations. Exchange rate losses would be offset from this account and exchange rate gains would be deposited into the account. Would you please tell us how exchange rate losses and gains will be verified; how often this will be done; and how and when funds will be withdrawn from the fund.

Answer. Gains and losses will be verified through ongoing quarterly reviews of individual FAS Counselor, Attache and Trade Office operating budgets. These reviews will consider the implications of current exchange rates with those rates used at the time the post operating budgets were developed. While the timing of fund withdrawals remains under review, it would most likely occur following the completion of the third quarter review. Any exchange rate gains would be transferred into the fund following completion of the fourth quarter post operating budget review in late September.

Question. What notifications do you plan to provide this Committee? (i.e., will you notify the Committee when exchange rate losses and gains are verified and when funds are deposited and withdrawn from the fund?)

Answer. We would anticipate notifying the Committee in writing of the results of our reviews of FAS post operating budgets at least on an annual basis. Additionally, we would be pleased to meet personally with Committee staff to discuss the results of our quarterly reviews with respect to exchange rate gains or losses.

PERFORMANCE MEASURE TRACKING SYSTEM

Question. The fiscal year 1999 budget requests an increase of $500,000 to enable FAS to develop a cross-agency performance tracking and evaluation system to determine success rates in implementing goals and objectives in the agency strategic plan, and for FAS to "re-engineer" its market intelligence performance measurement and evaluation tools. Is this request a one-time increase?

Answer. It is not certain at this point whether additional funds will be necessary beyond fiscal year 1999 to implement the fundamental changes necessary to transition FAS to a performance-based management system, as required by the Government Performance and Results Act. However, the increase is definitely temporary in nature, and will be used solely to effect full implementation of the Act as a management tool at FAS.

Question. Please explain more specifically what costs this additional $500,000 will cover and why additional funds are required for FAS to evaluate its performance.

Answer. FAS is seeking the help of private sector experts to develop an agency-wide performance tracking and evaluation system to verify and validate success rates in attaining goals and objectives outlined in its strategic plan. The additional funds also will permit FAS to evaluate and re-engineer its market intelligence process. This is necessary for three reasons. First, recent management audits by GAO and a recent study completed by USDA's Economic Research Service question the efficiency of USDA's market information delivery system. Second, by taking maximum advantage of enabling technologies, cost savings in human, information, and program resources from re-engineering the market intelligence process can be shifted to other FAS program activities where there is a greater return on investment, e.g, market access, market promotion, and outreach activities. Third, it will help focus our market intelligence gathering activities to better serve the needs of our external and internal customers.

Question. How will the additional funds requested allow FAS to determine success rates in implementing its strategic plan goals and objectives? Please be specific.

Answer. The Government Performance and Results Act requires Federal agencies to develop and implement results-oriented performance measurement and evaluation systems to assess the public value of various program activities relative to investment costs. The additional funds will be used to enlist the services of private sector experts in developing a meaningful and realistic agency-wide performance measurement and evaluation system. This system that will help FAS define its level of success in achieving its strategic goals and objectives, and provide benchmarks for making appropriate adjustments in strategic goals and objectives when needed to achieve the maximum public good for dollars invested.

FOREIGN MARKET DEVELOPMENT COOPERATOR PROGRAM

Question. The explanatory notes indicate that a competitive allocation process has been implemented in the Foreign Market Development (FMD) Cooperator Program to ensure available resources are directed to the most cost effective market development activities. Please describe in detail the competitive allocation process which has been implemented for the Foreign Market Development (FMD) Cooperator Program. What criteria are being used to determine the "most cost-effective" market development activities?

Answer. In determining which proposals to approve for funding, FAS considers a number of factors including the organization's administrative capability, the conditions or constraints impeding U.S. exports, and the likely success of the strategic plan. The strategic plan must identify a clear long-term agricultural trade strategy and a program effectiveness time line against which results can be measured at specific intervals using quantifiable product or country goals. Meritorious applications then compete for funds on the basis of the following criteria: participant contribution levels, past export performance, past demand expansion performance, and future demand expansion goals. This competitive allocation process promotes FAS's strategic plan goals and objectives, as required by the GPRA, by disbursing appropriate levels of funds to those applicants that provide the greatest levels of cost-share (contributions) and can document the best performance.

FAS has adopted a results-oriented management (ROM) system based on performance measurements to determine the "most cost-effective" market development activities. In keeping with the philosophy of the GPRA, FMD funding allocations will be based in part on the effectiveness of Cooperators in meeting their goals and objectives. The criteria, or goals and objectives, vary between organizations depending on products, markets, constraints, and market development programs; however, each organization's objectives will be clearly identified in its marketing plan. FAS and its industry partners have already participated in three seminars on ROM—seminars tailor-made to assist FAS and the industry in identifying appropriate performance measures, objectives, goals, and the processes for managing our programs based on measurable results. We also intend to contract with a proven, experienced entity to work with us to further develop and refine this effort over the next several program cycles.

Question. The explanatory notes indicate that a $5.5 million reduction is being proposed in Foreign Agricultural Service (FAS) activities funded through the Foreign Market Development Cooperator Program. This reduction is to partially offset the proposed shift in computer facility operating costs from the Commodity Credit Corporation to the FAS. The budget indicates that the proposed $5.5 million reduction in FAS support for the Cooperator Program will be partially offset by increasing the cost-share factor for program participants. What is the current cost-share factor and what increase is being proposed? How much will this save?

Answer. I am pleased to report that participants in the Foreign Market Development Cooperator Program currently contribute $1.90 for each $1.00 in FAS funding. This represents an increase in participant cost sharing of over 40 percent since fiscal year 1994 levels. To fully offset the reduction of $5.5 million in FAS funding, participant cost sharing would have to increase to $2.54 for every $1.00 of FAS funding.

Question. As you know, U.S. exporters who utilize the GSM–102 credit guarantee program pay a fee. I believe the fee goes to the General Fund of the Treasury. I also believe the total fees paid can range up to $20 million per year depending on the volume of 102 credit guarantees utilized. Would it be possible to redirect the fees to the FMD program?

Answer. Under Credit Reform Act of 1990, fees associated with the GSM–102 program are used in the subsidy calculation which determines the level of budget authority and outlays for the program. Further, these fees are deposited to the loan

financing account for the export credit guarantee program, not to the General Fund of the Treasury, to be used to help offset claims. To use these fees for some other purpose would require a modification to current credit reform law and would result in a higher subsidy calculation for the GSM–102 program.

Question. Please provide a table which shows the total amount of funding available for the FMD Cooperator Program in each of fiscal years 1994 through 1998 and the amount proposed for fiscal year 1999. For each of these fiscal years, please show FAS funding for the program; the amount of nonfederal funds provided by program participants; and the program carryover balance, both for federal and nonfederal funds, from one fiscal year to the next.

Answer. I will provide a table which shows the total amount of funding available for the FMD Cooperator Program in each of fiscal years 1994 through 1998 and the amount proposed for fiscal year 1999.

[The information follows:]

COOPERATOR PROGRAM FUNDING FISCAL YEARS, 1994–1998

[In thousands of dollars]

	1994	1995	1996	1997	1998	1999 [3]
FAS funding [1]	31,410	20,800	24,279	27,500	27,500	22,000
Non-Federal funds [2]	27,594	30,655	31,325	39,862	47,719	53,219
Federal carryover balance	26,200	16,000	11,200	9,200	6,700	.....

[1] Appropriated funding.
[2] Cooperator contributions.
[3] Estimate.
Note: No information available on carryover of non-Federal funds.

Question. Please provide a breakdown of how the funds for the FMD Cooperator Program were allocated in each of the fiscal years 1997 and 1998.

Answer. I will provide for the record a breakdown of how FAS funds for the FMD Cooperator Program were allocated in each of the fiscal years 1997 and 1998.

[The information follows:]

COOPERATOR FUND ALLOCATIONS

	1997	1998
American Forest & Paper Association	$2,555,000	$1,538,553
American Seafood Institute	.....	129,272
American Seed Trade Association	220,824	174,178
American Sheep Industry Association	138,353	102,905
American Soybean Association	5,249,108	5,292,821
Cotton Council International	949,000	2,297,114
EUSAFEC	134,893	.....
Leather Industries of America	173,722	161,220
MIATCO	159,840	.....
Millers National Federation	7,100	8,717
Mohair Council of America	20,000	5,523
NASDA	334,966	.....
National Cottonseed Products Association	124,936	153,551
National Dry Bean Council	71,865	45,841
National Hay Association	48,250	50,203
National Peanut Council	467,934	498,151
National Renderers Association	926,000	598,164
National Sunflower Association	173,000	258,994
Protein Grain Products International	11,000	17,539
SUSTA	160,511	.....
U.S. Beef Breed Council	73,000	25,097
U.S. Dairy Export Council	269,630	224,730
U.S. Feed Grains Council	5,551,057	4,341,047
U.S. Hide, Skin & Leather Association	48,500	52,294
U.S. Livestock Genetics Exports	385,000	657,891

COOPERATOR FUND ALLOCATIONS—Continued

	1997	1998
U.S. Meat Export Federation	1,515,000	966,206
U.S. Wheat Associates	4,767,500	6,208,474
USA Dry Pea & Lentil Council	197,379	67,095
USA Poultry & Egg Export Council	1,220,000	1,115,597
USA Rice Council	1,340,000	1,558,393
Western Growers Association	10,000	430
WUSATA	196,632	.....
Unallocated Funds [1]	.....	950,000
Cooperator total	27,500,000	27,500,000

[1] Due to the low carryover balances (which are expected to reach $0 in 1999) and the uncertainty of actual expenditure rates by the Cooperators, FAS has set aside $950,000 for future obligation in fiscal year 1998. FAS is monitoring monthly expenditures for each Cooperator and will obligate the remaining funds as appropriate to ensure adequate funding for marketing plan budgets.

SUPPLIER AND FACILITIES CREDIT GUARANTEE PROGRAMS

Question. Please explain the reason for the new approach proposed in the budget to present the estimates for the Commodity Credit Corporation (CCC) export credit guarantee programs to reflect level of sales expected to be registered rather than the authorized levels. What is the budgetary impact of this proposed change?

Answer. The new approach proposed in the budget for the CCC export credit guarantee programs will result in more realistic estimates of the costs of the programs since the estimates will be based on the actual level of sales expected to be registered rather than the higher authorized levels. In the past, when the higher authorized levels were included in the budget, these costs tended to be overstated significantly. Actual sales registrations usually turned out to be far below the level estimated in the budget. The accuracy of the CCC budget estimates will improve by using these more realistic estimates.

It is important to note that the level of guarantees to be issued by CCC during the course of the year will not be limited by the budget estimates, but instead will be determined by market conditions and program demand. This brings the budget treatment of the guarantee programs into line with that used for other CCC-funded programs.

Question. Using the new scoring, you indicate that the budget projects an aggregate program level of $5.0 billion for export credit guarantees in fiscal year 1998 and $4.6 billion for fiscal year 1999. What is the reason for the reduction in fiscal year 1999 from the fiscal year 1998 level?

Answer. The projected program levels for the CCC export credit guarantee programs of $5.0 billion in 1998 and $4.6 billion in 1999 are substantially higher than the $2.9 billion of sales registered under the guarantee programs in 1997. The higher projected program levels for 1998 and 1999 reflect an increase in guarantee programming in response to the financial turmoil in Southeast Asia and the Republic of Korea. The reduction in fiscal year 1999 can be primarily attributed to the reduced programming level projected for Southeast Asia and Korea in fiscal year 1999. In fiscal year 1998, over $2 billion of CCC export credit guarantees have already been made available for Southeast Asia and Korea. For fiscal year 1999, a reduced amount of $1.3 billion in export credit guarantee commitments has been estimated in the fiscal year 1999 President's Budget for Korea and the Southeast Asian region

Question. Please provide specific examples of how the supplier and facilities credit guarantee programs are being used to help finance U.S. exports.

Answer. These relatively new programs are just beginning to help finance U.S. exports. For fiscal year 1997, registrations under the Supplier Credit Guarantee Program (SCGP) totaled $3.74 million for sales to Guatemala, Indonesia, and Mexico. For fiscal year 1998, registrations as of March 20 total $2.23 million. USDA has been aggressively promoting these programs through both domestic and foreign outreach efforts, and we expect increased program use particularly for sales to Asian markets. As of March 20, USDA has authorized SCGP allocations for fiscal year 1998 totaling $323 million to 14 countries or regions compared to $160 million for 9 countries or regions for fiscal year 1997. Facility Guarantee Program (FGP) interim regulations became effective August 8, 1997. USDA has authorized FGP allocations for fiscal year 1998 totaling $155 million for 13 countries. There is considerable interest in using this program to help finance projects in Asia.

PROPOSED STAFF REDUCTIONS

Question. What impact will the proposed reduction of 15 staff years have on FAS market access activities and how will this proposed staffing reduction be applied?

Answer. Under this proposal, FAS will concentrate available resources on the highest priority trade policy issues, including preparation for the next round of multilateral trade negotiations under the auspices of the World Trade Organization, regional free trade agreement negotiations (Free Trade Area of the Americas and Asian Pacific Economic Cooperation forum), and resolution of sanitary and phytosanitary issues. FAS will also work to use improved computer and other technical capabilities to assure the continued effectiveness and integrity of these activities.

We anticipate achieving staff reductions though attrition. While the budget proposes a pro-rata distribution of staff reductions among budget activities, the actual impact would likely be determined by where attrition occurs and the degree to which shifts in staff resources may be required to meet priority agency objectives.

Question. What impact will the proposed decrease of 15 staff years have on FAS market intelligence activities and how will this staffing reduction be applied?

Answer. Under this proposal, FAS will concentrate available resources on overseas reporting that focuses on the most promising market opportunities for U.S. agriculture, as well as the activities of competitor exporting countries. FAS will also work to use improved computer and other technical capabilities to ensure the continued effectiveness and integrity of this function.

Question. The explanatory notes indicate that the proposed market intelligence staff year decreases will force FAS to focus on the most promising market opportunities for U.S. agriculture, as well as the activities of competitor exporting countries. What are the most promising market opportunities for U.S. agriculture? What competitor country exporting activities are of greatest concern?

Answer. The Asian financial crisis notwithstanding, the most promising market opportunities over the next ten years are in Asia and, to a lesser extent, Latin America. While there are promising market opportunities in many parts of the world, these two regions are largely responsible for much of the export growth we have experienced over the past decade and will likely experience over the next decade. At the heart of this growth has been strong economic growth, economic and trade liberalization, and rapid expansion of their middle classes. Japan, China/Hong Kong, Korea, Taiwan, and Southeast Asia lead the "best prospect list" in Asia. In Latin America, Mexico and Brazil are the leading prospects. However, the nations of Central America and the Caribbean offer excellent prospects with both expected to reach new record highs in fiscal year 1998.

Competitor country exporting activities of greatest concern include export subsidies provided by the European Union and Canada, as well as export monopolies operated by marketing boards in Canada, Australia and New Zealand. These countries are major competitors for grains, meat, fruit and value added products. In addition, it is important to track developments in competitor countries such as Argentina and Brazil which export substantial quantities of wheat, corn, soybeans, meat and citrus, and China, which is a major exporter of fruits and vegetables and other value added products as well as some grains. Finally, recent developments in currency markets bear close attention as the devalued currencies in several competitor countries may have a negative impact on U.S. agricultural export opportunities.

Question. What impact will the proposed decrease of 12 staff years have on FAS financial marketing assistance activities and how will this staffing reduction be implemented?

Answer. Increasing the liquidity of foreign importers to buy U.S. agricultural products is the primary goal of this activity. Under this proposal, FAS will improve its analytical process to focus appropriate financial assistance activities on market development needs identified as priorities in its resource allocation strategy. FAS will also concentrate available resources on the continued development of new approaches to expanding liquidity in potential markets using the export credit programs, and on finding ways to use these programs to better complement each other and other FAS programs in order to ensure maximum benefits to U.S. agriculture. FAS will work to use improved computer and other technical capabilities to assure the continued effectiveness and integrity of these financial assistance activities.

Question. The explanatory notes indicate that increasing the liquidity of foreign importers to buy U.S. agricultural products is the primary goal of the financial marketing assistance activities supported by the FAS. How have we been successful to date in this area and what new approaches have been identified to expand liquidity in potential markets?

Answer. Under GSM–102, GSM–103, and Supplier Credit Guarantee programs more than $5.0 billion of export credit guarantees have been made available to date in fiscal 1998. Recipients have used about 40 percent of these allocations during the first half of fiscal 1998, and the programs have played a critical role in softening the effect of the Asian crisis on the U.S. agricultural sector. Asian nations have used more than $800 million of the approximately $2.0 billion of GSM guarantees allocated to the region. These guarantees have maintained or restored agricultural trade relationships following the collapse in trade during late 1997. FAS continues to expand export credit liquidity through the guarantee programs to Mexico, Pakistan, and other emerging markets. New approaches to expand liquidity include making more financing instruments eligible for coverage under GSM–102 and conducting educational seminars to promote the Supplier Credit Guarantee program. FAS has implemented a new program to support the U.S. agricultural sector—the Facilities Guarantee Program. This program will provide credit guarantees to U.S. participants in projects to build or improve facilities in emerging markets. These guarantees could support projects such as refrigeration, grain handling, and storage facilities that would increase the capacity to purchase U.S. agricultural products.

Question. What market development needs are identified as priorities in the FAS resource allocation strategy?

Answer. One of the primary objectives identified in the FAS Strategic Plan for 1997–2002 is to, "Focus and expand foreign market development, promotion, and outreach activities to U.S. exporters and foreign buyers." In meeting this objective, FAS strategic priorities include: increasing the share of overseas activities carried out in markets identified as priorities through the MAP and FMD planning processes; focusing on emerging markets while protecting market share in mature markets; increasing domestic awareness of export opportunities, programs and market intelligence, with emphasis on small and new-to-export firms; and introducing new international buyers to U.S. products and exporters through U.S. and overseas training, marketing seminars, and missions.

Over the past year, FAS has developed new processes and procedures for use in allocating its market development resources. These efforts effectively support the strategic decision-making initiatives of the Government Performance and Results Act. For example, beginning February 1998, Market Access Program (MAP) and Foreign Market Development (FMD) program applicants are required to combine their applications in a Unified Export Strategy (UES). This UES process and format will for the first time ever result in the submission of a unified package including not only MAP and FMD applications but also requests for assistance under virtually all FAS administered marketing, financial assistance, and market access programs. For example, in the UES submission, MAP/FMD applicants are asked to also specify their requests for funding assistance under the Cochran, Emerging Markets, and Section 108 programs. The UES also accommodates applicant recommendations for financial and trade policy assistance for consideration by FAS in allocating guarantee availabilities and staff resources under the GSM–102/103 and Supplier's Credit programs and in prioritizing its efforts to open or expand access to overseas markets.

This UES process for our industry partners complements and mirrors the Country Promotion Planning process recently completed by FAS's overseas offices and the Product Promotion Planning process which is now underway in FAS Commodity Divisions. Together these three initiatives undertaken by industry, FAS country, and FAS commodity experts will provide FAS decision-makers with the necessary information base to make sound decisions regarding how limited staff and program resources should be allocated to achieve our market expansion and food security goals as outlined in the Agency's strategic plan.

Question. What impact will the proposed decrease of 7 staff years have on FAS long-term market and infrastructure development efforts and how will this staffing reduction be implemented?

Answer. Under this proposal, FAS will concentrate available resources on the highest priority activities in order to maximize the benefits of increased international agricultural cooperation and development.

Question. Please identify the highest priority activities to maximize the benefits of increased international agricultural cooperation and development.

Answer. The Cochran Fellowship program, our efforts in international collaborative research, especially in support of SPS initiatives, and our work on food security issues are the highest priority activities in international agricultural cooperation and development at the current time.

Question. Please provide for the record a table providing a separate breakdown of the funding and staffing reductions proposed for fiscal year 1999, by activity: (1) to offset increased resources proposed for the "overseas buying power maintenance

account", and (2) for "support of USDA's international crop estimates and production intelligence capabilities."

Answer. I will provide a table providing a separate breakdown of the funding and staffing reductions proposed for fiscal year 1999 in order to offset the costs of those two components of our budget request.

[The information follows:]

REDUCTIONS BY BUDGET ACTIVITY

[Dollars in thousands]

	Overseas account		Crop est. and production intelligence		Total	
	Amount	SY	Amount	SY	Amount	SY
Market access	$173	2	$1,115	13	$1,288	15
Market development, promotion and outreach	173	2	1,019	11	1,192	13
Market intelligence	173	2	1,136	13	1,309	15
Financial marketing assistance	173	2	814	10	987	12
Long-term market and infrastructure development	87	1	503	6	590	7
Total	779	9	4,587	53	5,366	62

PUBLIC LAW 480 PROGRAM

Question. The fiscal year 1999 budget proposes to maintain the fiscal year 1998 Public Law 480 Titles II and III program levels in fiscal year 1999, but to decrease the Title I program level by $124.7 million, from the fiscal year 1998 level of $226.9 million to $102.2 million. What is the reason for the significant reduction proposed for fiscal year 1999 in the Public Law 480 Title I program?

Answer. This reduction supports compliance with discretionary spending targets which have been established in conjunction with efforts to balance the Federal budget. Program resources will be targeted towards the most promising market development opportunities which have been identified by the Foreign Agricultural Service in its resource allocation processes.

Question. What impact will this reduction have on commodity shipments? Which commodities are likely to be impacted?

Answer. The proposed program level for fiscal year 1999 will provide estimated commodity shipments of 0.547 million metric tons grain equivalent (MMTGE) as compared to 1.249 MMTGE estimated for fiscal year 1998. Wheat and wheat flour, rice, and vegetable oil are the commodities most affected by the reduced Public Law 480 program level. The estimated shipment of wheat and wheat flour will be reduced from 1.099 MMTGE in fiscal year 1998 to 0.386 MMTGE in fiscal year 1999. The estimated shipment of rice will be reduced from 0.072 to 0.016 MMTGE and the estimated shipment of vegetable oil will be reduced from 0.021 to 0.005 MMTGE.

Question. What appropriations would be required for fiscal year 1999 (for the subsidy costs of Title I agreements, and for ocean freight differential grants) to maintain the fiscal year 1998 level for the Public Law 480 Title I program?

Answer. To maintain a $226.9 million program level for Public Law 480 Title I for fiscal year 1999, we estimate that a Title I appropriation of $196.9 million would be needed to cover the subsidy costs in the program account. In addition, $20.9 million would be required for estimated OFD costs.

Question. Please provide for the record the Public Law 480 funding allocations, by Title, for each of fiscal years 1996 and 1997, and for fiscal year 1998 to date.

Answer. I will provide for the record the Public Law 480 funding allocations, by Title, for each of fiscal years 1996 and 1997, and for fiscal year 1998 to date.

[The information follows:]

Public Law 480, Title I Fiscal Year 1996 Programming

[In millions of dollars]

Country	*Total allocation*
Angola	8.7

Country	*Total allocation*
Armenia	14.4
Belarus	9.9
Bolivia	8.6
Congo	8.0
Cote D'Ivoire	10.0
El Salvador	12.2
Guyana	9.0
Jamaica	15.0
Jordan	21.0
Lithuania	10.0
Moldova	13.7
Pakistan	10.0
Philippines	15.0
Sri Lanka	9.6
Suriname	1.9
Turkmenistan	10.0
Ukraine	20.0
Title I Subtotals	207.0
Title I funded Food for Progress:	
Albania	5.0
Georgia	28.8
Kyrgyzstan	15.0
Tajikistan	11.0
Food for Progress subtotal	59.8
Grand totals	266.8

Public Law 480, Title I Fiscal Year 1997 Programming

[In millions of dollars]

Country	*Total allocation*
Armenia	15.0
Bolivia	10.0
Cote D'Ivoire	10.0
El Salvador	9.2
Georgia	20.0
Guyana	7.8
Jamaica	5.3
Jordan	20.9
Lithuania	7.6
Pakistan	35.0
Sri Lanka	10.0
Ukraine	10.0
Title I subtotals	160.8
Food for Progress title I funded:	
Kyrgyzstan	13.6
Mongolia	2.8
Tajikistan	8.1
Food for Progress subtotal	24.5
Grand totals	185.4

Public Law 480, Title I Fiscal Year 1998 Programming[1]

[In millions of dollars]

Country	*Total allocation*
Angola	10.0
Armenia	15.0
Bolivia	10.0

Country	*Total allocation*
Cote d'Ivoire	10.0
El Salvador	10.0
Eritrea	10.0
Georgia	15.0
Guatemala	10.0
Guyana	9.0
Indonesia	25.0
Jamaica	5.0
Jordan	18.0
Nicaragua	10.0
Pakistan	10.0
Peru	10.0
Philippines	10.0
Sri Lanka	10.0
Zimbabwe	10.0
Private trade	10.0
Title I subtotals	217.0
Food for Progress Title I funded:	
Albania	10.0
Bangladesh	10.0
Bosnia-Herzegovina	10.0
Kyrgyzstan	15.0
Mongolia	5.0
Mozambique	10.0
Tajikistan	10.0
Russia (private entities)	9.0
Food for Progress subtotal	79.0
Grand totals	296.0

[1] Through March 24, 1998.

[CLERK'S NOTE.—Due to the volume of title II funding allocations they do not appear in the hearing record, but they are available for review in the subcommittee's files.]

TITLE III PROGRAM BUDGET

[In millions of dollars]

Program	Fiscal year—		
	Actual 1996	Actual 1997	Estimated 1998
Bangladesh	7.5	.....	.....
Hati	10.0	10.0	10.0
Honduras	5.0	.....	.....
Nicaragua	4.0	1.4	.....
Eritea	.....	15.0	5.0
Ethiopia	25.0	10.0	9.9
Mozambique	.....	4.0	5.0
Program total	51.5	40.4	29.9
Farmer-to-farmer	0.1	0.1	0.1
Claims settlement	.....	0.1	.....
Transfer to title II	10.1	.....	.....
Transfer from title II	.....	−9.0	.....
Carry-in	−11.7	.....	.....
Prior year unoblig	.....	−2.1	.....

TITLE III PROGRAM BUDGET—Continued

[In millions of dollars]

Program	Fiscal year—		
	Actual 1996	Actual 1997	Estimated 1998
Appropriation	50.0	29.5	30.0

Question. Last year the Department indicated that Public Law 480 Title I funds carried over from one fiscal year to the next were increasing: $4.4 million was carried into fiscal year 1993, $4.7 million into fiscal year 1994, $16.9 million into fiscal year 1995, $24.7 million into fiscal year 1996; and $32.9 million into fiscal year 1997. What is the carryover from fiscal year 1997 into fiscal year 1998? What is the estimated carryover from fiscal year 1998 to fiscal year 1999?

Answer. The carryover from fiscal year 1997 to fiscal year 1998 is $62.9 million. As of March 24, 1998, the estimated carryover from fiscal year 1998 to fiscal year 1999 is expected to be $17.0 million.

Question. Why have the carryover balances for the Title I program been growing from year to year?

Answer. The carryover balances for the Title I program have increased in recent years because country allocations were withdrawn for unresolved issues related to the recipient country's prior year Title I agreements, civil wars within the recipient country, or for internal issues within the country which led them to change their purchase decisions. In addition, in some instances countries did not purchase the full amount of their allocation.

Question. What is being done to increase the focus of the Public Law 480, Title I program on the private sector?

Answer. Senior level teams have traveled overseas and domestically to explain the program to potentially interested private sector groups. Overseas they met in Pakistan and Bangladesh with cotton importers. Domestically, we have met with USDA cooperators including U.S. Wheat Associates and the American Soybean Association to review possible projects in southern Africa and Russia. We are presently pursuing a regulatory change that would allow USDA to enter into Public Law 480 agreements directly with foreign, private sector entities without a U.S. partner. This change is expected to increase program flexibility and private sector use.

OVERSEAS OFFICES

Question. Please provide for the record a list of FAS overseas counselor/attache and trade offices and the amount of funding and full-time equivalent staffing levels provided for each in fiscal year 1997 and 1998 and proposed for fiscal year 1999.

Answer. A list of FAS overseas counselor/attache and trade offices and the amount of funding and staffing is provided.

[The information follows:]

FOREIGN AGRICULTURAL SERVICE OVERSEAS COUNSELOR/ATTACHE AND TRADE OFFICES FUNDING AND STAFF [1] LEVELS—FISCAL YEARS 1997–99

[Dollars in thousands]

Post	Fiscal year 1997—		Fiscal year 1998—		Fiscal year 1999—	
	Funding	On-board employees	Funding	On-board employees	Funding	On-board employees
Foreign Agricultural Affairs						
Austria	657	4	730	4	752	4
Czech Rep	48	1	40	1	41	1
France	960	7	1,043	7	1,074	7
Greece	280	2	244	2	251	2
Israel	126	1	143	1	147	1
Italy, Emb	725	6	723	6	745	6
Italy, Fodag	215	1	215	1	221	1
Portugal	145	1	165	1	170	1

FOREIGN AGRICULTURAL SERVICE OVERSEAS COUNSELOR/ATTACHE AND TRADE OFFICES FUNDING AND STAFF [1] LEVELS—FISCAL YEARS 1997–99—Continued

[Dollars in thousands]

Post	Fiscal year 1997—		Fiscal year 1998—		Fiscal year 1999—	
	Funding	On-board employees	Funding	On-board employees	Funding	On-board employees
Spain	900	6	901	6	928	6
Switz, Bern	63	.....	87	.....	90	.....
Switz, Gen	779	4	908	4	935	4
Belgium, E	201	1	213	1	219	1
Belg.Useu	1,123	6	1,271	6	1,309	6
Denmark	239	2	211	2	217	2
United Kingdom	726	5	769	5	792	5
Germany	788	6	780	6	803	6
Ireland	149	1	162	1	167	1
Netherlands	667	4	712	4	733	4
Sweden	378	5	364	5	375	5
Total	9,169	63	9,681	63	9,971	63
Argentina	778	5	761	5	784	5
Brazil	525	4	726	4	748	4
Canada	446	5	470	5	484	5
Chile	353	3	348	3	358	3
Colombia	370	4	408	4	420	4
Costa Rica	296	3	327	3	337	3
Dom. Rep	329	2	337	2	347	2
Ecuador	156	2	156	2	161	2
Guatemala	482	2	497	2	512	2
Mexico	809	8	828	8	853	8
Peru	298	3	337	3	347	3
Venezuela	531	5	512	5	527	5
Total	5,373	46	5,707	46	5,878	46
Algeria	35	.....	37	.....	38	.....
Bulgaria	238	3	232	3	239	3
Bangladesh	37	1	42	1	43	1
Cote D'Ivoire	280	3	354	3	365	3
Egypt	406	3	413	3	425	3
India	417	8	395	8	407	8
Kenya	234	1	276	1	284	1
Morocco	227	2	254	2	262	2
Nigeria	392	2	452	2	466	2
Pakistan	288	3	275	3	283	3
Romania	30	1	30	1	31	1
Syria	40	1	51	1	53	1
Serbia-Mont	34	1	37	1	38	1
So. Africa	534	5	704	5	725	5
Tunisia	202	2	73	2	75	2
Turkey	505	4	558	4	575	4
Total	3,899	40	4,183	40	4,308	40
Australia	323	4	348	4	358	4
PRC	953	4	933	4	961	4
Indonesia	488	4	659	4	679	4
Japan	1,412	10	1,430	10	1,473	10

FOREIGN AGRICULTURAL SERVICE OVERSEAS COUNSELOR/ATTACHE AND TRADE OFFICES FUNDING AND STAFF [1] LEVELS—FISCAL YEARS 1997–99—Continued

[Dollars in thousands]

Post	Fiscal year 1997—		Fiscal year 1998—		Fiscal year 1999—	
	Funding	On-board employees	Funding	On-board employees	Funding	On-board employees
Korea	653	5	520	5	536	5
Malaysia	247	3	296	3	305	3
New Zealand	189	2	218	2	225	2
Philippines	533	5	542	5	558	5
Poland	505	4	501	4	516	4
Russia	1,126	10	1,194	11	1,230	11
Thailand	637	5	665	5	685	5
Ukraine	61	.....	174	1	179	1
Vietnam	345	1	367	1	378	1
Total	7,472	57	7,847	59	8,082	59
Total, FAA	25,913	206	27,418	208	28,241	208
Agricultural Trade Offices						
Sao Paulo, Brazil	354	4	375	4	386	4
Shanghai, China	595	1	660	1	680	1
Guangzhou, China	461	1	407	1	419	1
Hamburg, Germany	424	3	463	3	477	3
Hong Kong	927	4	961	4	990	4
Jakarta, Indonesia	282	1	321	1	331	1
Milan, Italy	362	2	341	2	351	2
Tokyo, Japan	2,174	8	1,983	8	2,042	8
Osaka, Japan	449	3	476	3	490	3
Seoul, Korea	1,073	4	1,069	4	1,101	4
Mexico	1,121	5	1,165	5	1,200	5
Riyadh, Saudi Arabi	407	3	383	3	394	3
Singapore	979	3	946	3	974	3
Dubai, U.A.E	378	4	369	4	380	4
Caribbean Basin, U.S	171	1	212	1	218	1
Total, ATO	10,157	47	10,131	47	10,435	47
Grand total	36,070	253	37,549	255	38,675	255

[1] Overseas managed on a head count basis, not FTE basis. Total includes FSN's as well as U.S. Foreign Service personnel.

INTERNATIONAL COOPERATIVE ADMINISTRATIVE SUPPORT SERVICES [1] FISCAL YEARS 1990–99

	Fiscal year—		
	1997	1998 [2]	1999
Foreign Agricultural Affairs	4,871	7,119	7,119
Agricultural Trade Offices	1,624	2,373	2,373
Total	6,495	9,492	9,492

[1] Reimbursement to State Dept., formerly Foreign Affairs Administrative Support Services.
[2] Includes a $4.4 million base transfer.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. FAS' program activities are essentially restated as unique strategic objectives with key operating strategies and performance goals. Each FAS objective, in turn, is directly associated with FAS' strategic goals and mission. FAS' two strategic goals are directly linked to the department's objectives and goals.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. Prior to the 1998 budget, FAS had developed its Long-Term Agricultural Trade Strategy (LATS) report which identified five key drivers of long-term success. In the 1998 budget submission, FAS revised its program activities to correspond to these key drivers. As FAS began developing and refining its Strategic and Annual Performance plans, and following consultations with Senate Agriculture Committee staffers on its initial draft strategic plan, FAS identified that it had two goals: (1) expand export opportunities for U.S. agricultural, fish, and forest products; and (2) promote world food security. FAS recognized that with a few modifications, its five program activities were actually objectives that support the achievement of FAS' two goals. The first four program activities (market access, market development etc., market intelligence, and financial assistance) all support FAS' goal to expand export opportunities. The last program activity (long term market and infrastructure development) supports FAS' goal to promote world food security.

Like other agencies across the Federal Government, FAS learned that in order to implement GPRA, planning needs to drive the budget. The five program activities in the fiscal year 1999 budget submission reflect slight modifications in the five program activities in the fiscal year 1998 budget. These modifications are a result of FAS' realization that it needed to re-align its budget activities to its goals and objectives. As FAS learns more about institutionalizing performance-based management processes, it anticipates that there will be further changes required to continually adjust the budget to accommodate changes in legislation, international trade, and technology.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, performance measures contained in the agency's Performance Plan are linked to each FAS budget activity and are displayed in FAS' Annual Performance Plan.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. Little difference exists between FAS' performance planning structure and account and activity structure. Objectives identified under Goal 1 of the Annual Performance Plan are identical to the first four budget program activities. The objectives for Goal 2 of the Annual Performance Plan are grouped in the account and activity structure of the budget under "Long-term Market and Infrastructure Development" for budget presentation purposes.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. FAS currently has no plans to change its account structure for fiscal year 2000. However, as FAS institutionalizes it performance-based management processes and as Federal Government agencies transition to a cost accounting system, FAS may propose changes in its account structure to facilitate aligning performance goals with all operating costs and appropriated/non-appropriated program activities.

Question. How were performance measures chosen?

Answer. FAS believes that leadership starts at the top but performance comes from the front line. Following this principle, FAS' senior management created a draft strategic plan with objectives and the Strategic Operations Staff of the Office of the Administrator facilitated a series of one-day workshops for nearly every division in the agency. The purpose of these workshops was three-fold: (1) to begin the education process of all employees and supervisors on GPRA and performance management; (2) to validate and improve the draft strategic plan prepared by senior management; and (3) to assist the divisions in preparing division-level performance plans which identified performance measures that are aligned to the agency's strategic goals and objectives. Following these workshops, FAS senior management participated in the validation of the revised draft strategic plan and the performance measures identified by the divisions prior to their submission to OMB and Congress.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The process of making GPRA a reality in FAS is hardly one year old and still ongoing. However, FAS believes that its approach of ensuring that all employees recognize how his/her activities relate to and contribute to the overall mission and performance goals of the agency will pay off in superior planning and performance in future years. By the end of fiscal year 2000, a track record of learning and evaluation regarding both realistic and verifiable performance measures and the associated costs will be available.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. No, FAS will be conducting GPRA workshops this April through June with every division (approximately 23) in the organization that has direct responsibility for developing and tracking the performance data necessary to meet the March 2000 performance reporting requirement. The primary purpose of these workshops is to ensure that FAS has procedures in place to verify and validate that it is capturing the right performance data.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. While all measures are important to track to understand the breadth of FAS' activities, FAS suggests that the subcommittee focus on: the number of SPS issues resolved each year; the number of research activities facilitated annually by FAS that encourage the use of sound science (i.e., Codex Alimentarius) in resolving SPS issues; the number of foreign participants trained annually in FAS-sponsored seminars on U.S. food safety; the number of potential exporters identified and contacted about FAS exporter services; the number of U.S. based companies exporting agricultural products; and the percentage use of GSM credit guarantees to countries lacking liquidity to purchase U.S. agricultural products on the commercial market.

The rationale for putting priority on SPS issues is that they are vital FAS output goals for the U.S. agricultural industry. SPS issues raised by foreign countries under the guise of sound science are artificial trade barriers which significantly limit U.S. export opportunities. Additionally, FAS provides or administers project funds for research activities specifically targeted to resolve SPS issues and trains foreign participants in U.S. food safety standards. These activities, while supporting different objectives under separate goals, are linked.

Two of the performance indicators focus on tracking progress in achieving FAS' outreach objectives; namely, increasing domestic awareness of export opportunities, USDA export programs, and overseas market intelligence. The rationale is to reach out directly to potential exporters, especially small and new-to-export agribusiness firms, so that strategic partnerships can be built with interested organizations. FAS assists in educating their members about the rewards of exporting and how USDA can assist them in developing new markets. By expanding the number of U.S. firms exporting (primarily high-value processed food products), FAS believes that the U.S. agricultural industry will benefit by increasing its global market share of high-value products.

Lastly, the GSM Export Credit Guarantee Programs will continue to support cash-strapped countries with short-term credit to finance purchases of American products. As FAS becomes more adept at deploying this financing mechanism in countries lacking liquidity to purchase U.S. agricultural products, U.S. exporters will benefit by increasing market share and/or maintaining their presence in the market—a necessary and important element in international trade.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. Using independent analysis from the Economic Research Service, FAS was able to calculate the impact (i.e., outcome) of the exports supported by its program on rural communities and the national economy as a whole. Calculating impact of market development relies on procedures approved by the Trade Promotion Coordinating Committee (TPCC) and used in preparation of the annual National Export Strategy submitted to the Congress. This includes calculating the impact of FAS market development programs on exports. Estimating national and rural economic impacts involve combining the export impacts with trade multipliers associated with direct and indirect effects of agricultural exports (multiplier effect per billion dollars of agricultural exports are as follows: national economy = $2.4 billion; rural economy = $800 million; national employment in jobs created = 17,300). These are published by USDA's Economic Research Service using results from a 417 sector input-output model of the United States economy.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. They are beginning to develop a greater understanding of the difference. However, in order to fully institutionalize strategic planning at every level of the organization, strategic planning workshops were held over the spring and summer of 1997 for every division in the agency. FAS will be conducting workshops again in 1998 and 1999. These workshops will continue the process of linking what every employee is doing to support the organization-wide goals, introducing the concepts of verification, validation, and process improvement in the context of GPRA. Through this ongoing process of education and by instituting a quarterly reporting requirement FAS is making GPRA real.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. For internal customers, FAS will perform two separate types of surveys. The first is the Peer Evaluations of FAS' headquarters and overseas offices' performance and customer satisfaction. The second survey will be a Work-life survey in which the employees and managers will be asked to identify trends in the work place which inhibit or promote productivity and employee development.

For external customers, FAS has numerous listening sessions with various customer groups to identify areas of improvement. For instance, FAS works in partnership with the Private Voluntary Organization (PVO) community in implementing the Food for Progress program. FAS has a yearly listening session where ideas are shared and new initiatives announced. These listening sessions have helped both groups (FAS and the PVO's) to focus on reducing red tape and improving specific projects. Also, FAS has listening sessions with U.S.banks participating in the GSM Export Credit Guarantee program. Again, these sessions have identified areas of improvement and cooperation.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The measurable goals of FAS' fiscal year 1999 Annual Performance Plan and its fiscal year 1999 budget program activities were developed in tandem and are mutually supportive.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, that is true for the most part. Depending upon the size of the increase/decrease, FAS would be able to estimate changes in the associated performance goals and indicators.

Question. Do you have the technical capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. No, we are not yet able to do so. FAS is requesting in the fiscal year 1999 budget funds to build a performance tracking, evaluation, and reporting system. Once built and implemented, this system will provide the information senior managers need to determine whether FAS will meet/exceed its performance goals or whether resources need to be re-allocated.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget.

Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. To some extent, we have. The traditional FAS budget activity structure was a combination of organizational linkages and functional activities which did not fit well in a performance based management system. This led to our modification of the FAS budget activity structure in fiscal year 1998.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. Beginning with the fiscal year 1998 budget, the FAS budget activity structure was modified to reflect our implementation of the Government Performance and Results Act and transition to a performance-based management system. In this regard, FAS has adopted a budget activity structure that incorporates five of the policy objectives included in the FAS strategic plan. This activity structure was modified slightly in our fiscal year 1999 submission.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. Currently FAS' program activities relate directly to our mission and legislated mandates. In general, we believe the current budget activity structure is satisfactory. However, modifications could be made as our experience in implementing a performance-based management system continues to develop.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. Again, we will explore further modifications as our experience in implementing a performance-based management system develops.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes it does. Both FAS' strategic and annual performance plans cite several external factors. These include foreign competitors' continued use of export subsidies, direct credits and credit guarantee programs, non-price export promotion, monopolistic marketing boards, and various technical assistance programs. Additional external factors outside FAS' span of control include variability in crop production due to weather conditions, both at home and abroad; effect of foreign exchange fluctuations on the price of U.S. products abroad; political instability that may undermine demand in key importing countries; and reductions in resources of other USDA and Federal agencies with whom FAS works in partnership to fulfill its mission and goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. FAS will continue to use the GSM program to inject liquidity into developing country markets suffering short-term liquidity crunches similar to the way it did in Asian countries during the fiscal year 1998 financial crisis. Additionally, the agency will use the Export Enhancement Program, Dairy Export Incentive Program, Market Access Program, and Foreign Market Development Cooperator program to offset foreign competitors' continued use of export subsidies, non-price export promotion, monopolistic marketing boards, and various technical assistance programs.

Question. What impact might external factors have on your resource estimates?

Answer. The impact will vary depending on the external factors. A number of the programs administered by FAS fluctuate yearly on the basis of market conditions and competitor actions, including export credit guarantees, EEP, and DEIP.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance plan identify the overlap or duplication?

Answer. Yes it does. In conjunction with other agencies within the Department dealing with SPS issues, FAS has, as a result of a General Accounting Office review of USDA's approach to resolving SPS issues, recently been given the responsibility to support the Special Assistant to the Secretary on International Affairs to coordinate USDA wide goals and objectives and facilitate the integration of USDA-wide processes to improve USDA's efficiency and effectiveness in prioritizing SPS issues and bringing them to resolution. Since this initiative has just begun, USDA is in the process of determining how all of the USDA agencies will jointly plan and coordinate this effort.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that, to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The performance measures identified in FAS' fiscal year 1999 Annual Performance Plan are focused primarily on outputs, and are not sufficiently mature to allow use in measuring program effectiveness. In recognition of this challenge, FAS requested an increase of $500,000 in its fiscal year 1999 budget request to enlist the help of private sector experts in developing an agency-wide performance tracking and evaluation system that has meaningful and realistic measures and benchmarks of performance to help define relative success rates and measure program effectiveness.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Yes. The biggest factor is the lack of a cost-accounting system which would provide accurate data on costs related to each budgeted program activity.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No, we do not see the need for revisions within the next year.

QUESTIONS SUBMITTED BY SENATOR MCCONNELL

PUBLIC LAW 480 TITLE II

Question. It is estimated that more than 800 million individuals are chronically undernourished, yet AID failed to program more than $20 million of Title II humanitarian funding in fiscal year 1997. Will AID use all the current year's appropriation, as well as the unspent funds carried over from last year, for commodity and processed food purchases for donation to Title II feeding programs? If not, why not?

Answer. USAID currently expects to utilize in this fiscal year all funds appropriated for fiscal year 1998 plus the carry-over from fiscal year 1997.

While current plans are that all available funds will be utilized this fiscal year, it is possible that there will be an emergency requirement at the end of the year which will make it advisable to carry over some funds to next year. In past years, the amount has always been relatively small. For example, the carry over from 1997 to 1998 was around 2.5 percent of the Title II total and 5 percent of the amount spent for emergencies. Nevertheless, USAID currently expects to expend all available funds this year.

Question. If unspent, what impact will it have on domestic farmers, processors, packagers, and other businesses who normally supply the program?

Answer. The impact on U.S. suppliers, processors and shippers would not be great. The funds carried over from one fiscal year to the next would normally be utilized in the first few months of the following fiscal year.

Question. Traditional Title II "relief" programs donated foods for the "poorest of the poor" for feeding women, children, school children, orphans, widows and the elderly, disabled, destitute, and others in the most vulnerable circumstances. AID'S fairly recent policy change has eliminated traditional "relief" programs from Title II eligibility, restricting approvals to only "developmental" programs.

Under this policy, it has been pointed out that Mother Teresa's programs, were she alive today, would not qualify for Title II humanitarian assistance. What is the basis for this AID policy?

Answer. USAID does not have a policy that eliminates feeding activities for the "poorest of the poor." Within the non-emergency programs, however, USAID does have a policy to give Title II funding priority to programs where the recipient will eventually be able to make self-sustaining progress toward food security. We have concluded this is most likely to occur with "developmental" activities which improve household nutrition or enhance agricultural productivity. Notwithstanding this policy focus for non-emergency Title II activities, USAID does support a large number of traditional "relief" programs in both its non-emergency and emergency Title II activities. In all cases, resources are focused on the neediest countries and within those countries on the most vulnerable.

With emergency Title II programs, the U.S. feeds the starving women and children we all see on CNN. Recent crises in Bosnia, Rwanda, and North Korea are examples of where Title II resources have supported traditional relief feeding activities to maintain the health of the most vulnerable groups in those societies.

In non-emergency Title II feeding programs, U.S. commodities are often used in maternal/child health activities and food-for-education activities benefiting vulnerable groups of women and children. In many cases, these traditional feeding activities have been integrated with other developmental resources to increase the likelihood of sustainable improvements in the health and nutrition of these groups. This category also finances food-for-work programs for poor farmers and landless laborers in countries like Bangladesh. The beneficiaries of these programs are also vulnerable.

USAID also allocates Title II resources to the sorts of welfare feeding programs which Mother Theresa's Missionaries of Charity manage. We will continue to do so and have told cooperating sponsors we will consider modest expansion of these activities. However, the beneficiaries of emergency programs and of non-emergency programs such as maternal/child health are also vulnerable and we believe warrant continued priority.

Question. What has been its impact on private voluntary agencies?

Answer. There has been no adverse impact on our PVO partners. The U.S. private voluntary organizations which manage Title II participated in developing the Food Aid and Food Security policy, which emphasizes the priority of addressing the underlying causes of hunger, and with which our current programs are in complete harmony. Since the PVO's are a diverse community, it is understandable that individual organizations would support some dimensions of the policy more strongly than others. On balance, there has been general support, even though it has required some adjustments by some PVO's.

For example, the policy requires Title II to focus on the most food insecure countries and within those countries on those most in need. This has meant getting out of countries like Indonesia and Philippines which, except for emergencies, are making good progress. Conversely, the policy means greater focus on Africa.

The policy, like Public Law 480, Government Performance and Results Act (GPRA), and other legislation that apply to USAID and its programs, also requires greater attention to achieving program results. This has meant more effort must be devoted to specifying objectives, such as reducing malnutrition among children, and more effort must be devoted to monitoring performance. In some cases, the PVO's have been asked to pay greater attention to the long term impact of the programs. In food-for-education activities, for example, greater attention is paid to the educational benefits of the program.

Question. Is the policy responsible for AID not using all Title II funds in fiscal year 1997, and for likely unspent Title II funds in fiscal year 1998?

Answer. No, the policy had nothing to do with the carry-over from fiscal year 1997. The carry-over resulted from management of emergency Title II funds at the end of fiscal year 1997. No carry-over is currently expected from fiscal year 1998 to fiscal year 1999.

Question. Did AID comply with the statutory processed, fortified, and bagged subminimum tonnage requirement for Title II commodities, in fiscal year 1997? If not why not?

Answer. Based on the traditional method of calculating these subminimum levels, USAID fell a bit short in fiscal year 1997. The requirement is that 75 percent of the commodities distributed for non-emergency programs be in the form of processed, fortified or bagged commodities. The actual level was 73.3 percent. In addition, not less than 50 percent of the quantity of the bagged commodities that are whole grains should be bagged in the U.S. The actual level was 48 percent.

There are two reasons these subminimum requirements were not met in 1997. First, there are commodities such as vegetable oil, soybean meal, and milled rice that require some processing but which we traditionally have not included in this calculation. While these are "processed commodities" as that term is used commercially, the legislative history, while not foreclosing on such a reading, is not explicit as to the congressional intent of the referenced mandate to include these commodities in the calculation. Nevertheless, had they been included, USAID would have met the percentage requirements stated in the legislation. Second, the levels of monetization have increased in response to requests from the private voluntary organizations that manage most Title II non-emergency activities. Monetization allows flexibility to use proceeds for improved management and to strengthen development activities. Increased monetization of Title II commodities under non-emergency activities negatively affects the processed, fortified, bagged mandate because bulk whole grains and bulk vegetable oil represent the majority of monetized commodities.

It is important to note that there are substantial amounts of processed and fortified commodities which go through the Title II supported emergency programs. For example, in North Korea in fiscal year 1997 the U.S. contributed 10,000 metric tons of nutritious corn/soya blend for child feeding.

Question. Will AID comply with the processed, fortified, and bagged subminimum requirement in fiscal year 1998? If not, why not?

Answer. Based on current plans for implementing programs, it appears likely that programs will not be in compliance with this mandate. Commodity requests from our cooperating sponsors for non-emergency activities currently require only approximately 60 percent processed, fortified, and bagged commodities. Even if USAID were to include bulk vegetable oil, soybean meal, and milled rice (that are also processed but not included in USAID's current calculation), the percentage would only increase to approximately 69 percent. Again, we believe that this shift in commodity demand is primarily due to the increased requirements for monetization activities, which is supported by its own mandate under Section 203(b) of Public Law 480. So the factors which led us to fall slightly short of the requirements in fiscal year 1997 remain in force.

As was the case last year, we expect substantial processed and fortified commodities will be shipped under emergency programs.

Question. Does AID incorporate the statutory processed, bagged, and fortified commodity subminimum requirement into PVO program plans and approvals. If not, why not?

Answer. USAID approves the commodity and bagging specifications for PVO programs and monitors progress toward meeting these subminimum requirements on a monthly basis. However, much like Cargo Preference where it would be logistically impossible to apply the 75-percent requirement to each individual shipment, USAID

does not dictate that each PVO program earmark a specific proportion of its program to meet this requirement. To do so would result in an inflexible system that would severely limit the types of activities our partners could undertake.

Although historically USAID has substantially complied with the overall 75 percent subminimum, Public Law 480 permits waiver of these subminimum requirements if the PVO programs "will not be best served by the enforcement of such requirements." USAID manages implementation of the subminimum requirements with a view to the best interests of the PVO programs and, if necessary, exercises the waiver authority to support those interests.

Question. In light of the increased number of monetization programs, is AID taking steps to insure that the processed, bagged, and fortified commodity subminimum is incorporated into these programs?

Answer. Together with our cooperating sponsor partners, we do look for opportunities to monetize processed, fortified and bagged commodities in order to help ensure compliance with these subminimum requirements. Wheat flour and tinned vegetable oil, as an example, are monetized and counted toward the achievement of the mandate. Unfortunately, there is not a ready market in developing countries for many of the other traditional processed and fortified products, such as corn soya blend and cornmeal, so in most cases the monetization of these commodities is not feasible.

QUESTIONS SUBMITTED BY SENATOR BURNS

FOREIGN MARKET DEVELOPMENT/COOPERATOR PROGRAM

Question. Mr. Schumacher, is it true that the President's budget proposes to spend more to renovate the south building than to develop markets for U.S. agricultural products through the Foreign Market Development/Cooperator Program?

Answer. The President's budget proposes a funding level of $22.0 for the Foreign Market Development Program (FMD), a reduction of $5.5 million from the current level of $27.5 million. However, it is anticipated that a higher level of participant cost-sharing will minimize program disruption. It is my understanding that the budget also proposes $23.5 million for the continued renovation of the South Building to correct health and safety hazards and provide modern facilities.

Question. How much money is needed to be appropriated for the Foreign Market Development/Cooperator Program for fiscal year 1999 to maintain marketing plans for the program at the current level?

Answer. We are hopeful that with higher participant contribution levels, marketing plan levels can continue at the current level with the $22.0 million appropriation request set forth in the President's budget.

Question. Why, when U.S. agricultural exports are down, especially for bulk commodities that use this program, is the Department cutting the Cooperator program or farmers export program by 30 percent?

Answer. It is simply an issue of money. The FAS budget must absorb some of the costs that had previously been funded by the Commodity Credit Corporation. Those costs used to be on the mandatory side of the budget but now are proposed to be funded on the discretionary side of the budget. FAS has a very restricted discretionary budget, and we are forced to absorb these additional costs within the constraints of the budget. We are hopeful that an increase in participant cost sharing will help offset the reduced FAS contribution to this program.

Question. What does the President's Budget mean by "increasing the cost share" for the Foreign Market Development/Cooperator Program? According to my information, the cooperator contributions to the operation of the FMD/Cooperator Program has consistently exceeded 115 percent. Moreover, if a wheat farmer checks-off $.02 a bushel on a bushel of wheat that is worth $2.00 less than it was two years ago, his cost share has already increased. What are you trying to do here?

Answer. The budget assumes a higher level of cost-share contributions from Cooperator organizations which will help to offset the reduced Federal contribution. This effort is consistent with House Committee report language recommending that FAS seek an increase in cost sharing from participants in the Foreign Market Development Cooperator Program. For fiscal year 1998, FMD participants currently contribute $1.90 for each $1.00 in FAS funding.

WHEAT EXPORT STRATEGY

Question. On Wednesday, March 18, 1998, Secretary Glickman told the House Agriculture Committee that EEP would result in lower wheat prices because other countries, namely the EU, would compete against an EEP and drive prices lower.

And anyway, our competitors will eventually run out of wheat leaving the U.S. to supply the remaining import demand. Jack Hay, a wheat producer from The Dalles, Oregon responded that wheat producers would take the chance of lower wheat prices if the Department would move wheat out of the U.S. and expand U.S. market share.

At that same hearing, the Secretary noted that the GSM–102 program was the centerpiece of the U.S. farm export strategy. This is new since the Asian financial crisis. In the fall of 1997 several agricultural groups met with the Department to urge the use of the credit guarantee programs so that they would not fall victim to cuts like the EEP experienced last appropriations cycle. The question is—in the absence of a foreign economic crisis—what is the Department's export strategy? And what is the Department's strategy for dealing with a U.S. farm crisis?

Answer. While I am not prepared to speak on all actions the Department is taking to respond to low prices, what I can do is address what we are doing to promote and expand markets. USDA's export strategy is to utilize to the maximum extent possible those programs which are available and appropriate to assist in opening markets and expanding U.S. exports. USDA is currently using a wide range of programs to assist exports including the Export Credit Guarantee Program (GSM–102), Public Law 480, as well as funding for FMD and MAP. USDA continues to monitor world markets and our competitors' actions and reserves the right to use the Export Enhancement Program (EEP) if competitor actions and market conditions warrant. At the moment, however, we do not believe these conditions make EEP the appropriate tool to use.

In addition, we are working aggressively to resolve a wide range of bilateral market access issues. Such efforts have opened up the Chilean wheat market and are currently under way to address barriers in China, India, Brazil, and many other countries. We strongly believe that reducing import barriers to U.S. commodities is the best solution to long term success for U.S. farm exports, and it is an area where the U.S. Government can play a critical role. To further this cause, we are preparing for the next round of WTO negotiations and are assisting in the Administration's review of economic sanctions.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

ASIAN FINANCIAL CRISIS

Question. You mention that the level of agricultural exports in 1997 is down slightly from the previous year due, in part, to the pending financial crisis in Asia. What US commodities are most at risk due to the current financial crisis in Asia? How long do you believe this problem will continue? Do you see long term problems for US agricultural exports resulting from this problem?

Answer. USDA expects the Asian crisis will reduce overall U.S. agricultural exports by no more than 3–6 percent in fiscal year 1998 and 1999 from levels that would have otherwise prevailed. In fiscal year 1998, two-thirds of the total impact on U.S. exports is expected to fall on high value products, led by horticultural products, red meats/poultry, and processed foods as these products are more sensitive to the price and income changes brought on by the crisis. However, in fiscal year 1999, losses for grains and soybeans are expected to grow substantially as Asian economies slow further and competitors benefit from an appreciating U.S. dollar. Beginning in fiscal year 2000, the negative trade effects will likely begin to ease as Asia's currencies, economies, and import demand start their recoveries. Assuming we have seen the worst of the crisis and these countries make the needed economic reforms, USDA sees no permanent long term damage to U.S. exports to the region. The most affected countries have well-educated and highly productive work forces, flexible economies and generally well-developed infrastructure. There is no reason to believe that these economies cannot recover much of their previous economic vitality.

MARKET ACCESS PROGRAM

Question. The budget request provides for $90 million, the fully authorized level. Please provide information on the amounts of MAP grants made available in fiscal year 1997 including the recipient commodities, companies, and targeted markets. Also, please provide any estimates available on this information for fiscal year 1998.

Answer. I will provide that information for 1997 for the record. Allocations of MAP funding for 1998 have not yet been made, so we cannot provide any information at this time.

[CLERK'S NOTE.—The information does not appear in the hearing record, but is available for review in the subcommittee's files.]

Question. You mention that European countries spend around $400 million on market promotion of which about half comes from EU member governments. This suggests that the EU private sector spends about $200 million annually on market promotion. How much do U.S. companies spend on agricultural market promotion on an annual basis? Aside from the $90 million for MAP, what additional USDA program funding do you categorize as "market promotion"? What other federal spending (non-USDA) could be considered as agricultural market promotion?

Answer. It is difficult to ascertain the exact amount of funding spent by U.S. companies on agricultural market promotion. According to Dunn & Bradstreet, there are more than 150,000 food companies in the U.S., but less than 10 percent of these companies are involved in exporting. Of the 10,000 companies that are exporting product, approximately 1,000 have received assistance under the Market Access Program (MAP). Each company receiving assistance under the MAP is required to match federal funds on a one-to-one basis. In 1996, more than 500 companies participated in the MAP and contributed approximately $22.2 million of their own funds for export promotion activities. We know that this figure does not begin to scratch the surface as there are more 9,400 additional U.S. companies involved in export promotion that are not participating in the MAP and, therefore, are not obligated to report their expenditures to the Department. However, according to a recent survey of commodity trade organizations, the U.S. industry spends in excess of $165 million on agricultural market promotion. This figure includes over $88 million in expenditures which are reported as contributions by participants in the MAP and/or FMD programs.

There are two USDA programs that are categorized as export promotion programs—the MAP and the Foreign Market Development Cooperator Program, funded at $22 million in the President's 1999 budget. USDA has a number of other programs, services, and activities which are "export-related", but do not meet the definition of export promotion as defined by the Technical Working Group of the Trade Promotion Coordinating Committee. FAS overseas offices also have a small Annual Marketing Plan budget for use in conducting agricultural promotion activities in their countries of responsibility.

At this time we are not aware of any other non-USDA programs that could be considered agricultural market promotion. With its technical expertise and international market intelligence network, the Department is best equipped to develop and implement export promotion strategies for agricultural commodities and products.

TRADE BARRIERS

Question. The European Union has placed a ban on poultry imports from the U.S. because of the practice by US companies to use chlorine as an anti-microbial agent. Is FAS involved in resolving this dispute? If so, what is the status?

Answer. FAS, in conjunction with the Food Safety and Inspection Service and U.S. industry representatives, is working with the EU to resolve the issue regarding the use of anti-microbial treatments in poultry production. In the Veterinary Equivalency Agreement, the EU committed to undertake a scientific study on the use of anti-microbial treatments, including chlorine. The experts which include a person from the United States have begun their research, and we expect this study to be completed by mid-1998. If the results are positive, the Commission has agreed to submit legislation to Member States, reversing the EU policy. U.S. officials are closely monitoring the progress of the scientific study.

AQUACULTURE EXPORTS

Question. You mention that edible fish and seafood product exports did not fare as well in 1997 as previous years and had, in fact, slipped 6 percent from 1996. What portion of the U.S. edible fish and seafood product exports are farm-raised aquacultural products?

Answer. We estimate that about one percent of 1997 U.S. edible fish and seafood product exports are farm-raised aquacultural products including: farmed Atlantic salmon ($14.4 million, 93 percent to Canada), crawfish ($5.3 million, 99 percent to Sweden (aquaculture estimated to be half of the $10.5 million of total crawfish exports)), trout ($3.4 million, 71 percent to Canada and 17 percent to China) and catfish ($.7 million, 75 percent to Germany and 10 percent to France). Exports of these particular products were up 2.9 percent over 1996 exports. Additional aquaculture products are exported but it is difficult to separate farmed versus wild harvest exports.

Question. Will long-term U.S. aquaculture exports increase at a pace equal to increased domestic production?

Answer. We expect that long-term U.S. aquaculture exports will increase at a pace equal to or greater than increased domestic production. Exports of these products grew 4.4 percent and 2.9 percent in 1996 and 1997, respectively. For 1998, farmed catfish production is forecast to grow 2–4 percent and farmed salmon production is expect to remain level; crawfish production rose 6 percent in 1997, and trout production from September 1, 1996 through August 31, 1997, grew 4 percent. Although the domestic market is the main outlet for U.S. aquaculture products, as U.S. production grows we expect exports of some aquaculture products will increase at a greater rate or to a greater number of markets. For example, the Catfish Institute is considering expanding market promotion activities beyond Germany to include Canada and other markets.

USE OF BIOTECHNOLOGY

Question. You mention that biotechnology may provide opportunities to meet world food security needs and, at the same time, reduce chemical use, provide safer food, and cut costs. What efforts are underway to make importing countries more willing to accept products modified genetically or produced with other biotechnological methods?

Answer. USDA assisted Egypt's Ministry of Agriculture develop a biotechnology research capability in the early 1990's. In July 1997, the Egyptian Ministry of Health made a decision requiring the Genetically Modified Organisms (GMO) Certification of all food and agricultural imports. FAS alerted the Ministry of Agriculture to the issue and to the relevance of its research for the issue's resolution.

The U.S. Embassy, in its briefing cable preceding Secretary Glickman's September trip to Egypt, pointed out that Minister of Agriculture Youssef Wally took control of the issue and was a major force behind the decision to "neutralize" the GMO certification requirement. The Embassy emphasized his role in keeping the GMO issue from becoming a major trade irritant between Egypt and U.S.

While in Egypt Secretary Glickman thanked Ministry Wally and solicited his support for a reasonable international consensus on the labeling of biotech (GMO) products. Other countries in the region often follow Egypt's lead with these decisions. He also acknowledged the excellent work being done in Egypt in biotechnology and pledged USDA's continuing support and collaboration with the MOA on this kind of research.

Because of the importance that biotechnology plays in new agricultural products, USDA has recently established a Department-wide working group on biotechnology that will coordinate the Department's efforts in this area. FAS, in coordination with APHIS, other U.S. regulatory agencies, USTR, and industry groups, has initiated harmonization efforts in a number of multilateral and bilateral fora.

The U.S. government holds regular bilateral discussions with the EU to encourage the EU to evaluate genetically modified products using scientifically based analysis. USDA is working closely with the developers of genetically modified products, manufacturers of processed products, and exporters to keep them informed of developments in the EU and to help ensure that there is no disruption of trade in products such as corn gluten feed. FAS is an active participant in the Transatlantic Business Dialogue Agri-food Biotechnology Initiative.

A biotechnology initiative has been undertaken in the Asia Pacific Economic Community (APEC) and was endorsed at the recent APEC Ministerial in 1997. The U.S. hosted a second workshop on risk assessment of biotechnology products in March 1998.

Bilateral harmonizations efforts continue with Japan. FAS led a delegation from U.S. regulatory agencies to speak with Japanese press and consumer groups. In addition, USDA has hosted representatives from the Government of Japan to gather information on the U.S. approach to labeling of biotechnology products. To date, Japan has approved 15 agricultural biotechnology products for importation.

In order to mitigate the potential negative effects on trade, FAS has played a prominent role in developing the U.S. position for the negotiations of a Biosafety Protocol under the Convention on Biodiversity and is represented on the U.S. delegation to these negotiations.

PUBLIC LAW 480

Question. The budget request calls for a reduction in Title I of Public Law 480. What is the reason for this reduction?

Answer. The proposed reduction in Public Law 480 Title I funding is necessary to help meet discretionary spending targets set in order to achieve a balanced budg-

et. Public Law 480 Title II and Title III funding remains unchanged from fiscal year 1998 levels. This will ensure that adequate resources are available to meet serious food assistance needs, including emergencies.

QUESTIONS SUBMITTED BY SENATOR KOHL

FOREIGN MARKET DEVELOPMENT/COOPERATOR PROGRAM

Question. How much money needs to be appropriated for the Foreign Market Development/Cooperator Program in fiscal year 1999 to maintain marketing plans for the program at the current level?

Answer. We are hopeful that with higher participant contribution levels, marketing plan levels can continue at the current level with the $22.0 million appropriation request set forth in the President's budget.

Question. Why, when U.S. agricultural exports are down, especially for bulk commodities that use these program, is the Department cutting the Cooperators program or "farmers export program" by 30 percent?

Answer. It is simply an issue of money. The FAS budget must absorb some of the costs that had previously been funding by the Commodity Credit Corporation. FAS has a very restricted discretionary budget and we are forced to absorb these additional costs within the constraints of the budget. We are hopeful that an increase in participant cost sharing will help offset the reduced FAS contribution to this program.

Question. What does the President's budget mean by "increasing the cost-share" for the FMD/Cooperator Program? According to my information, the cooperators contribution to the operation of the FMD/Cooperator Program has consistently exceeded 115 percent. Moreover, if a wheat farmer checked off 2 cents a bushel on a bushel of wheat that is worth $2 less than it was two years ago, his cost-share has already increased. What are you trying to do here?

Answer. The budget assumes a higher level of cost-share contributions from Cooperator organizations which will help to offset the reduced Federal contribution. This effort is consistent with House Committee report language recommending that FAS seek an increase in cost sharing from participants in the that participants in the Foreign Market Development Cooperator Program (FMD). For fiscal year 1998, FMD participants currently contribute $1.90 for each $1.00 in FAS funding.

AGRICULTURAL TRADE OFFICES

Question. What are the Department's plans with respect to expanding the opening of Agricultural Trade Offices? Is this a wise course of action when U.S. agricultural exports are declining?

Answer. Agricultural Trade Offices (ATO's) have been established for the purpose of developing and maintaining markets for U.S. agricultural, food, forest and fishery products. The Secretary of Agriculture has been directed by statute to establish not less than six nor more than twenty-five U.S. Agricultural Trade Offices worldwide. ATO's are the export market promotion arm of FAS operations overseas. In recent years, the establishment of ATO's has not increased the number of FAS American staff overseas. Rather, attache positions have been converted to ATO's to reflect an increased emphasis on market development and to take advantage of increased market opportunities for consumer food products in selected regions.

U.S. consumer-oriented food and agricultural product exports continue their growth, increasing 4.14 percent to $21 billion in 1997. While there have been some recent declines due to the financial situation in Asia and lower prices for bulk commodities, the long term trend is for continued growth in exports.

Two new ATO's were established in 1997: ATO Sao Paulo and ATO Caribbean Basin. In the case of Sao Paulo, the Office of Agricultural Affairs was converted to an ATO with no net change in American or local staffing. This was done to reflect the increasing export opportunities for high-value consumer oriented products as well as increased support needed by visiting Foreign Market Development cooperators, Market Access Program participants, and other U.S. exporters with expanded programs in the region. Import liberalization has resulted in spectacular growth in consumer-oriented exports to Brazil from $74 million in 1994 to over $160 million in 1997, growth of 116 percent.

The Caribbean Basin ATO is responsible for market development throughout the Caribbean. The Assistant Attache position in Santo Domingo was converted to the ATO Director position in Miami. Establishment of this office was long overdue with U.S. consumer food exports to this region exceeding $570 million in 1997, reflecting growth of 10.6 percent over 1996 exports.

The Foreign Agricultural Service believes that dedicated market development support overseas through our U.S. Agricultural Trade Offices is not only wise but essential to fulfill our mandate to develop, maintain, and coordinate market development activities in markets with excellent high-value food product export potential.

FAS OUTREACH PROGRAM

Question. Please explain the value of the FAS Outreach Program and its direct impact on agricultural exports.

Answer. Increased agricultural exports are generated by established exporters and new-to-export companies and cooperatives. As background, Dunn and Bradstreet reports there are approximately 165,000 companies in the United States producing, manufacturing, packing or marketing agricultural products, yet less than 10,000 are actually engaged in exporting. With sales to the export market growing at three times the rate of the domestic market it is very important that U.S. companies be alerted to overseas opportunities and the potential for profit. Increased exports create jobs in both urban and rural communities; provide a safety net for farm income; and contribute positively to the balance of trade. It is clearly in the best interest of the national economy that the Government engage in increasing domestic awareness of global market opportunities, consumer quality and safety expectations, and educate foreign buyers about the merits of U.S. products.

The FAS Outreach Program uses its extensive communication network and relationships with universities, export assistance centers and the State Departments of Agriculture to effectively convey to companies and cooperatives alike that real export opportunities exist, and that USDA can be a full partner with the private sector in expanding sales, developing new markets and promoting new products. The resultant increase in exports represents tangible evidence of USDA's commitment to expanding the number of exporting companies which can be linked to the efforts of FAS in partnership with State Departments of Agriculture. Targeting small, medium and new-to-export companies in addition to cooperatives to provide export assistance and trade information has led to a higher rate of export participation among these groups, and in turn increased exports of food, fiber, seafood and forest products.

QUESTIONS SUBMITTED BY SENATOR LEAHY

URUGUAY ROUND AGREEMENT

Question. I understand that we have reported to the WTO for the 1995/1996 Uruguay Round Agreement (URA) phase-in year that we intended to ship 64,000 metric tons of nonfat dry milk, and for the following year (1996/1997), that we intended to ship 67,000 metric tons of nonfat dry milk. How much of that combined amount of 131,000 metric tons—which amounts to some 290 million pounds—actually has been shipped? If it has not been shipped, what steps are you taking to ensure that the nonfat dry milk will be exported under DEIP?

Answer. Agreements under DEIP in 1995/96 and 1996/97 committed 63,693 metric tons, and 69,890 metric tons, of non-fat dry milk, respectively. Of the total tonnage committed of 133,583 metric tons for those two years, approximately 89,607 metric tons were shipped. Buyer defaults and various other factors accounted for the loss in shipments. In order to reduce the rate of DEIP non-performance, the Commodity Credit Corporation recently modified its policy concerning amendments to DEIP agreements. DEIP exporters now have more flexibility to change the buyer on DEIP contracts, renegotiate export sales prices, and extend delivery periods. In addition, we have also regionalized our DEIP allocations in order to allow for greater program flexibility.

Question. I understand that the URA technically allows countries to carry-over from one year to the next unused export tonnage. Isn't reprogramming of canceled, unshipped tonnage, which I believe does not involve carry-over, thus also permitted under the URA?

Answer. Throughout the negotiations leading to the Uruguay Round Agreement (URA), it was understood that export subsidies would be disciplined by annual tonnage and expenditure limits. The European Union apparently interprets certain language in the URA as allowing for unused tonnage to be carried forward into another year. Although we have not yet confirmed whether the EU has acted to carry or roll-over unused tonnage, the United States and many other countries continue to have concerns that such an interpretation of the URA could greatly undermine the export subsidy disciplines in place on a range of commodities.

Question. Given that reprogramming of unshipped DEIP tonnage is permissible under the URA, and given that the 1996 farm bill mandates that USDA make full use DEIP, will you ensure compliance with the farm bill by reprogramming canceled tonnage that otherwise would not be shipped?

Answer. Re-programming tonnage that was contracted, but canceled or unshipped, could adversely affect the URA. Nonetheless, we would view with great concern actions by other countries along these lines, and we would have to consider what would be the most appropriate U.S. response should this occur.

Question. USDA is estimating that it will remove about 62 million pounds of nonfat dry milk in calendar year 1998 under the milk price support program, and in fact is currently purchasing about 2 million pounds of powder per week. Isn't it cheaper for USDA to "DEIP" milk powder overseas than purchase it under price support (assuming that USDA will have to hold on to the powder it acquires under price support for a long period or give it away)? Further, aren't DEIP sales more beneficial to U.S. dairy farmers than price support acquisitions, since a product that is DEIP'ed is removed from the market forever, but price support acquisitions overhang the market and serve to weaken prices?

Answer. Under current market conditions, it is cheaper to "DEIP" nonfat dry milk than to purchase it under the price support program. Unfortunately, our entire Uruguay Round subsidy allowances are already fully dedicated under the DEIP program. Price support purchases may be cheaper under market conditions that permit short storage periods before sale back to the market or if the DEIP subsidies were more expensive. However, the dairy price support program ends at the beginning of 2000 and the DEIP program offers the opportunity to develop long-term dairy export markets.

RISK MANAGEMENT AGENCY

QUESTIONS SUBMITTED BY SENATOR COCHRAN

LEGISLATIVE PROPOSAL

Question. The Administration proposes in the fiscal year 1999 budget request to pay all administrative expense reimbursements to reinsured companies from the mandatory Federal Crop Insurance Corporation Fund. Program changes are proposed as a partial paygo offset that would take effect beginning in fiscal year 2000. These include: placing a $100,000 limit on Catastrophic Coverage; reducing the reimbursement rate on delivery expenses; reducing the subsidy for buy-up coverage; and limiting the loss ratio to 1.06.

By reducing premium subsidies for higher levels of coverage, Mr. Ackerman you state that farmers would experience "a slight increase" in producers' out-of-pocket costs to pay premiums, about 10 cents/acre. Farmers of which individual crops would be affected by this most?

Answer. Crops with high values per acre or high premium rates will be affected more than this average change. For example, almonds will increase about $1.40 per acre due to an average liability of nearly $1,700 per acre. Wheat, with a liability of about $75 per acre and relatively high rates, will increase about 10 cents per acre. Cotton, with an average liability of $211 per acre, will increase about 46 cents per acre.

Question. By reducing the statutory loss ratio target from 1.075 to 1.060 beginning in fiscal year 2000, producers' out-of-pocket expenses for premiums rates would increase also. How much does this increase farmers' out-of-pockets expenses?

Answer. This would increase the costs for an average producer by about 1.4 percent. The national average, based on premium costs for 1997, would be 10.4 cents per acre.

Question. In the years beyond fiscal year 1999, the agency is proposing that half of the mandatory offsets would come from proposed changes in the crop insurance program and the other from USDA sources. What other USDA sources are being considered?

Answer. The following are proposed Departmental offsets outside of the crop insurance program: Create a flexible, multi-year program level authorization for the Export Enhancement Program; and reduce the expenditures in Cotton Step 2 payments.

CROP INSURANCE COMPANIES

Question. Mr. Secretary, you indicate in your opening statement that the weather in 1997 was particularly good and that the Federal Crop Insurance Program had

a very favorable loss ratio of less than .80, which is well below the statutory requirement of 1.10. Thus the insurance companies received underwriting gains based on the risk they retained. Under more normal conditions, the companies would have received far less.

How much in underwriting gains did the companies receive in 1997? In 1998?

Answer. At the 1997 Annual Settlement, the companies received underwriting gains for the 1996 reinsurance year of approximately $248 million based on $1.2 billion of premium retained by the companies and a loss ratio of 76.1 percent.

At the 1998 Annual Settlement, the companies received underwriting gains for the 1997 reinsurance year of approximately $359 million based on $1.3 billion of premium retained by the companies and a loss ratio of 50.6 percent.

LOSS RATIO

Question. You also mention a legislative proposal that would reduce the loss ratio, among other things. What will this new loss ratio be?

Answer. The Risk Management Agency (RMA) proposes to reduce the loss ratio target, contained in Section 506 [7 U.S.C. 1506] (o)(2) of the Federal Crop Insurance Act, from 1.075 to 1.06.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. RMA's performance goals were derived directly from the Agency's objectives contained in its strategic plan. RMA documented its business processes (life cycles) in line with its strategic planning efforts. These business processes contain the activities that support the achievement of RMA's performance goals. RMA is currently working to establish the capability to more directly link program activities, performance goals, and resource requirements with the strategic plan components.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. RMA worked to link performance goals directly to program activities found in the current budget structure. However, the budget activity structure does not lend itself well to the measurement of RMA's progress toward achieving its overall mission and goal. Since RMA receives a single discretionary appropriation for administrative and operating expenses, it did not report individual program activities for this account in its fiscal year 1999 budget. Although the Agency did provide activity information on its mandatory account, the Federal Crop Insurance Corporation Fund, the current structure is not easily tied to the Agency's performance goal. Therefore, the Agency decided to take the approach of establishing annual performance goals and indicators that gauge progress toward achieving the long-term general goal and objectives found in its strategic plan. RMA is considering ways to improve the linkage between its performance goals and budget.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes—RMA's Annual Performance Plan does link performance measures to its budget, however, RMA chose to focus their performance measures and indicators on the mission, goal, objectives, and management initiatives of the Agency rather directly tying them to the program activities or accounts found in the budget. For example, performance goal #4 in RMA's annual plan, "Reduce program vulnerabilities" relates to one objective of the Agency, has funding tied to it through the discretionary A&O Account, but is not a separate program activity in the budget. RMA is currently working to establish the capability to more directly link all of these components.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. RMA's performance planning structure and the account and activity structure in its budget do differ significantly in format and structure. However, RMA's budget estimates and justifications do include some linkage to the performance goals and indicators found in the Annual Performance Plan, as well as goals and objectives found in the Agency strategic plan. This linkage can be found throughout the Agency's fiscal year 1999 Explanatory Notes package and 1999 Annual Performance Plan. In addition, it is important to note that RMA's performance plan is consistent with the Agency strategic plan and fiscal year 1999 budget request, as required. The following is a description of both the performance planning structure and program activities found in RMA's budget request:

—The performance planning structure in the annual plan outlines the performance goals and indicators that RMA would like to accomplish in the given fiscal year. This structure is very similar to that found in RMA's strategic plan which focuses on the mission, goal, and objectives of the agency.

—However, RMA's budget account and activity structures are based on program activities, and currently include two accounts, the mandatory Federal Crop Insurance Corporation Fund and the discretionary Administrative and Operating Expense Account. The FCIC Fund is further broken out by the following program activities: premium subsidy; delivery expenses; research and development reform costs; and apportionment for excess losses. For fiscal year 1999, the A&O account includes only one program activity—salaries and expenses. RMA understands the need to translate the performance goals and indicators directly to the program activities found in the budget, and is considering ways to achieve this.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. At the present time, RMA does not propose any changes to the budget account structure for fiscal year 2000. However, if modifications were made, analysis would be conducted to determine the appropriate structure for future years.

Question. How were performance measures chosen?

Answer. RMA documented the life cycles for its core business processes using a cross-functional team. The team contained a diverse representation of managers and employees from all major functional areas of the Agency.

These life cycles contained the activities, as well as specific inputs and outputs to these business processes. RMA selected the "vital few" measures that they felt would best allow RMA management to determine agency results in line with the strategic plan.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. Given current budgetary constraints, RMA has found it difficult to fund the development of truly meaningful performance measures. We realize that many of the measures in our fiscal year 1999 budget measure output or workload rather than outcomes. However, several of our outcome-based measures require customer surveys which demand an investment of significant financial resources and time. RMA fully expects there to be lessons learned from the first attempt. These lessons will be used to improve the Agency's ability to conduct performance measurement in the coming years.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. RMA did not have complete baseline data to establish all performance targets for inclusion in its 1999 Annual Performance Plan. However, RMA has established an implementation plan for the institutionalization of its documented performance plan measures. This plan takes into account the March 2000 requirement. RMA's intent is to have all its performance measures and targets based on current, reliable, and/or statistically valid information.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. RMA recommends that its performance measures that are outcome based be used to determine applicable program results. RMA's output-based measures are intended to help provide additional detail to assess programs in achieving outcome targets. It should be noted that RMA's outcome and output measures may not be mature enough for effective and efficient program management. RMA intends to conduct quarterly reviews of its available measures and determine their appropriateness as management tools. RMA fully expects adjustments to be made to its performance measures as experience is gained in results-based management.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. In RMA's annual performance planning process, we strove to include outcome measures for each objective and management initiative in support of our strategic goal. The intent was to include at least one outcome measure for each objective and management initiative. RMA recognizes that work needs to be done to establish or refine these measures. As mentioned previously, funding and time constraints precluded the development of some of these measures. As RMA gains experience with performance planning, our measures will improve and the benefits that can be derived for the Agency will increase.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes—RMA established measures utilizing cross-functional subject-matter experts serving on a team, some of whom were managers. These measures (i.e., output and outcome) were presented to and accepted by the Agency's senior management. RMA understands the need to train program managers on all GPRA concepts as implementation progresses.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. RMA has created two projects that will institutionalize the development and administration of surveys to internal and external customers. RMA is currently in the definition stage working to determine: what data elements are needed; what specific questions should be asked; who should be asked; where are they; what vehicle/instrument should be used; what should be the frequency of data collection; and what the cost would be. Examples of internal customers include: employees and unions. Examples of external customers include: private reinsured companies and agricultural producers.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. Actually, the fiscal year 1999 budget process began prior to the developmental stage of RMA's Annual Performance Plan. However, throughout the budget preparation process, RMA was able to incorporate portions of our annual plan throughout the fiscal year 1999 budget request. For example, justifications in the budget request link to the annual and strategic plans and support the goals within those plans. The Purpose Statement and Status of Program sections of the fiscal year 1999 Explanatory Notes for the Agency outline the contents of the annual plan and reflect the resources required to accomplish those goals and measures. RMA feels that together, these two tools will provide clear direction to manage RMA's activities for fiscal year 1999. In addition, the annual plan and budget documents clearly define the Agency's commitment to meet its goals.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes—however, RMA is working to improve its ability to directly link its program activities and performance goals with resource and budget constraints.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes—however, RMA is working to utilize technology to improve its current capabilities of reviewing, analyzing, and adjusting priorities or business processes to ensure achievement of its performance goals. RMA recognizes the need to coordinate and assimilate this data into its programs, given that it comes from a variety of internal and external sources. RMA has established a project designed to institutionalize Agency reviews on a quarterly basis. RMA must establish its measure baselines and establish performance targets before these reviews will be of maximum benefit.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Yes—RMA has faced difficulties in linking dollars to results under the current budget structure, especially in the mandatory FCIC Fund. For example, it was very difficult to produce quantifiable and measurable performance goals for program activities such as delivery expenses paid to reinsured companies.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. It is not clear that linkages would be clearer if RMA's budget account structure were modified. However, RMA's mandatory FCIC Fund has been reviewed by Congress several times beginning in 1994 with the Crop Insurance Reform Act and most recently in the development of the Research Title. While the categories are broadly stated, the assumptions that underlie them have been analyzed closely.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. If RMA were to modify its account structure, a thorough analysis would be conducted to determine how it could be improved.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. If modifications were made, the strengthening of accountability would depend on the analysis stated above. It is assumed that modifications would more directly link RMA resources and activities (including FTE's, dollars, and business processes) with performance goals and provide the Agency with the necessary information to strengthen accountability.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes—in RMA's strategic plan, they identified several key external factors that could significantly affect progress in our efforts to achieve our goal.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. RMA conducted Business Process Reengineering (BPR) that allowed for the opportunity to address some of these factors. For example, in the area of improving its delivery partner relationship with the private sector, the BPR Final Report outlines recommendations and steps to improve this relationship.

Question. What impact might external factors have on your resource estimates?

Answer. RMA external factors can have significant impacts on our resource estimates. For example, depending on the level and degree of private sector involvement in risk management functions, the possibility of significant impacts to RMA resources are extensive.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. The performance planning process itself did not identify any significant duplicative functional or procedural steps.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. RMA's measures have not been thoroughly tested and therefore proven to be the right measures allowing for proper results management of the Agency. Through time and empirical evidence, RMA will refine its measures and management processes and become more confident in its ability to manage actual performance with targeted performance.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Many of RMA's traditional measures are activity-based. RMA is in the process of institutionalizing its outcome measures, and expects that time and experience will improve the accuracy of its resource estimates.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. No—RMA's fiscal year 1999 Annual Performance Plan was directly derived from its strategic plan. However, RMA expects that changes to its strategic plan in the future will result in adjustments to any following performance plans.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

PRIVATE INSURANCE COMPANY PROGRAM DELIVERY

Question. You mention that suggested crop insurance reforms might reduce private company profits by 20 percent. What level of profits have private insurance companies been making from the crop insurance programs in recent years?

Answer. The company pre-tax return on retained premium based on the reinsurance agreement terms effective during that year are as follows:

Reinsurance year	*Actual return on retained premium (percent)*
1992	5
1993	−19
1994	19
1995	17
1996	21

Reinsurance year	*Actual return on retained premium (percent)*
1997	28
1998 (estimate)	10

Question. If private companies are realizing sizable profits from crop insurance, why does USDA need to provide an additional $188 to $205 million to reimburse the companies for program delivery?

Answer. The Risk Management Agency (RMA) believes that insurance gains and losses from administrative and operating expenses subsidies should be treated separately. The basic premise behind risk sharing provisions of the Standard Reinsurance Agreement (SRA) is for the companies to share in both gain and loss years. RMA is contracting for a delivery system with private sector insurance companies. The delivery of the crop insurance program directly competes with the delivery of other lines of insurance which private sector insurance companies may choose to sell. Administrative and operating subsidies are intended solely to cover delivery expense to ensure that companies do not lose money in their delivery. Taken together, risk sharing provisions and the payment of delivery expenses provide an incentive for companies to sell crop insurance.

The issue of profitability, as with a share of underwriting gains and losses, was a significant one during the negotiations for the recently agreed upon 1998 SRA. RMA intends to continue discussions with the crop insurance industry regarding profitability in the delivery of the Federal crop insurance program. RMA believes the pre-tax rate of return provided by the 1998 SRA is similar to the rate of return received from the insurance company investments in other lines of insurance and allows insurance companies to continue delivering the program.

OTHER PROGRAM REFORMS

Question. Another suggested reform to achieve savings is to place a $100,000 cap on payments to farmers for catastrophic risk protection (CAT). Would this change be fair to producers who might raise crops with higher market values and higher production costs?

Answer. The matter of payment limitations affects many people in various circumstances differently. You have cited high value or high production costs as distinguishing characteristics. The cap would also affect small scale farmers differently from large scale farmers. The limit is consistent with those established under ad hoc disaster programs and the Noninsured Assistance Program (NAP). However, the ad hoc and NAP programs are subject to a further limitation for farmers with less than $2,000,000 in gross income from all sources, which is not proposed under the Department's proposal. Thus, we believe the proposed limit is consistent with previous Congressional actions but is relatively more liberal to recognize that this is an insurance program, not ad hoc disaster assistance.

Question. For example, would a payment of $100,000 to a rice farmer with high production costs be of equal "value" as a $100,000 payment to a wheat farmer with relatively low production costs?

Answer. A wheat farmer with relatively low production costs per acre would need to farm significantly more acreage than a rice farmer to qualify for a $100,000 payment. Hence, even though the costs per acre are lower, the total costs associated with a $100,000 payment may not differ materially. If this is the case, the value of the payment should be roughly equivalent for the two producers.

Another proposed reform is to reduce the statutory loss ratio from 1.075 to 1.060. The immediate result of this change would be to increase crop insurance premiums.

Question. Have you determined what effect this change will have on the level of crop insurance participation? If so, what did you find?

Answer. There are no studies that unambiguously estimate what economists call the price elasticity of demand of crop insurance. The effect of this action would be to increase premiums by about 1.4 percent. A typical policyholder owed about $1,020 of farmer-paid premium in 1997. The increase would be about $14. This probably is not large enough to trigger widespread cancellations. Changes due to planted acres, yields, or price elections may have a greater effect on premiums than would this change.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be next week in this same room. We will hear the budget proposal from the Food

and Drug Administration and the Commodity Futures Trading Commission at that time.

Until then, the subcommittee will stand in recess.

[Whereupon, at 11:33 a.m., Tuesday, March 24, the subcommittee was recessed, to reconvene at 10:04 a.m., Tuesday, March 31.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

TUESDAY, MARCH 31, 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:04 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran and Bumpers.

COMMODITY FUTURES TRADING COMMISSION

STATEMENT OF BROOKSLEY BORN, CHAIRPERSON

ACCOMPANIED BY MADGE BOLINGER, DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order.

Today our subcommittee is continuing its review of the President's budget request for the next fiscal year. This morning we are considering specifically the request for funding of two independent agencies under the subcommittee's jurisdiction, the Commodity Futures Trading Commission and the Food and Drug Administration.

Because we have a vote that is scheduled to occur on the floor of the Senate at 10:30, I hope that we are able to complete action on the first panel which deals with the Commodity Futures Trading Commission, and then I will go over and vote. Senator Bumpers may very well be here at that time as well. We will either continue the hearing if there is a Senator here to chair it or temporarily suspend the hearing until I can return from the floor for that vote.

PREPARED STATEMENT

We have a prepared statement from Senator Bumpers which will be made part of the hearing record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BUMPERS

Mr. Chairman: All too often, people hurriedly refer to this subcommittee as the "Agriculture" subcommittee. Sometimes, if they are generous, they may refer to it as the "Agriculture and Rural Development" subcommittee. It is unfortunate that people generally fail to recognize that the title of this subcommittee ends with "And Related Agencies" which include the Commodity Futures Trading Commission and the Food and Drug Administration, both of whom are with us today.

Ours is also, perhaps, an unfortunate choice of a name to the extent that these two agencies are collectively considered as "Related Agencies". This term might suggest to some a relegation of importance to a level somewhere below our usual recognition of "Agriculture" or "Rural Development". Let me assure our guests and my colleagues on the Subcommittee on Agriculture, Rural Development, and Related Agencies, that the Commodity Futures Trading Commission and the Food and Drug Administration do hold responsibilities of great importance to our nation.

The CFTC may not be a household word to every American and there may be relatively few Americans who actively participate in futures trading. However, for anyone who has ever viewed (with fascination, I am sure) the complex workings of the futures pits and considered for a moment the effect of the numbers on the board to investors and financial security all around the world, the members and staff of the CFTC are not viewed as simply another agency.

The American economy is strong. Still, we hear rumblings of market instability on foreign shores and we have seen in recent years the effect market manipulation can have on a regional and global scale. As markets become ever more "global" in nature, the role of the CFTC takes on greater importance as a regulator whose mission it is to ensure protections in the marketplace for our investors and our producers.

The 1996 Farm Bill eliminated many of the traditional Farm Safety Net features that farmers had relied on for years to protect them from an unstable market place. The Risk Management Agency at USDA has the task of creating programs to reduce the farmer's risk from nature and, to an extent, from the markets. The CFTC also holds an important role in offering the farmer tools that will enable him leverage in the market place to secure a reasonable price for his products. The use of futures is complex and, to many unfamiliar with the practice, a frightening and potentially costly alternative. The CFTC has a place in working with the farmer as well as the professional trader to make certain that products on the futures exchanges are available in a manner meaningful and useful to all. To that extent, the CFTC plays a role other than as simply a "Related Agency" but with a real responsibility to "Agriculture and Rural Development".

The Food and Drug Administration is one of those agencies whose responsibilities are often unrecognized but are, in fact, of extreme importance. A loss of the protections to human health and safety afforded by this agency are uncomprehensible. No American can enter a grocery store, a pharmacy, or a hospital in which protections of the FDA are not in place. I further believe that no American could imagine the changes to his or her lifestyle that would occur if those protections were not in place.

The Food and Drug Administration has taken criticism in recent years over delays in drug approval and other items. The Food and Drug Modernization Act of 1997 may do much to correct some of those problems. Still, regardless of past criticism, I would not trade the security of our food, blood, and drug supplies in this nation for that of any other country on earth. As modern medicine advances, FDA must keep pace and it is the responsibility of this subcommittee to provide the resources to keep FDA in step with technology.

FDA, as with USDA, is going through a period of introspection, consolidation, and downsizing. Just as agencies experience growing pains during periods of growth, similar trauma occurs (usually in a more painful manner) in the event of contraction. The consolidation of the FDA regional field laboratories presents challenges but will provide a much more efficient agency with inherent cost savings. I support this consolidation and encourage the agency to move as rapidly as possible. I will do what I can on this subcommittee to provide the resources and direction necessary to effect these changes as quickly as are prudent.

Over the past several years, this subcommittee has provided consistent increases for FDA. I am sure that we will do what we can for the coming fiscal year to help FDA maintain its commitment to quality, protection, and safety. I note that the budget submission, again, proposes unauthorized user fees and we are all aware of the special problems such assumptions create. I admonish my friends in the Administration, just as I have to those in previous Administrations, that we should be presented with a budget submission that can be reasonably assumed to be enacted. If FDA truly expects to achieve a higher program level through the collection of new user fees, they should first secure those fees from the appropriate committees before suggesting a lower request for new budget authority. We want to be helpful, but we also demand cooperation.

Mr. Chairman, this is our last hearing for the fiscal year 1999 appropriations bill. As such, it is the last hearing I will attend in my capacity as a member of this subcommittee. Let me again express publicly my sincere gratitude for the opportunity to serve with you these many years and for your gracious manner in disposing your

responsibilities. You have always been honest and fair and truly a pleasure to work with. While there are some features of public life I will not miss, sharing a role on this subcommittee with you and all members, Republican and Democrat alike, is not one of them. I will miss all of you.

INTRODUCTION OF WITNESS

Senator COCHRAN. We are very pleased to have Ms. Brooksley Born who chairs the Commodity Futures Trading Commission as our first witness, and we have a copy of your written testimony which we appreciate very much. We will make that a part of the record in full and invite you to make any comments or summarize your statement in any way that you think would be helpful to the committee. We then will have an opportunity for some questions.

You may please proceed.

STATEMENT OF BROOKSLEY BORN

Ms. BORN. Thank you very much, Mr. Chairman. The Commission very much appreciates this opportunity to discuss the President's fiscal year 1999 budget request for the Commodity Futures Trading Commission.

With me today is Madge Bolinger who is the Director of the Commission's Office of Financial Management.

The Commodity Futures Trading Commission is a small agency with an important mission. It oversees the Nation's futures and option exchanges and the over-the-counter derivatives market. The Commission also supervises 64,000 commodity professionals who trade on the floor of the Nation's exchanges or represent customers. These markets have experienced explosive growth in the past decade.

The President's fiscal year 1999 budget request for the Commission is $63.4 million, with a staffing level of 600 full-time equivalents. This request represents a $5.3 million increase over fiscal year 1998, or approximately 9 percent. It calls for an additional 20 full-time equivalent staff-years over the fiscal year 1998 appropriation, or a 3-percent increase in staff.

Approximately $3.9 million of the increase is required for the Commission to sustain its current level of services, and the remaining $1.4 million would support the requested 20 additional staff-years. The staff increase would raise the Commission's staff to approximately the staff level it had in fiscal year 1992.

The Commission is responsible for ensuring the integrity of the Nation's futures and option markets, protecting customers from fraud and other trading abuses, monitoring the markets to detect and to prevent price distortions and manipulation, and encouraging the competitiveness and efficiency of the Nation's futures and option exchanges. Through effective oversight regulation, the Commission enables the commodity futures markets better to serve their vital price discovery and hedging functions in the Nation's economy.

The requested increase will be used to enhance the Commission's enforcement, market surveillance, and oversight presence in our rapidly changing and growing on- and off-exchange markets. The largest portion of the requested dollar increase will be dedicated to the Division of Enforcement, which will receive an allocation of 10

additional staff-years. The addition of these staff-years would, in effect, complete the reorganization of the division, which was begun in 1995. The division's new flexible organizational structure, which will be enhanced by the 10 additional staff-years, will allow the enforcement program to devote necessary staff to special matters such as quick strike cases and large, complex cases, including fraud and manipulation cases, without detracting from the Commission's strong enforcement presence throughout the industry.

The increase will also enhance the Commission's market surveillance program. Additional staff-years will be used to implement the Commission's new integrated market surveillance system and to maintain an effective surveillance program over the growing markets. A strong surveillance program is critical for the Commission to carry out its mission of detecting and deterring price manipulation and other major market abuses.

The requested increase will also provide the resources necessary to sustain our oversight over contract market practices and standards. The increase will provide the Commission with the resources necessary to address new product developments, new market linkages, new trading developments, and other innovations.

Overall, the increase in funding and staffing will strengthen the Commission and increase its ability to oversee the growing and vital futures and option markets that are critical to the Nation's economy.

As part of our commitment to maintaining strong futures and option markets, one of the Commission's top priorities in fiscal year 1997 and continuing into fiscal year 1998 has been to modernize and streamline its regulatory framework. The growth and change in our markets, as well as revolutionary technological developments, have necessitated a comprehensive review of the Commission's regulations. The Commission is seeking to eliminate undue regulatory burdens while continuing to provide an effective level of regulation and public protection.

Toward that end, the Commission has proposed or adopted a number of regulatory reform initiatives in the last year relating to exchange markets and commodity professionals, many of which are described in my written testimony.

An additional area of our regulatory reform efforts involves a review of our regulatory framework for over-the-counter derivatives instruments. It has been 5 years since the Commission exempted some types of OTC instruments entered into by sophisticated parties from provisions of the Commodity Exchange Act, other than prohibitions of fraud and manipulation.

Since that time, the OTC markets have grown dramatically both in size and in the diversity of the instruments offered. These developments have prompted the Commission to examine its approach to this market. The Commission plans to issue shortly a concept release which will invite comment on how best to achieve an appropriate balance between the need to ensure that U.S. entities have the opportunity to remain competitive in the global financial marketplace and the need to maintain adequate regulatory safeguards.

We look forward to the input of the industry, users of OTC derivative instruments, relevant regulatory authorities, and other interested persons, including members of this subcommittee, as we go

forward with our concept release and other regulatory reform initiatives.

We believe that the increase that the President has requested for fiscal year 1999 is essential for the Commission to fulfill its congressional mandate and to keep pace with growing complex and dynamic markets.

Thank you very much, and I will be pleased to respond to questions.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Madam Chairperson. We appreciate your being here and the fact that you have always been very willing to discuss with the committee matters that relate to the Commission's budget and the activities of the Commission. We will insert your prepared statement in the hearing record.

[The statement follows:]

PREPARED STATEMENT OF BROOKSLEY BORN

Mr. Chairman and Members of the Subcommittee: I am pleased to appear before you this morning to discuss the President's fiscal year 1999 budget request for the Commodity Futures Trading Commission ("CFTC" or "Commission"). In my testimony today, I will provide the Subcommittee with an overview of the proposed budget for 1999, discuss the need for additional resources for the Commission's programs and update you on highlights of fiscal year 1997, including the Commission's efforts to streamline its rules and procedures and to relieve unnecessary regulatory burdens while maintaining important customer protections.

REQUEST FOR APPROPRIATIONS IN FISCAL YEAR 1999

The President's fiscal year 1999 budget request for the Commission is $63.4 million. That sum represents an increase of $5.3 million (or nine percent) over fiscal year 1998 appropriations. Approximately $3.9 million of the increase is necessary for the Commission to maintain its current level of services and operations. The remaining $1.4 million increase would support the addition of 20 full-time equivalent ("FTE") staff years, a three percent increase in staffing. The budget request would provide the Commission with the resources needed effectively to perform its legislative mandate under the Commodity Exchange Act ("CEA" or "Act").

OVERVIEW OF FUNDING LEVELS AND OPERATIONAL EFFECTS

The Commission has a statutory mandate to oversee the nation's futures and option markets, including on- and off-exchange transactions in futures and options. The Commission is responsible for ensuring the economic utility of these markets by guarding the integrity of the markets, protecting customers from fraud and other trading abuses, monitoring the markets to detect and to prevent price distortions and manipulation, and encouraging the competitiveness and efficiency of the nation's futures exchanges. Through effective oversight regulation, the CFTC enables the commodity futures markets better to serve their vital functions in the nation's economy, price discovery and hedging.

The Commission also oversees 64,000 commodity professionals who trade on the floor of the exchanges or represent customers. Our goal is to ensure that these firms and individuals meet standards of fitness, maintain financial integrity, use proper sales practices and provide adequate risk disclosures to their customers.

For well over a century, futures transactions have enabled producers, merchandisers and processors of agricultural commodities to protect against adverse price movements. In recent decades, market innovations have expanded to include contracts for other physical commodities such as metals and energy products. In addition, the derivatives industry has developed new on- and off-exchange futures and option products that have given financial institutions and others tools to protect against currency fluctuations, equity index variations, and interest rate changes. The proven utility of these on- and off-exchange derivative transactions has resulted in phenomenal growth in their trading volumes.

Examples of this growth and the great expansion of the Commission's oversight and regulatory responsibility include the following:

Increased exchange trading volume.—The CFTC supervises all trading of futures and option contracts on U.S. futures exchanges. The commodity futures and option markets have experienced dramatic growth. Exchange futures and option trading has increased by 100 percent in the last decade (from 275 million to 555 million contracts). In the last year alone the number of futures and option contracts traded on designated U.S. contract markets grew from 499 million in 1996 to nearly 555 million in 1997, an increase of more than 11 percent. The Commission's regulatory program has encouraged this healthy growth by assuring market participants around the world that our markets are safe, fair and transparent.

Growth of over-the-counter derivatives.—The CFTC exercises oversight of the rapidly growing and evolving over-the-counter market in derivative instruments. The CFTC works with other U.S. financial regulators and with the international regulatory community to address disclosure and market integrity issues in the global market. This enormous market, currently estimated to have a notional value well in excess of $27 trillion world-wide, has emerged in the past decade.

Growing managed funds.—The CFTC regulates commodity pool operators ("CPO's") and commodity trading advisors ("CTA's"). Funds committed to professional management for futures trading have grown exponentially, from $115 million in 1975 to over $35 billion today, not counting hedge funds also registered as commodity pools. This area of financial investment includes a growing number of pension and mutual funds. The Commission has worked with industry groups and other regulators to improve and to simplify disclosure requirements which allow customers to make informed investment decisions.

Rapid innovation.—The CFTC approves all contracts traded on futures and option exchanges and all rules of such exchanges and the National Futures Association ("NFA"). Since 1986, the CFTC has approved over 450 new contracts for trading on exchanges. Many of these new, innovative contracts have brought new market users within CEA protection for the first time. The CFTC has worked closely with both the exchanges and industry representatives to assure that new contracts will create hedging opportunities and enhance price discovery and price basing of the underlying commodities.

Expanded Congressionally mandated responsibilities.—The CFTC's authority and responsibilities have grown substantially since the Commission was created in 1975. Congress passed the Futures Trading Practices Act of 1992 giving the CFTC a number of new responsibilities to ensure market integrity. Ongoing activities include enforcing the heightened audit trail standards for exchanges and improving the CFTC's own oversight and enforcement programs. In 1995 Congress reaffirmed these obligations by adopting a reauthorization of the Commission through fiscal year 2000.

Growing internationalization of the markets.—Financial and commodities markets are becoming increasingly global, further increasing the complexity of the CFTC's oversight responsibilities. The agency must respond promptly and effectively to international developments, such as the collapse of Barings Plc. and the issues surrounding Sumitomo Corporation's copper trading. The agency has ongoing responsibilities to ensure that its regulatory framework is capable of responding to the domestic implications of problems arising anywhere in the world. It has become a leader in encouraging international cooperation and improvement of regulation abroad.

Technology developments.—The exchanges, commodity professionals and users of the markets are turning to newly developed technology to cope with the huge growth in this industry. Likewise, the CFTC has had to augment its staff as well as its hardware and software to keep pace with the growth in the markets. Technology also poses regulatory challenges to the CFTC, including the need to police futures and option trading advice and sales offered illegally via the Internet.

CFTC RESOURCES

During the past four years, both the Administration and Congress have recognized the need for additional resources at the CFTC to maintain effective oversight over the growing and evolving futures and option markets. Accordingly, the CFTC has received increased appropriations to maintain current service levels from year-to-year, to provide additional resources to the Commission's Division of Enforcement and to permit investments in technology to increase the Commission's ability to conduct adequate market surveillance.

The proposed increase in funds for fiscal year 1999 is necessary to enable the Commission to keep pace with the rapid growth in volume and the profound changes resulting from novel transactions, new trading systems, new market practices, advances in technology, and the globalization of the markets. The additional

resources would be dedicated primarily to maintaining an effective enforcement, surveillance and oversight presence in these rapidly changing and growing markets. In addition, the Commission must remain responsive to technological developments, business changes, and market evolution so as not to burden innovation and financial market growth with regulatory inefficiencies and outmoded regulatory structures. The Commission began a comprehensive regulatory review and reform initiative in fiscal year 1997, which is ongoing in fiscal year 1998 and will continue into fiscal year 1999. Without the requested additional resources, the Commission would not be suitably equipped to carry out effective enforcement, market surveillance and regulatory reform.

Much of the requested increase will be dedicated to the Division of Enforcement, which will receive an allocation of ten additional FTE staff years. That allocation of resources would make the Division's employment level the strongest since fiscal year 1992. The addition of these staff years would in effect complete the reorganization of the Division, which began in 1995. The ten additional FTE's will be devoted to investigation and prosecution of matters involving fraud, quick-strike cases, and large, complex cases, including manipulation cases. The Division's new flexible organizational structure will allow the Enforcement program to devote necessary staff to respond appropriately without detracting from a strong enforcement presence across the industry.

The Commission's fiscal year 1999 budget request would also add five FTE staff years to further the Commission's market surveillance efforts. These FTE's are necessary to continue the effort started in 1997 to implement new software for the integrated market surveillance system and to maintain an effective surveillance program for a dynamic industry. One of the major enhancements of the system is the ability to obtain and analyze daily large trader option data. (Previously large trader option data was obtained on a weekly basis.) The system also has the benefit of reducing the overall reporting burden of certain commodity professionals, who will report large trader data only to the CFTC rather than to multiple exchanges. Full implementation of the new system, together with the Commission's current surveillance system, will enhance the Commission's ability to detect and deter price manipulation or other major market abuses.

The final five additional FTE staff years will be allocated to the Division of Trading and Markets. The Division of Trading and Markets has taken the lead in developing many of the regulatory reform initiatives that have been undertaken or are being considered by the Commission. A number of those initiatives are discussed in the Commission's highlights of fiscal year 1997 described below. Additional resources are needed to develop innovative regulatory approaches to address new product developments, market linkages, and trading mechanisms and to assure that clearing organizations, firms holding customer funds, and other commodity professionals operate safely and consistently with the public interest. The resources will also enhance Commission oversight of contract market standards and practices.

The requested increase in funding and staffing will strengthen the Commission and will increase its ability to oversee the growing and vital futures and option markets that are critical to our nation's economy.

HIGHLIGHTS OF FISCAL YEAR 1997

REGULATORY STREAMLINING

One of the Commission's top priorities in fiscal year 1997 and continuing into fiscal year 1998 has been to modernize and to streamline its regulatory framework. Much of the Commission's regulatory regime dates back to its early years as an agency. The explosive growth and change in our markets as well as revolutionary technological developments have necessitated a comprehensive review of the Commission's regulations. The Commission must ensure that its rules have adapted to changes in the marketplace and continue to provide an effective level of regulation and public protection. Toward that end, the Commission has proposed or adopted a number of regulatory reform initiatives in the last year, some of which I would like to highlight here today.

Fast-Track Review for Contract Designations and Rule Changes

In fiscal year 1997, the Commission implemented new "fast-track" procedures for processing certain contract designation applications and exchange rule changes. These procedures significantly streamlined the review process for most new exchange contracts and many exchange rules, permitting approval within ten days for many types of contracts and 45 days for certain other contracts.

Prior to the adoption of fast-track procedures, the Commission had already reduced its average contract approval time to about 90 days. During the seven months

of fiscal year 1997 that the fast-track rules were in place, 15 new contract designations were filed with the Commission, seven of which were eligible for fast-track treatment. The Commission approved all eligible contracts within the fast-track period. Even contracts not subject to the fast track procedures—such as stock index futures contracts, which must be submitted to the Securities and Exchange Commission ("SEC") for comment—were approved in record time. For example, during fiscal year 1997, the Commission approved the Chicago Mercantile Exchange's ("CME") E-Mini S&P 500 contract and the Chicago Board of Trade's ("CBOT") Dow Jones Industrial Average contract within days of receiving the statutorily required SEC comment letters.

Reporting and Disclosure Requirements

The Commission also streamlined many of its reporting and disclosure requirements. The agency amended its reporting requirements to permit filing by large traders of CFTC Form 40, Statement of Reporting Trader, only when requested by the Commission rather than annually. In an important development for CFTC registrants who are also SEC registrants, the Commission adopted rule amendments to harmonize certain financial reporting requirements with the requirements of the SEC. The Commission also approved in principle two-part risk disclosure documents for commodity pool offerings, which potentially would highlight the core information required to be provided to customers.

In early September 1997, the Commission proposed amendments to its rules reducing the risk disclosure obligations of futures commission merchants ("FCM's") and introducing brokers ("IB's") as to financially sophisticated customers. The Commission approved the rules on February 20, 1998, and expects the rule amendments to speed the account opening process for the customers identified in the rule. The rule provides flexibility to FCM's and IB's to design their own disclosure of risk by eliminating certain mandatory risk disclosure information and procedures. This proposal responded directly to industry calls to permit different regulatory treatment of sophisticated customers where appropriate.

Electronic Media

The Commission has adopted a number of initiatives designed to take advantage of the increased efficiencies and reduced costs made possible through the use of electronic media. In June 1997, the Commission paved the way for FCM's to use electronic media to communicate with their customers. The Commission's Advisory permits FCM's to deliver confirmations and account statements solely by electronic media to customers who consent to electronic transmission in lieu of receiving paper documents. Also in June, the Commission authorized CTA's and CPO's to provide risk disclosure documents to their customers via electronic media. The Commission's interpretation enables CPO's and CTA's to provide customers with a risk disclosure summary and a hyperlink connection to the entire risk disclosure document.

The Commission also adopted measures to permit the electronic filing of documents with the Commission. In April 1997, the Commission adopted a rule allowing CTA's and CPO's to file their required disclosure documents with the Commission electronically. The Commission has also undertaken a program to permit FCM's to file required financial reports with the Commission electronically. These electronic media initiatives should increase the timeliness of information flow, reduce the administrative costs of commodity professionals and allow members of the industry and their customers to reap the benefits of technological advances.

Streamlined Requirements for Commodity Professionals

The Commission's streamlining efforts have brought significant benefits to FCM's, CTA's and their customers. For example, in June 1997, the Commission approved an interpretation permitting streamlined procedures for allocation of customer orders which are bunched for execution by CTA's. The Commission provided relief to FCM's with respect to the capital treatment of short option positions to permit more FCM's to carry such positions for customers and to facilitate efficient use of capital without creating undue financial risk.

Delegations to the National Futures Association

To improve the efficient use of Commission resources, the Commission has focused on whether it could delegate additional functions to the NFA. The NFA is a self-regulatory organization of commodity professionals designated by the Commission under the CEA to perform certain regulatory functions. During the past year, the Commission delegated additional authority to NFA in several areas including registration decisions relating to floor brokers and floor traders with disciplinary histories, various registration and processing functions relating to non-U.S. firms, and the review of disclosure documents required to be filed by CPO's and CTA's.

ENFORCEMENT

During fiscal year 1997, the Commission focused enforcement efforts on matters involving allegations of fraud in a variety of contexts. For example, the Division of Enforcement pursued cases against commodity professionals which failed to register with the Commission, as required, and which violated the anti-fraud provisions of the Commodity Exchange Act. The Division filed cases alleging fraud in the offer and sale of various off-exchange instruments, including precious metals contracts and foreign currency contracts marketed to the general public. The Division also pursued cases against firms and individuals using fraudulent advertising and solicitations.

In fiscal year 1997, the Division of Enforcement also investigated allegations related to certain hedge-to-arrive contracts involving grain elevators. As a result, in fiscal year 1997 the Commission filed three separate administrative complaints alleging violations of various provisions of the CEA and Commission regulations in connection with certain of these hedge-to-arrive contracts. The Commission filed an additional complaint in fiscal year 1998. The Division of Enforcement continues to investigate other individuals and entities in connection with hedge-to-arrive contracts.

CONTRACT DESIGNATIONS

In fiscal year 1997, the Commission reviewed and approved 51 applications for new futures and option contracts. Several of these contracts reflect innovative approaches designed to meet specialized hedging needs. For example, the Commission approved contracts based on inflation-indexed debt instruments issued by the U.S. Treasury, including the CBOT inflation-indexed Treasury bond, long-term Treasury note, and medium-term Treasury note futures and option contracts. These contracts, the first based on inflation-indexed debt securities, were designed specifically to deal with the unique hedging needs of institutions exposed to risk arising from holding the inflation-indexed instruments recently issued by the U.S. Treasury.

INTERNATIONAL REGULATORY COOPERATION

The CFTC, along with British and Japanese authorities, co-sponsored an international regulators conference on physical delivery markets in London in November 1996. Regulators from 17 countries issued a Communiqué agreeing on certain basic principles of regulation of such markets. The participants also agreed on a year-long work program for the development of international "best practices" standards on contract design, market surveillance, and information sharing. Such best practices standards were agreed upon at a meeting of international regulators on October 31, 1997, in Tokyo. To date 17 regulators from 16 countries have subscribed to the standards. International best practices standards help to protect the U.S. markets from the impact of events on foreign markets due to poor market regulation abroad. They also assist in leveling the international regulatory playing field for markets and commodity professionals.

ESTABLISHMENT OF OFFICE OF INTERNATIONAL AFFAIRS

In late July 1997, the Commission created, within the Office of the Chairperson, an Office of International Affairs to enable the Commission to continue its leading role in international regulatory initiatives and to keep abreast of global changes. Over the past several years, there has been enormous growth in the international marketplace. New exchanges have been established around the world, foreign trading volume has grown, new regulatory bodies have been created abroad, and the need for cooperation and understanding among international regulators and exchanges has become paramount. The Office of International Affairs will enhance the Commission's ability: (1) to respond quickly to market crises that have global systemic implications; (2) to remain an effective supervisor in a global marketplace where no one regulator has all the information or resources to regulate its markets or its firms; and (3) to eliminate unnecessary impediments to global business while preserving core protections for markets and customers. The Office of International Affairs will play a key role in an evolving process toward international harmonization of regulations which ensure market innovation and access while maintaining needed customer and market protections.

AGRICULTURAL TRADE OPTIONS

Agricultural options—both on- and off-exchange—were traded in the United States at least from the time of the Civil War until the 1930's. However, concerns about fraudulent sales practices, failure to perform over-the-counter obligations, and

the use of exchange-traded options to manipulate the prices of agricultural commodities prompted numerous industry and government efforts to limit or eliminate trading in agricultural options. In 1936, Congress banned all sales of options on certain agricultural commodities listed in the CEA. In 1982, Congress lifted the 1936 statutory ban, allowing the Commission to permit options on certain agricultural commodities listed in the Act. The Commission permitted exchange trading in these agricultural options in 1984. However, the regulatory ban on off-exchange agricultural options remains.

In May 1997, the Commission's Division of Economic Analysis issued a White Paper on this issue. The paper analyzed: (1) the current regulatory environment; (2) recent developments in agriculture that have expanded the need for risk-shifting strategies; (3) the benefits and risks of agricultural trade options; and (4) possible ways to strike a balance between the benefits and the risks. The staff analysis identified, for the consideration of the Commission, risks and benefits of lifting the ban. The Commission sought public comment on the issue through a Federal Register notice and by holding meetings in Bloomington, Illinois and Memphis, Tennessee.

The Commission published a proposal in the November 4, 1997 Federal Register to establish a three-year pilot program that would lift the ban on certain agricultural trade options subject to regulatory protections. Under the rules as proposed, entities which handle the agricultural commodity in normal cash market channels would be able to offer to buy or sell options on that commodity with other commercial counterparties for business-related uses. These options would require physical delivery of the commodity if exercised and could not be repurchased, resold or otherwise canceled prior to the expiration or exercise of the option. Entities offering to buy or sell the options would be required to become registered as agricultural trade option merchants, to report to the Commission on their transactions, to provide their customers with disclosure statements and to safeguard their customers' premiums. As a condition of registration, such entities would be required to meet a financial requirement, successfully complete a proficiency exam and periodically attend ethics training. The Commission also proposed to exempt from the prohibition and the other proposed rules described above individuals or entities which have a net worth in excess of $10 million. Finally, the Commission proposed to remove the prohibition on the offer and sale of agricultural options for physicals on designated exchanges. The Commission is currently considering all comments received on its proposal and expects to conclude its consideration of the matter soon.

DELIVERY SPECIFICATIONS FOR CHICAGO BOARD OF TRADE FUTURES CONTRACTS

In December 1996, the Commission voted unanimously to notify the CBOT under section 5a(a)(10) of the CEA that the delivery terms of the CBOT corn and soybean futures contracts no longer accomplish the statutory objectives of "permit[ting] the delivery of any commodity . . . at such point or points and at such quality and locational price differentials as will tend to prevent or diminish price manipulation, market congestion, or the abnormal movement of such commodity in interstate commerce." That decision was based on a substantial reduction of the delivery capacity in Chicago under the CBOT contracts.

The Commission's notification gave the CBOT until March 4, 1997, to submit proposed amendments to its corn and soybean contracts to achieve the statutory objectives. On April 15, 1997, the CBOT approved proposed contract changes. Nearly 700 comments were received by the Commission relating to the CBOT's proposed delivery amendments, many expressing objections. On September 15, 1997, the Commission published a proposed order to change and to supplement the CBOT's proposed amendments for the corn and soybean futures contracts. After providing the CBOT an opportunity to be heard, the Commission issued its final order on November 7, 1997.

Since issuance of the final order, the CBOT has submitted new terms for its corn and soybean futures contracts for the Commission to consider. The CBOT's board of directors, on February 10, 1998, approved additional revisions to its current proposal. The CBOT's full membership approved the additional revisions on March 19, 1998. The revised proposal has since been submitted to the Commission and is currently under review.

AUDIT TRAIL AND DUAL TRADING

Accurate audit trails have been an aim of the Commission since its inception. In the past year, the Commission reviewed compliance with statutory and regulatory requirements regarding audit trails and dual trading in order to assure that trade monitoring systems are in place which, to the extent practicable, enable effective detection, deterrence, and prosecution of trading abuses, as required.

During 1997 the Commission took action on all pending exchange petitions for exemption from the statutory dual trading ban provisions of the CEA, except for the New York Mercantile Exchange's ("NYMEX") petition. (NYMEX asked for a delay in Commission action in light of its recent relocation to new facilities with new audit trail systems.) The Commission issued unconditional dual trading exemptions to the Commodity Exchange, Inc. ("COMEX"), the Coffee, Sugar & Cocoa Exchange ("CSCE") and the New York Cotton Exchange ("NYCE"), each of which demonstrated that it met the statutory requirements.

On November 7, 1997, the Commission issued separate proposed orders granting the CME and the CBOT conditional dual trading exemptions in 7 and 13 affected contract markets, respectively. In addition, the Commission granted the CME an unconditional dual trading exemption for its S&P 500 futures contract market. The Commission's proposals to grant conditional exemptions for the other affected contract markets were based on the Commission's finding that the exchanges' trade monitoring systems for these markets did not meet all the requirements of the Act and Commission regulations. Specifically, neither exchange was able to demonstrate that 90 percent or more of its imputed trade times are reliable, precise, and verifiable as demonstrated by being imputed within a timing window of two minutes or less. Both the CME and the CBOT were provided opportunities to present written and oral comments to the Commission, and each has done so. The Commission expects to issue final orders for both exchanges shortly.

USE OF THE INTERNET

The Commission has taken several steps designed to make information and assistance more available to the general public. In addition to its Internet monitoring and surveillance program, commenced in fiscal year 1996, the Commission has used its home page on the World Wide Web as a means of providing the public with brief summaries of the types of abuses commonly investigated and prosecuted by the CFTC. The Commission's website also provides descriptions of recently filed cases and encourages the public to report suspected abuses by providing an electronic questionnaire that can be filled out by visitors to the website. The website also includes information about individuals and firms who are the subjects of pending enforcement actions or who have been found liable for violating federal commodities laws in an administrative or a civil action previously brought by the Commission. Similarly, the website includes the names of individuals and firms with sanctions in effect. Finally, the website provides individuals with the Commission's entire reparations complaint package.

AUTOMATION OF ADMINISTRATIVE FUNCTIONS

During fiscal year 1997, the Office of Proceedings implemented a new case tracking system. The new system tracks the progress of each case from receipt through disposition in the Office of Proceedings, appeal to the Commission and appeal to Federal court. This system not only assists case management within the agency, but allows the Office of Proceedings to provide better information on the status of cases in response to public inquiries.

The Commission took additional steps during fiscal year 1997 to make more extensive use of automation to streamline financial and fiscal processing. For example, the Commission now has the capability to transmit electronic disbursement requests to the Philadelphia Finance Center, thereby eliminating the need for magnetic tape generation and costs associated with overnight delivery. In addition, the Commission can now make disbursements directly to financial institutions for vendors and employees and has implemented an electronic travel manager system that reduces paperwork and increases productivity.

COMMISSION YEAR 2000 COMPUTER COMPLIANCE INITIATIVES

The Commission has been engaged in conducting analyses and taking corrective actions related to the so-called Year 2000 problem since 1993. The Commission's internal systems needed to be Year 2000 compliant at that time in order to process futures and option contracts with expiration and delivery dates in the year 2000. The Commission implemented modifications to our mission-critical mainframe systems to accomplish correct turn-of-the-century processing. At that same time the Commission adopted a policy that all new systems developed would be Year 2000 compliant.

In response to OMB Bulletin 96–02, our other mainframe systems are also being reengineered and converted to Year 2000 compliant client/server-based systems. That work is scheduled to be completed by September 1999. During the next 24

months, we will be reviewing, correcting and testing equipment and software so as to ensure the Commission's compliance.

The Commission is also working with the regulated industry and other regulators on Year 2000 compliance matters. Last year, the Commission contacted each of the futures exchanges about its responsibilities as a self-regulatory organization ("SRO") to ensure internal compliance, as well as the compliance of its member firms. More recently the Commission has requested that SRO's produce additional materials that will demonstrate such compliance. In addition, the Commission has sent a questionnaire to FCM's asking them to report material facts on their compliance plans.

Finally, the Commission is working with other regulators, the Futures Industry Association and the Securities Industry Association to develop stress testing for computer systems in advance of the year 2000. This cooperative effort should help determine domestic and global preparedness of the financial markets.

PENDING LEGISLATION

Last year I expressed the Commission's concerns with legislation pending before the Senate and House Agriculture Committees (S. 257 and H.R. 467, respectively) to amend the CEA. In the Commission's view the bills, if adopted, would result in pervasive deregulation of our futures and option markets, posing dangers to the public interest. While both bills remain pending before the Senate Committee on Agriculture, Nutrition, and Forestry and the House Committee on Agriculture, we understand that no action is currently scheduled. The Commission has addressed many of the issues raised in the bills and, as illustrated above, has adopted regulatory reform measures to meet many of the concerns underlying the bills.

The Commission has reconstituted its Financial Products Advisory Committee ("FPAC") to serve as a forum for industry members to discuss the Commission's regulatory reform proposals. The Commission welcomes any regulatory reform suggestions from the industry, market participants, members of Congress and other interested persons.

Separately, the CFTC has been monitoring the progress of the Financial Services Act of 1997 (H.R. 10). The Commission's review of the proposed legislation has revealed that it could create conflicts with the CEA, and the Commission has recommended that the bill should include a general savings clause making clear that the legislation is not intended to affect the provisions of the CEA or the jurisdiction of the CFTC.

CONCLUSION

The Commission appreciates this opportunity to report to the Subcommittee on its accomplishments of the past year and to reiterate its commitment to fulfilling its statutory mandate to oversee the United States' vibrant futures and option markets. As we look ahead to fiscal year 1999, the Commission seeks additional appropriations to complete its restructuring of the Division of Enforcement, to improve its market surveillance abilities, and to respond to the changes in the markets with adoption of regulatory reform initiatives. We look forward to working with Congress on these matters, and I would be happy to respond to any questions you may have.

Thank you.

BIOGRAPHICAL SKETCHES

BROOKSLEY BORN

Brooksley Born was sworn in as Chairperson by Acting Chairman John E. Tull on August 26, 1996. Ms. Born was nominated by President Clinton on May 3, 1996, and confirmed by the Senate on August 2, 1996, for a term expiring in April, 1999.

Ms. Born practiced law at the Washington, D.C., firm of Arnold & Porter from 1965 until her appointment to the CFTC. As a partner in the firm, Ms. Born specialized in representing institutional and corporate clients in complex litigation, primarily in the federal courts, and in futures regulation matters.

Ms. Born is an active member of the District of Columbia Bar and the American Bar Association (ABA), having served on the Boards of Governors of both organizations. She currently serves on the Boards of the American Bar Foundation and the National Women's Law Center.

Ms. Born was in 1972–1973 an Adjunct Professor of Law at Georgetown University of Law Center and a Lecturer at Law at Columbus School of Law, Catholic University of America, in 1972–1974.

A native of San Francisco, California, Ms. Born received her A.B. degree from Stanford University in 1961 and her Juris Doctor degree from Stanford Law School in 1964, where she graduated first in her class and was President of the Stanford Law Review. She is a member of Order of the Coif. She has also been honored by the National Association of Public Interest Law, the National Legal Aid and Defender Association, and the National Women's Law Center. She received the Woman Lawyer of the Year Award from the Women's Bar Association of the District of Columbia in 1981.

MADGE A. BOLINGER

Madge A. Bolinger has served as the Director of the Office of Financial Management since 1987.

A native of Massachusetts, Ms. Bolinger began her Federal career with the Commodity Futures Trading Commission in 1976 following receipt of a Bachelor of Science degree from Miami University. Prior to her appointment as the Director, Ms. Bolinger held positions in budget and program analysis and automated data processing.

IMPACT OF TOKYO COMMUNIQUE

Senator COCHRAN. Madam Chairperson, we notice that in your statement, you referred to an international set of standards that were discussed and were the subject of a communique—the Tokyo Communique I think it is called—relating to the 16 countries that met to consider uniform standards in this regulatory area of responsibility.

What, if any, budget impact is there on the Commodity Futures Trading Commission that would flow from these standards?

Ms. BORN. I do not think that there is any budget impact from the standards, Mr. Chairman. The standards that were adopted as best practices standards by the world's regulators of leading commodity markets are already complied with by the Commission and consistent with the Commodity Exchange Act. Indeed, many of the principles in the Commodity Exchange Act have been incorporated into those guidances and are now adhered to by the other 17 countries.

LOSING BUSINESS TO OVERSEAS EXCHANGES

Senator COCHRAN. One of the problems that was brought to my attention within the last year was the concern by some of the exchanges here in the United States that we were losing business to overseas exchanges. Has that been reversed or does that continue to be a problem, or is it a problem that is serious and should have the attention of the Congress?

Ms. BORN. In fiscal year 1997, there was no further erosion of the U.S. portion of world trading in these instruments. In fact, the U.S. exchanges contract volume increased by 11 percent during fiscal year 1997, and that was approximately the level of growth abroad as well.

Senator COCHRAN. You mentioned that most of the new money that would be appropriated under this request would go to enforcement, not all, but a substantial amount in terms of the FTE's and total dollar allocation.

Is there a major problem of any kind that you are investigating now or do you foresee the need for any special enforcement activity? You mentioned market manipulation as a possible area that

could receive additional attention. Is that the only area that troubles you?

Ms. BORN. No; fraud is a pervasive problem in our jurisdiction as well. We just issued yesterday a consumer warning about prevalent fraudulent schemes relating to foreign currency markets which are being advertised over radio and through the Internet and by telemarketing which are targeting retirees and various immigrant populations, encouraging them to invest their savings in the foreign currency markets. Of course, the money disappears rapidly.

Senator COCHRAN. Do you have jurisdiction similar to the Federal Trade Commission or other Federal agencies where you can bring your resources to bear on practices like that, even though these may not be exchanges? We normally think of the Commodity Futures Trading Commission as dealing with futures traders operating out of Chicago or New York or some of the other major cities. What is the opportunity that you have or the power that you have to reach out and do something about things like that?

Ms. BORN. Well, the statute requires that futures and option contracts generally are traded on exchanges. So, we can bring enforcement actions against what we call bucket shops, that is, confidence artists who are selling off-exchange futures or option contracts illegally. We can bring actions against them on two grounds. One is fraud and the other is the fact that they are trading off exchange. There are some limitations to our over-the-counter jurisdiction, but we certainly can go against bucket shops.

Senator COCHRAN. Do you find yourself cooperating with the Department of Justice or other Federal agencies in this effort?

Ms. BORN. Very much so. We often cooperate with the Department of Justice and the U.S. Attorney's offices in the areas where we are investigating bucket shops or Ponsi schemes and proceed in cooperation with them, they bringing criminal actions which we cannot bring, and we bringing civil actions which we do have power to bring. In addition, we cooperate with State securities commissioners, with the SEC, with the banking regulators, and others as appropriate.

OVER-THE-COUNTER DERIVATIVES MARKET

Senator COCHRAN. One other over-the-counter activity that we have had brought to our attention is the possible conflict with the Securities and Exchange Commission regulations for dealers that are active in the over-the-counter derivatives market. What can you tell us about that and the plan that the CFTC has, if any, to deal with this conflict?

Ms. BORN. Well, the SEC published proposed rules at the end of the year that would regulate certain over-the-counter derivatives dealers. Based on a GAO report in 1997, the SEC has jurisdiction over approximately 1.4 percent of the instruments that are traded in the over-the-counter derivatives markets—that is, options on securities and options on securities indexes. We have jurisdiction over other instruments.

We were quite concerned with the SEC's proposal because it would extend over instruments that are within our jurisdiction and it would indeed make certain over-the-counter instruments permis-

sible for over-the-counter derivatives dealers to trade in that we have forbidden under our statute and regulations.

We did put in a comment letter to the SEC pointing out these problems and urging the need for regulatory cooperation and coordination on this matter, suggesting that each agency should act within its own jurisdiction but try to coordinate our actions.

We also at the same time announced that we are planning to release a concept release on our over-the-counter derivatives regulations. The last time we acted as a Commission in this area was in 1993 when we adopted a certain reduced regulatory regime for specified over-the-counter derivatives instruments, and we plan within the next month to issue a concept release reaching out to the market, the over-the-counter derivatives dealers, and the end users of those derivatives to ask them whether our regulations adopted 5 years ago still are appropriate for a market that has grown tremendously during that period.

NEW SYSTEM FOR MARKET SURVEILLANCE

Senator COCHRAN. One of the other areas you say you need additional funds or you plan to use the additional funds in the budget request is for market surveillance, and you talk about a software system that will require some additional FTE's to put in place and to implement. This is a new system, as I understand it.

Could you tell us a little more about what that is for and why the new system is needed?

Ms. BORN. Certainly. This was a system for which all the funds were obligated in 1996 and which is an ongoing project that will be completed in fiscal year 2000. It was designed to upgrade our market surveillance by permitting the Commission to receive not only daily reports from futures commission merchants on large futures positions of the accounts they carry, but also large options positions, so that the computer system will then be able to analyze the overall position of large traders in our markets. This is part of a very significant program in the Commission to detect market manipulation in its incipiency and to try to move in quickly to deter any further price distortion or problems coming from attempted price manipulation.

Senator COCHRAN. When we mention the word "computer," I think about the fact that some agencies are doing better than others in getting ready for the year 2000 and the implications for the computer systems.

Are you spending any amount of this year's funds to prepare for that, and if not, why not?

Ms. BORN. We are indeed. Our agency identified the year 2000 problem in 1993, earlier than some agencies because we had to think about futures contracts out into the future, and realized that soon we would be faced with futures contracts expiring in the year 2000. So, we took immediate steps to get our market surveillance and contract market systems compliant with the year 2000 or to adopt plans to get them compliant. We propose to have all our systems compliant by June 1999.

We are also working very closely with the exchanges and the National Futures Association and the Futures Industry Association to

make sure that both the exchanges and the 64,000 commodity professionals are year 2000 compliant by the year 2000.

COST OF PREPARING FOR YEAR 2000 TRANSITION

Senator COCHRAN. What do you estimate—or can you estimate—the total cost of preparing for the year 2000 transition? Is there any way to do that?

Ms. BORN. For our markets and our traders, I think it will be many billions of dollars. I do not have an estimate.

Senator COCHRAN. What about the agency itself? Is there a way to identify the costs that have been sustained or that will be between now and 2000?

Ms. BORN. We could certainly attempt that. Some of the costs may be difficult to determine as they go back to 1993. In addition, some of the costs are included in the overall costs associated with our compliance with OMB's mandate to move from a mainframe computer to a client server system which has been a more or less simultaneous effort. So, it may be a little hard to pare out of the overall reorganization that part that relates just to the year 2000 computer compliance issue, but we could make an attempt.

STREAMLINING OPERATION OF THE AGENCY

Senator COCHRAN. I know that you have been trying to streamline and make more efficient the operation of the agency, and you have talked about that in your statement.

One of the things that you have done is to delegate some additional functions to the National Futures Association. I know that has been a subject of some interest for several years now. Would you judge that to have been a successful effort? Have these steps enabled the Commission to still maintain its regulatory supervision but at the same time maybe achieve some savings in the operation of the Commission?

Ms. BORN. Yes, indeed; I think it has been a great success. The NFA does a wonderful job in the functions that we have delegated to it. What we have tended over the years—and this is also true in the last year—to delegate to the NFA are those tasks under our jurisdiction which involve very staff-intensive efforts like registration of the 64,000 commodity professionals, reviewing all the disclosure documents that those professionals are required to prepare whenever there is any significant change in their operations.

By delegating those very staff-intensive activities, I think we have been able to keep our staff at a relatively small size. If we get the increase we are requesting now, we will be only at the level we were in 1992, and that, despite enormous increases in the markets we are overseeing and the number of people we are overseeing as well.

FRAUD OR ABUSE IN OFF-FLOOR TRANSACTIONS

Senator COCHRAN. I understand the Commission is considering a proposal to permit noncompetitive, off-floor transactions, that is, allowing exchanges to adopt rules for sophisticated market participants to privately negotiate the terms of large transactions and then report the transactions to the exchange.

Do you think there are systems in place to protect the exchanges and customers against fraud or abuse in these transactions?

Ms. BORN. We actually do not have any proposed rules out. What we put out, a couple of months ago, was a concept release, reaching out to the exchanges, to commodity professionals, and to big traders, asking whether they would see a benefit to our changing our rules to allow exchanges to permit this kind of activity, and if so, what kinds of protections would be necessary. The comment period is still open. I think we put it out originally for 60 days, but have gotten a request to keep it open another 30 days.

So, I cannot answer that question yet, Mr. Chairman.

Senator COCHRAN. The jury is still out.

Ms. BORN. Indeed.

Senator COCHRAN. Well, I appreciate so much your testimony this morning. It has been very helpful to our understanding the budget request and what the funds will be used for if we are able to approve them, and I hope we can. I know the work of the Commission is very important. The integrity of the exchanges is important, and the process can be very helpful to agriculture producers and consumers and our Nation's economy as well, all tied to the successful operation of this important agency.

SUBMITTED QUESTIONS

We think you have done an excellent job as chair of the agency and we commend you for that. Thank you very much for your cooperation and you are dismissed. We will submit additional questions to be answered for the record.

We will suspend the hearing temporarily while I go over and vote on this amendment to our budget resolution, and I will be back soon.

[A brief recess was taken.]

[The following questions were not asked at the hearing, but were submitted to the agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

REGULATORY STREAMLINING

Question. One of the efforts undertaken by the Commission was the expedited review of new contracts and exchange rule changes. How has this "fast-track" procedure for processing contract market designation applications and exchange rule amendments been received by the futures exchanges and employees of CFTC responsible for implementing the procedure?

Answer. Since its implementation, the vast majority of new contract proposals were filed, and ultimately approved, under the fast-track procedures. Since fast-track went into effect, 45 new contracts have been approved, of which 37 were deemed approved under the fast-track procedures. The seven non-fast-track approvals included five equity index contracts which were not eligible for fast-track, two currency contracts which the exchange removed from fast-track procedures, and one contract which was approved under regular procedures before the end of the fast-track period. Two of the equity index contracts were approved in 52 days, and the other two were approved in 77 days. The currency contracts were approved in 70 days. In that same period, over 100 rule changes have been submitted, of which about half were submitted under the fast-track procedures. Many of the submissions, although eligible for fast-track treatment, were made under the regular procedures of regulation 1.41(b) at the discretion of the submitting exchange. Rule changes approved to date that were submitted under fast-track were either deemed approved in 45 days, as provided by the fast-track procedures, or they were approved sooner by the Commission under its regular review procedures.

Question. What problems, if any, has reducing the approval time for new contracts and rule changes to anywhere from 10 to 45 days presented to the futures exchanges and the Commission?

Answer. The Commission's staff is reviewing the fast-track procedures to determine if any modifications are warranted. In general, the fast-track provisions appear to be working well both for the futures exchanges and the Commission. Accordingly, we would expect that any modifications would be nonsubstantive and would be designed to address primarily technical problems with the procedures.

Question. What are the eligibility requirements for fast-track treatment of a new contract or rule change?

Answer. Filings under fast-track are at the discretion of the exchange. New contract applications eligible for 10-day fast-track procedures include: (1) futures contracts using cash settlement rather than physical delivery, based on any commodity except those covered under the CFTC/SEC Accord, such as stock index and corporate bond contracts and certain enumerated agricultural commodities; (2) physical delivery futures contracts on major currencies; and (3) options on futures. New contract applications eligible for 45-day fast-track include physical delivery and cash-settled futures and option contracts based on any commodity except those covered under the CFTC/SEC Accord. Under the fast-track procedures, an exchange may list a contract for trading on the "effective date," which is the day following the end of the 10- or 45-day period, unless the date is extended or fast-track review is ended. Under fast-track, the initial 10- or 45-day effective date may be extended once for an additional 30 days. For applications not meeting fast-track requirements, or if requested by the exchange, fast-track review is ended and the regular review procedures for new contract applications apply.

Question. How, if at all, has this "fast-track" procedure improved the ability of the futures exchanges and the Commission to conduct their business?

Answer. The fast-track procedures were designed to address concerns expressed by US futures exchanges about Commission contract approval time rather than to improve the Commission's conduct of its business. The exchanges had indicated that faster contract approval times would enhance their global competitiveness by enabling them to bring innovative products to market more quickly. The fast-track procedures, therefore, should foster the domestic exchange's competitiveness.

The fast-track procedures also should provide the exchanges with more certainty about the likely approval date of contracts awaiting Commission approval. With more precise information about possible approval dates, the exchanges can better make necessary arrangements to launch the new products, such as education and marketing efforts, computer programming, as well as possible redesign of the trading floor.

Question. CFTC has adopted several initiatives to encourage the use of electronic communication of information, such as filing required disclosure documents and required financial reports with the Commission electronically, and delivering monthly statements, trade confirmations, and risk disclosure documents to consenting customers electronically. How have these efforts served to streamline regulation?

Answer. The Commission, like most federal regulators, developed many of its regulations at a time when almost all formal communication took place in a written, hard copy form. In recent years, however, technological advances that foster faster, more efficient communication have transformed business practices. Both Commission registrants and their customers have discovered the advantages of electronic communication for day-to-day business transactions. As a result, the Commission initiated a process of analyzing its regulations for unnecessary limitations on electronic communication. Where adequate measures exist to safeguard its regulatory interests, the Commission has increased the communication options available to registrants and their customers by permitting them to use electronic communication in fulfilling regulatory obligations. By moving toward a regulatory framework that is more technologically neutral, these initiatives permit registrants to respond more quickly to ongoing advances in communication technology.

Question. How many commodity trading advisors, commodity pool operators, futures commission merchants and customers have participated in these programs so far?

Answer. Two general types of communication are affected by the Commission's electronic communication initiatives: communication between registrants and their customers and communication between registrants and the Commission. The initiatives affecting the first category have been in place for less than a year, and the Commission does not have substantial data on either the number of registrants who have developed programs to communicate eligible documents to customers electronically or the number of customers who have agreed to accept electronic communications in lieu of hard copy disclosure.

The initiatives affecting communications between registrants and the Commission have been in effect for a little more than a year. During this period, approximately 18 commodity pool operators or CPO's, and 86 commodity trading advisors, or CTA's, have electronically submitted disclosure documents for Commission review. In addition, Commission staff have been communicating their comments on these draft disclosure documents electronically to the CTA's and CPO's. As a result, the overall efficiency of the review process has been materially enhanced.

As of March 31, 1998, there were 225 firms registered as futures commission merchants, or FCM's, and seven were filing financial reports electronically with the Commission as part of a testing phase. The Commission anticipates that, by the end of April 1998, approximately 54 FCM's will be filing their financial reports electronically, and more will be added during the remainder of 1998.

Question. Do you anticipate that all reporting will be done electronically within the next fiscal year?

Answer. No. The Commission's current policy is that the use of electronic communication should be voluntary, not mandatory. In the short term, it is unlikely that all eligible registrants and their customers will elect to use the electronic communication option.

In an effort to minimize development costs incidental to the Commission's initiative for electronic filing of financial reports by FCM's and introducing brokers, or IB's, the Commission is collaborating with two futures exchanges that have already developed an electronic filing system for their members. The Chicago Mercantile Exchange, or CME, and the Chicago Board of Trade, or CBT, jointly developed a software program called WinJammer that permits electronic filing of financial reports with the exchanges. The Commission is also using the WinJammer software for its electronic filing system. The National Futures Association, or NFA, an industry-wide self-regulatory organization supervised by the Commission, maintains an independent electronic filing system. Commission staff are working with NFA to adapt the data structure of its system to be compatible with the data structure of the system used by the Commission. Eventually, the Commission intends to have a single regulatory database that combines data from all FCM's into a single database for regulatory purposes.

Almost 60 percent of the FCM's who are members of CME and CBT will be capable of filing financial reports with the Commission electronically by the end of April. In the near term, the Commission plans to focus on bringing the remaining CBT and CME firms on line while working with NFA to extend the electronic filing system to registered FCM's who are not members of these exchanges. The Commission intends ultimately to expand its electronic filing system to include introducing brokers.

Question. Are there any concerns on the part of professional market participants, customers, or the CFTC that the electronic filing of documents may compromise the security or reliability of the information contained in those documents?

Answer. The electronic filing of documents raises issues relating to data security and integrity that are somewhat different from those raised by systems that rely on hard copy format. For example, the traditional method for authenticating a written submission—a signature, sometimes supported by a verification—is not easily adaptable to an electronic filing system. Moreover, due to its nature, electronic media may be easier to alter, and there is less likelihood of detecting the alteration than in hard copy media. Procedural or technological techniques must be used to reduce the risk of alteration.

Question. If so, what has been done to assure those using the electronic filing system of the security of the system?

Answer. The Commission has taken a variety of steps to address relevant security/integrity issues. For communications between Commission registrants and the Commission, required measures have varied with the nature of the information being provided. Permitting FCM's to provide important financial information electronically raises issues concerning the reliability of the information provided and the confidentiality of the communication system. The Commission has addressed these concerns by requiring firms to use Commission-issued personal identification numbers, or PIN's, in submitting financial information to the Commission. A firm's use of its PIN is deemed the equivalent of a manual signature for purposes of the Commission's attestation requirement. PIN's are issued by the Commission only after the authorized signer for the registrant has filed with the Commission a signed attestation that will be kept permanently on file. Moreover, the electronic filing system being used by the Commission provides a safeguard to minimize the likelihood of an unauthorized interception and alteration of financial data transmitted by an FCM. Financial data files are encrypted prior to transmission and unencrypted by Commission personnel prior to processing and review.

Security/integrity issues are of somewhat lesser concern in the system for electronic filing of CTA and CPO disclosure documents with the Commission because the documents at issue generally do not include confidential financial information and are subject to review and discussion prior to circulation to the public. Registrants who file electronically must use their NFA identification number to authenticate their submission and receive an electronic receipt as evidence that the Commission received the electronic submission. At the time the Commission adopted this initiative, consideration was given to requiring encryption procedures to guard against unauthorized interception of disclosure documents transmitted to the Commission electronically. The Commission determined that such a requirement was unnecessary in light of the voluntary nature of the program, but did state that Commission staff would cooperate with registrants who voluntarily adopted an encryption procedure.

For communication between Commission registrants and their customers, the Commission has placed a strong emphasis on the necessity for informed consent by customers. Because customer participation in these initiatives is voluntary, informed consent gives customers an opportunity to balance the efficiency benefits of electronic communication against the potential costs related to security/integrity concerns. For example, prior to transmitting confirmation, purchase and sale or monthly account statements to customers electronically, FCM's must generally obtain a signed, hard copy revocable consent from their customers. Similarly, CTA's and CPO's who fulfill their initial disclosure obligations by means of electronic delivery must obtain both a revocable consent and an acknowledgment of delivery of the required risk disclosure statement from their customer. While customer consent/acknowledgment may be communicated electronically, the Commission requires that CTA's and CPO's verify the authenticity of the consent/acknowledgment by using a PIN or another electronic methodology that uniquely identifies the specified person who has provided the consent/acknowledgment.

As for the reliability of information registrants communicate to the customers electronically, the Commission has required that registrants make a hard copy of the relevant information available to customers. This permits customers to monitor the reliability of the registrant's electronic communications. The Commission has also stated that FCM's should implement supervisory systems and procedures necessary to assure timely and appropriate delivery of required information and to detect and deter misconduct in connection with the delivery of such information. In addition, the Commission has noted that FCM's should take reasonable steps tailored to the particular electronic medium being used to ensure the confidentiality of personal financial information transmitted electronically. It also has directed self-regulatory organizations to enhance their audit programs to review these precautions.

ENFORCEMENT

Question. The budget justification indicates that the ten additional staff years requested would complete the reorganization of the Enforcement Division which began in 1995. How has this reorganization improved the ability of the CFTC to fulfill its enforcement responsibilities?

Answer. The reorganization of the Division of Enforcement has improved the efficiency and effectiveness of its operations, which has enhanced the CFTC's ability to fulfill its enforcement responsibilities. Prior to August 1995, the operating units of the Division were organized in three sections, each of which reported to one of three Deputy Directors in headquarters. The sections were: Western Operations, comprising the Central Regional Office in Chicago and the Western Regional Office in Los Angeles; Eastern Operations, comprising the Eastern Regional Office in New York and the Southern Regional Office in headquarters; and Manipulation and Special Operations, comprising three specialized units at headquarters—the Manipulation and Trade Practice Unit, the State/Federal Liaison Unit, and International Operations.

To enhance flexibility and responsiveness, the headquarters units were reorganized: the Manipulation and Trade Practice Unit, the State/Federal Liaison Unit, and the Southern Regional Office were replaced by four general investigation/litigation teams which are referred to as HQ1 through HQ4. International Operations was moved to the Office of Chief Counsel. Two of the deputy positions were eliminated, resulting in the four headquarters teams and the three regional offices reporting to a single Deputy Director and, ultimately, to the Director. The Deputy Director reviews and assigns all investigative referrals to Division staff and reviews all recommendations that the Division of Enforcement makes to the Commission.

The position of Counselor to the Director was established, in part, to assist with the review of recommendations through the Director's office.

As to the litigation teams themselves, each of the four headquarters teams is now headed by an Associate Director, and each regional office is headed by a Regional Counsel. The Management Analysis Officer has been given responsibility for supervising all administrative staff in Washington. This responsibility previously had been assigned to the unit within which a particular administrative employee worked.

In addition to the major structural changes described above, the Division has made organizational changes in the regional offices. Within the last six months, the Central Regional Office has been reorganized to include both attorneys and investigators in the same teams; a similar structure already existed in the Eastern Regional and Headquarters offices. Previously, investigators in Chicago reported through a separate supervisory structure. In addition, there is now a separate intake team in that office to perform preliminary investigative work. Also, the Eastern Regional Office has created the supervisory attorney positions, designed to provide more supervisory structure to investigations and litigation in that office. Finally, the Division's Office of Chief Counsel now has primary responsibility for preparing briefs in appeals to the Commission of Administrative Law Judges' initial decisions. Previously, the teams that handled the litigation before the ALJ had primary responsibility for appeal briefs.

The restructuring achieved several things. First, specialized units at headquarters were replaced by general investigation/litigation teams so that any one of the teams could respond immediately to any matter requiring investigation and legal action. The Division believes that this, in combination with the Deputy Director's handling of referrals, has evened workloads and enhanced the Division's ability to respond efficiently to new matters. The elimination of the two deputy director positions similarly was intended to streamline the review process, to enhance consistency in the policy review process, and to even workloads of the Division's seven operational units.

Second, designating the Office of Chief Counsel, in lieu of investigation/litigation teams, to handle all appeals to the Commission has left more time for the teams to pursue their investigations and cases. Just as important, centralizing this responsibility with the Office of Chief Counsel has ensured that the Division handles matters on appeal to the Commission consistently and more effectively.

Finally, shifting the responsibility of management of administrative staff to the Management Analysis Officer has reduced the amount of time investigation/litigation teams spend on administrative and personnel matters and allows more efficient utilization and oversight of support personnel. The changes in Chicago and New York are similarly designed to permit more effective management and oversight of the work of the attorneys and investigators, with the goal of performing the work and overseeing personnel more efficiently and effectively.

Question. If you receive the requested Enforcement staff-year increase, do you have a plan of action to recruit and hire the necessary employees to fill these positions in a timely manner?

Answer. The Division plans to use the additional FTE's to fill both professional and administrative positions in several different offices. If we were to receive the requested funding increase, the Division would immediately implement an active recruiting plan. With regard to professional positions, the Commission posts all vacancy announcements, including the Division's, on its CFTC website and forwards vacancy announcements to the Office of Personnel Management for inclusion on its nationwide Current Job Openings website. The Division also advertises in large, general circulation newspapers in the region where the job opening is located.

To focus more directly on qualified candidates, the Division also advertises in selected legal periodicals and—depending upon the experience required for particular openings—forwards vacancy announcements to law school placement offices. Also, each year representatives from the Division participate in a limited number of recruiting programs run by law schools. The Division's objective is to draw from the largest, most qualified, pool of candidates. For administrative staff, the efforts are similar, but do not include recruiting through educational institutions or professional periodicals.

Question. Please highlight for the Committee the cases of misconduct in connection with the hedge-to-arrive contracts and futures and options trading which were investigated by the Enforcement program of the CFTC in fiscal year 1997, and those which have been investigated so far in fiscal year 1998. How many cases were investigated? What were the outcomes of the investigations? Which provisions of the Commodity Exchange Act or CEA, and Commission regulations were violated? What

measures have been taken to protect the public and the industry from future similar violations of the rules and regulations?

Answer. In the spring of 1996, the Commission's Division of Enforcement commenced an investigation into certain grain transactions referred to as hedge-to-arrive or HTA contracts. The Commission's interest in HTA's arose from its surveillance of the grain markets during the volatile market conditions in 1995 and 1996, and the effect these conditions had on certain types of contracts entered into by grain elevators, marketers, and producers. The nationwide investigation involved discrete lines of inquiry, some of which resulted in filed cases and some of which the Division is still actively pursuing. Under the CEA and Commission's rules, these investigations must remain confidential, so I am unable to discuss them in any detail in this forum.

I can tell you, however, that the investigation has thus far resulted in the filing of four separate administrative complaints alleging violations of various provisions of the CEA and Commission regulations in connection with certain HTA's. Three were filed in November 1996, and one was filed in December 1997. All of these cases are pending before administrative law judges, and have not yet resulted in final judgments. Until there is some final adjudication of these issues, it would be inappropriate to speculate as to what violations may have occurred. Moreover, because these cases may come before the Commission on appeal, it would not be appropriate for me to discuss the merits of the matters. Accordingly, I will describe them to you generally to give you an idea of the types of violations alleged.

One complaint charges that a grain elevator offered and sold HTA contracts that constituted illegal futures contracts. This case involves alleged violations of Section 4(a) of the CEA, which prohibits offering or entering into illegal futures contracts. This matter is captioned In re Grainland Cooperative, CFTC Docket No. 97–1.

A second case charges a cooperative grain elevator with offering and entering into illegal futures and options contracts; an individual with acting as an unregistered commodity trading advisor or CTA, and with fraud in connection with his marketing and promotion of, and his entry into, illegal futures and options contracts; and a futures commission merchant and one of its employees with aiding and abetting the unregistered activities and trading without proper authorization. This case involves alleged violations of Section 4(a) of the CEA; Section 4c(b) and Regulation 32.2, entering into illegal agricultural options; Section 4m(1) acting as an unregistered CTA; Section 4o(1) fraud by a CTA; Section 4b fraud in connection with futures contracts; Section 4c(b) and Regulation 33.10 fraud in connection with options; Regulation 4.13(b) failure to file an exemption statement or to deliver to pool participants disclosure documents or account statements; Regulation 4.41(a) solicitation of agreements to guide clients commodity interest trading without delivering requisite disclosure documents; and Regulation 1.37(a) failure to maintain records of persons exercising control over customer accounts. This matter is captioned In re Wright, et al., CFTC Docket No. 97–2.

A third complaint alleges that a cooperative grain elevator violated Section 4c(b) of the CEA and Commission Regulations 32.2 and 33.10 by selling illegal agricultural options and engaging in fraud in connection with its marketing of the illegal instruments. This matter is captioned In re Southern Thumb Coop Inc., CFTC Docket No. 97–3.

Finally, a fourth complaint, captioned In re Competitive Strategies for Agriculture, Inc., et al., CFTC Docket No. 98–4, alleges fraud in connection with illegal futures contracts, failure to supervise by a registered introducing broker, or IB, and failure to identify a branch office of a registered IB. The sections of the CEA and Commission regulations alleged to have been violated include Section 4(a); Section 4o(1); Section 4b(a); Regulation 166.3 failure to supervise; and Regulation 166.4 failure to properly identify a branch office to the public.

With respect to measures taken to protect the public and the industry from future similar violations of the rules and regulations, the Commission has taken a number of steps. Specifically with regard to HTA contracts, in May 1996, the Commission's Division of Economic Analysis issued two policy and guidance statements relating to HTA contracts. The first concerned the mutual decision by producers and elevators to use cash payments in unwinding, working out or terminating such contracts, and the second addressed the risk implications of particular features and practices associated with HTA contracts for the future delivery of grain. The statements were publicized by a press release, were posted and remain posted on the Commission's website, and were published in the Commerce Clearing House reporter. Similarly, the Commission has issued press releases regarding the filing of each of the enforcement cases discussed above, and the Commission's website provides access to full-text copies of each of the complaints. Also in 1996, Commission employees participated in a series of town meetings hosted by state authorities to

discuss risk management and risk associated with the use of HTA contracts. Commission staff has also fielded numerous inquiries from the public regarding these instruments and will continue to do so.

More generally, the Commission has taken a number of steps to educate the public and the industry on risk management issues. For example, as the Committee is aware, the Federal Agricultural Improvement and Reform Act of 1996 requires the US Secretary of Agriculture to provide, in consultation with the CFTC, "education in management of the financial risks inherent in production and marketing of agricultural commodities." In 1997, the Commission entered into an agreement with the USDA which established the basis for a joint risk management education effort directed at farmers and third parties who deal directly with farmers regarding tools to mitigate risks. In September 1997, the two agencies held a risk management education summit to establish the basis for a nationwide education effort.

Finally, the Commission has engaged in extensive efforts to keep the public and industry informed of its policy on agricultural trade options. The Commission recently adopted a three-year pilot plan that lifts the ban on off-exchange agricultural trade options, another possible vehicle for farmers to hedge price exposure. In connection with its adoption of the program, which was announced on April 9, 1998, the Commission has engaged the public and industry in an extended dialogue regarding these instruments. In December 1995, the Commission held a public roundtable at which commodity industry experts, regulators, academics and market users exchanged their views regarding the prohibition of agricultural trade options. In May 1997, the Commission released a staff white paper entitled "Policy Alternatives Relating to Agricultural Trade Options and Other Risk-Shifting Contracts." In June 1997, the Commission published advanced notice of proposed rulemaking in the Federal Register seeking comment on whether it should propose rules to lift the ban. It also held a series of field meetings at which members of the public had an opportunity to address the Commission and to ask questions regarding the ban.

As a result of the recommendations contained in the white paper and the comments received from the public, in November 1997 the Commission published notice of a proposed rulemaking in the Federal Register regarding the pilot plan. The proposed program provided for streamlined registration of those selling the instruments, required that customers be provided with disclosure statements and account information, provided certain financial protections, and required that options vendors file reports on their market activity. After a public comment period in which over 440 comments were received, the Commission adopted a three-year pilot program.

Question. Please provide the Committee a description of the reorganization of the Enforcement Division which has taken place since 1995, including the funding and personnel resource changes during each fiscal year.

Answer. As a result of the reorganization described earlier, since the fall of 1995, the Division has put in place an almost entirely new senior management team, including a new Director, Deputy Director, Chief Counsel, Counselor to the Director, two Associate Directors and three Regional Counsels. In terms of total numbers, since 1995, Division staff has increased from 144 in 1995, to 147 in 1996, and to 154 in 1997. Division obligations, which include all program costs, were $12.8 million in 1995, $13.9 million in 1996, and $16 million in 1997. For the same time periods, the Commission's obligations were $49 million, $53.5 million, and $54.7 million.

MARKET SURVEILLANCE, ANALYSIS AND RESEARCH

TRADING AND MARKETS

Question. The President's budget for fiscal year 1999 requests five additional full-time equivalent positions for the Market Surveillance, Analysis and Research Division and the Trading and Markets programs. Please explain the need for these staffing increases.

Answer. The five additional FTE's in the Division of Trading and Markets are needed to enhance the Commission's regulatory reform and streamlining efforts, address new product developments, and sustain Commission oversight over contract market practices and standards.

Two of the additional FTE's are needed to continue development of innovative regulatory approaches, to address new product developments, market linkages and trading mechanisms, and to develop rules that foster the competitiveness of clearing organizations, firms holding customer funds, and commodity professionals in dynamically evolving market conditions without loss of customer protections. The globalization of markets, the blurring of distinctions among financial institutions, and the explosive growth of technology have made it essential that the Commission's rules are appropriately adapted to market conditions.

Three additional FTE's are needed for the Contract Markets subprogram. One is needed to provide increased efficiency in reviewing new programs and to be certain that increasingly innovative linkages between US and offshore markets, as well as cash and futures markets, maintain appropriate customer and market safeguards without imposing undue burdens or adversely affecting equitable access to the marketplace. The second is needed to assist in developing new initiatives regarding appropriate regulatory standards for sophisticated market participants who trade on, or are subject to the rules of, a contract market. The third is needed to address the increasingly complex oversight of SRO practices to assure appropriate incentives to maintain effective compliance programs. The Commission is expanding the ways in which it reviews SRO programs, reviewing both individual programs and particular practices across all exchanges (horizontal reviews), and developing a compendium of 'best practices' that can provide guidance to increasingly linked markets worldwide.

The additional resources will allow the Division to be more responsive to market participants and the public by reviewing rules to determine if they should be streamlined and modernized in light of technological and market developments; providing guidance and relief to foster innovative transactions and trading systems; maintaining US leadership in setting internationally accepted standards for the regulation of markets and trading; addressing intermarket issues through the President's Working Group on Financial Markets; and encouraging technological improvements and market innovation.

ESTABLISHMENT OF OFFICE OF INTERNATIONAL AFFAIRS

Question. Chairperson Born, in your prepared testimony you state that the Office of International Affairs was created in July 1997, within the Office of the Chairperson, to "enable the Commission to continue its leading role in international regulatory initiatives and to keep abreast of global change." What funding was used to create this office? How many FTE's are being used to staff this office, and from where were they taken?

Answer. The Office of International Affairs was funded and staffed with eight positions from the Office of Trading and Markets. The reassigned staff represented the Commission's principal expertise in the international area. The reorganization was accomplished within the Commission's fiscal year 1997 FTE ceiling and budget. The Office of International Affairs reports to the Office of the Chairperson.

Question. How has the creation of this office affected other offices within the CFTC, both in dollars and FTE's?

Answer. The creation of the Office of International Affairs resulted in a transfer of approximately $900,000 and eight FTE's from the Division of Trading and Markets to the Office of the Chairperson.

Question. What role has the Office of International Affairs had in dealing with the Asian financial crisis and its effect on the commodities and futures markets in the United States and around the world?

Answer. During the recent Asian volatility crisis, Commission staff from the Office of International Affairs, or OIA, has assisted in obtaining information from and providing information to foreign regulatory authorities as needed. For example, OIA staff successfully assisted a US futures commission merchant who initially experienced delays in receiving funds from a Malaysian broker by communicating with the Malaysian Securities agency and urging a quick resolution of the matter. In addition, OIA staff assisted in obtaining regulatory information from authorities in Japan and Hong Kong and transmitted that information to the Commission's operating divisions to assist in surveillance of our domestic markets.

Separately, OIA staff has participated in several international fora addressing these issues. For example, at the Commission's annual international regulators' conference in March of this year, organized in large part by OIA staff, Hong Kong, Brazil and Mexican authorities made presentations on the impact of Asian volatility on each of their markets, their immediate regulatory response, and their views on what their longer-term response may be.

Question. How cooperative have other countries been in sharing information and resources?

Answer. The collapse of Barings Plc., a UK firm, in 1995 resulted in a greater awareness of the need for regulators to share information and to implement emergency procedures domestically that help to minimize the spread of systemic risks resulting from defaults. Since that incident, cooperation from other countries in sharing information with the Commission generally has been good. For example, during the sell-off in world equity markets in the fall of 1997, the Commission received early information of the steps being taken by Japan to address the financial

situation and also information on the status of specified Japanese firms with some proprietary business on US derivatives markets. When the staff requested additional specificity about certain firms, the information was provided promptly. When the Japanese authorities suspended trading in a particular firm, they took care, consistent with recommendations made at the Windsor Conference, to permit the continued margining, offset and transfer of futures positions of customers. Also, in January 1998, during increased volatility in the Asian currency and equity markets, the Hong Kong Securities and Futures Commission notified the CFTC of one US-related firm with an exposure in the Hong Kong futures market which had reached a trigger level under the Declaration on Cooperation and Supervision of International Futures Markets and Clearing Organizations.

Additional examples of information sharing are the increasing number of formal arrangements entered into by the Commission with foreign regulators. Since amendments were made to the Commodity Exchange Act in 1992, the Commission has entered into 44 formal and informal arrangements for cooperative enforcement and regulatory information sharing with authorities in 21 jurisdictions. The formal arrangements include 13 Memoranda of Understanding; two Agreements; one exchange of Diplomatic Notes pursuant to a Treaty, signed by the Department of State on behalf of the Commission; and one joint communiqué. In 1997, the Commission signed two new formal arrangements for cooperative enforcement and regulatory information sharing: a Joint Communiqué on the Exchange of Information for Cooperation and Coordination signed on May 27, 1997, by the Commission and the Financial Services Board of South Africa; and an MOU between the Commission and Germany's Bundesaufsichtsamt für den Wertpapierhandel concerning cooperation and consultation in the administration and enforcement of futures laws.

A principal feature of the response to Sumitomo's losses, and an action item from the one-year work program commenced in London in 1996 and concluded in 1997 in Tokyo, was amendment of the multilateral support for exchange of large exposure information known as the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations. Those amendments were specifically designed to assure that all relevant regulatory authorities could be signatories and to clarify that disruptions related to manipulative and other abusive activities were covered and were successfully completed in November 1997 and March 1998, respectively.

The CFTC has also entered into a variety of arrangements with foreign authorities for the purpose of sharing information regarding regulatory matters. In October 1997, the CFTC concluded a new arrangement with the SEC, the Bank of England and Financial Services Authority to facilitate information sharing for prudential and risk-assessment purposes with respect to US, UK and/or third-country owned broker-dealers, FCM's or banks which conduct operations in both the United Kingdom and United States.

In addition to these formal arrangements, the Commission receives information informally through the many relationships established over the years with foreign regulators through its participation in international organizations such as IOSCO.

Question. Are there any concerns on the part of the Commission, market participants, or customers that participation in the international marketplace will compromise the security of the United States futures markets?

Answer. The recent volatility that has shaken world equity and currency markets has demonstrated more vividly than ever before that the markets are inextricably linked through common products and related market participants. Therefore, events that occur in one market can and frequently do cause global regulatory concerns. The shocks to the world financial system caused by the 1995 collapse of Barings Plc., a UK firm which traded on numerous world futures markets including Singapore, Japan, Hong Kong and the UK, and the 1996 copper losses suffered by the Sumitomo Corporation, a Japanese firm trading on the London Metal Exchange, illustrate that this is true for derivatives markets as well as securities markets.

The CFTC has played a leadership role in the international community in improving world standards for oversight mechanisms to reduce potential problems from market disruptions and for handling of defaults and protection of customer funds. The CFTC believes that more can be done to improve the integrity of global markets and is actively participating in ongoing international initiatives.

The CFTC also maintains an immediate crisis management response to global events in order to secure further the futures markets and its participants. For example, in the Barings and Sumitomo crises the CFTC promptly assessed the effects on US interests in the following areas: the extent of direct participation or trading activity by the affected firm or its affiliates in the US futures markets; whether the firm operated a US futures commission merchant, that is, a firm which carries customer positions; the extent to which other US FCM's were clearing or executing

trades through the firm on foreign markets; the extent to which US FCM's with subsidiaries that clear through exchanges in which the firm was a member could be affected by substantial losses on those exchanges as the result of clearing assessments or other loss mutualization provisions; and the potential impact on US exchange member firms if heightened volatility resulted from a firm's failure.

AGRICULTURAL TRADE OPTIONS

Question. Please provide for the Committee a description of the three-year pilot program that would lift the ban on off-exchange agricultural trade options.

Answer. Trade options are off-exchange options offered for business-related purposes to a producer, processor, merchant, or commercial user of a commodity. On April 8, 1998, the Commission removed the prohibition on off-exchange trade options on the enumerated agricultural commodities pursuant to a three-year pilot program. The interim rules for the pilot program permit only agricultural trade options which, if exercised, will result in delivery of the commodity. Also, the interim rules permit only those entities which handle the commodity in normal cash market channels to solicit, to offer to buy or sell, or to buy or sell such options.

Under the interim rules, vendors of such options would be required to become registered as agricultural trade option merchants, to report to the Commission on their transactions, to provide their customers with disclosure statements, and to safeguard their customers' premiums. The Commission is exempting from the prohibition and these interim rules individuals and entities which meet a substantial financial requirement, as it proposed. As part of the same action, the Commission also removed a longstanding prohibition on the offer or sale of exchange-traded physical options on these commodities.

The Commission promulgated interim rules because this is a pilot program and intends to reexamine the rules during and at the conclusion of the pilot program.

Question. What costs, if any, will be incurred by the Commission for this program?

Answer. The Commission will incur costs related to its oversight of trading under the pilot program. These relate to oversight of compliance with the interim rules and the cost of analyzing and studying the relative merit of the interim rules including possible surveys of market activity. The direct costs of registration and receiving required quarterly reports from agricultural trade option merchants will be borne by the National Futures Association which has been delegated these functions by the Commission.

AUDIT AND DUAL TRADING

Question. The Commission is working with USDA's Risk Management Agency on a risk management education program for agricultural producers. Can you give me an update on this initiative?

Answer. The Federal Agricultural Improvement and Reform (FAIR) Act of 1996 requires the U.S. Secretary of Agriculture to provide, in consultation with the CFTC, "such education in management of the financial risks inherent in the production and marketing of agricultural commodities as the Secretary considers appropriate." Consistent with this mandate, in 1997 the CFTC entered into a memorandum of understanding with USDA which establishes the basis for a joint risk management education effort. This effort is intended to be broad in both scope and content, focusing on integrating basic information on risk management from all relevant sectors, including crop insurance as well as futures and options. The education effort is being directed toward two audiences: third parties (such as insurance agents and commodity brokers) who deal directly with farmers on a variety of tools to mitigate risks, and the farmers themselves. To initiate the education program, the USDA held, and the CFTC participated in, a risk management education summit on September 16 and 17, 1997, which attempted to establish the basis for a consistent nationwide education effort.

Current initiatives involve development of educational materials and programs for ultimate delivery to farmers, including the February 10, 1998, issuance of an announcement of availability of grant funds and request for proposals for agricultural risk management education. In addition, a series of regional conferences, with an emphasis on more "hands on" training for third-party influences, will be held through 1998, beginning with a conference in Spokane, Washington, on March 24 and 25.

Commissioner David Spears has replaced former Commissioner Joseph Dial as the Commission's designee to the Risk Management Education Steering Committee which oversees this entire risk management education effort.

ELECTRONIC TRADING

Question. Has electronic trading become a widely used mechanism of trading in the industry? If so, which professional market participants and customers use electronic trading, and how often and under what circumstances is it used?

Answer. Currently, there are three electronic trading systems in operation at domestic futures exchanges: the Chicago Board of Trade's Project A system, the Chicago Mercantile Exchange's Globex system, and the New York Mercantile Exchange's ACCESS system. Since the inception of Globex and Project A trading in 1992 and ACCESS in 1993, the number of contracts traded and the volume of trading on these systems have continued to grow. Electronically traded volume, however, remains a very small percentage of overall futures trading. For example, volume on Project A during 1997 totaled approximately 6 million contracts, as compared to pit trading at the CBT of approximately 243 million contracts over the same time period. Therefore, electronic trading is not as widely used in the US futures industry as pit trading. Since these systems operate almost exclusively after the close of regular pit trading hours, the participants on electronic trading systems are generally institutional customers with facilities for overnight trading. These customers generally need to access these overnight markets to respond to global events that may influence their overall trading strategies.

Question. Have there been any regulatory problems in relation to the electronic trading of futures contracts, to date? If so, what measures were taken by CFTC to adjust to the regulatory demands of electronic trading? If not, do you foresee any future problems with the regulation of electronic trading?

Answer. To date, there have been no major regulatory problems with respect to electronic trading of futures contracts. Notwithstanding this, however, Commission staff have been examining electronic trading systems from a domestic and international perspective to develop facts and analysis with respect to the surveillance and compliance experiences at various exchanges. This information will be relevant to the Commission's consideration of the regulation of electronic trading systems generally, and with respect to such specific issues as the applicability of the statutory dual trading prohibition to these systems.

Question. What effect, if any, do you anticipate electronic trading will have on traditional pit trading?

Answer. At this point in the evolution of domestic electronic trading systems, it is difficult to predict what effect electronic trading systems may have on traditional pit trading. To date, domestic electronic trading systems have been developed as after-hours trading mechanisms to complement, rather than compete with, traditional open outcry pit trading. With one exception, the Chicago Mercantile Exchange's E-Mini S&P 500 contract on its Globex system, contracts in the US can be traded electronically only after the close of regular trading hours. The E-Mini contract, which began trading in September 1997, is traded concurrently both on Globex and in the pit during regular trading hours.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request? Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The agency's annual performance goals represent the estimated workload to be accomplished during the year based on the activities established in the CFTC Strategic Plan. Each performance goal is linked directly to an activity and an outcome objective. Performance goals are shown for most of the fifty activities. The activity level is the lowest of three levels set forth in the Strategic Plan. Each of the fifty activities supports one of the nine outcome objectives. Each of the nine outcome objectives supports one of the three strategic goals. This makes it possible to link a performance goal directly to an activity and an outcome objective.

Traditionally, the CFTC budget request has been displayed by program and subprogram activity only. This year, program and subprogram activities are linked to the outcome objectives and goals of the Strategic Plan. For instance, the Trading and Markets program contributes to outcome objectives in all three goals. Therefore, it is possible to review how the performance goals in the Annual Performance Plan are linked to the Strategic Plan and to the program activities in the budget request.

This cross-cutting display of budgetary resources required Commission staff to revamp the budget formulation system. One positive result is the ability to formulate the annual budget request and understand its impact by program activity as well as by goal.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, the performance indicators or measures in the annual performance plan are linked to the budget through the use of annual performance targets. The cost of reaching annual performance targets is shown in summary fashion on the annual performance plan in the table entitled, Budget Request by Program Activity. This table shows the amount of funding each program activity or account will require to accomplish each goal. There is one table for each goal. Each program activity or account has performance measures.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure is organized by goal while the budget justification structure is organized by program activity. There is a cross-cutting analysis in each structure. The program-based analysis of the budget request is augmented by a programmatic distribution of resources by agency goal. The goal-based analysis of the Annual Performance Plan disaggregates resources by program. Our intent in displaying information in both formats is to engender greater understanding of how the Commission's resources contribute to the accomplishment of the agency's mission.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. We do not anticipate any changes to the account structure for fiscal year 2000 at this time.

Question. How were performance measures chosen?

Answer. The performance measures were developed collaboratively by the CFTC Strategic Planning Task Force and the Commission's program managers during the development of the CFTC's strategic plan. After the Commission adopted a mission statement, three agency goals, and corresponding outcome objectives and activities, the Task Force prepared a set of corresponding performance measures, which the Commission approved.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. To date, the Commission has used existing reporting systems to collect all data. For example, data concerning the distribution of labor were collected principally through the Management Accounting Structure Code system, otherwise known as MASC. These data reflect the hours spent on various Commission activities and are provided bi-weekly by every employee concurrent with production of the payroll. These data are augmented by each division's informal systems for tracking and recording time spent on various projects and activities and the results or outcomes produced. As a result of the Commission's strategic planning experience, program managers have determined that new data may need to be tracked to produce a more complete and reliable picture of performance. To the extent possible, the Commission will seek to utilize and refine existing systems rather than develop new systems. More will be known after the first full year of tracking and analyzing data for the fiscal year 1999 Annual Performance Plan. Costs may be incurred in altering current systems and/or in developing better methods of data collection and verification. The costs will need to be weighed against the long term benefit of enhanced performance data.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Performance data are being tracked for the first time in fiscal year 1998 for some performance goals. While some data may not be available, it would be unwise to infer too much from data covering such a short period. The Commission is approaching the GPRA initiative as an iterative process to build on its positive experiences from year to year with a goal of understanding how we best accomplish our mission and at what cost.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The CFTC's recommended performance goals from its fiscal year 1999 Annual Performance Plan correspond to four broad indicators of success: markets free of disruption; registered and fit market professionals and financial intermediaries; self-regulatory organizations with sound financial practices and effective enforcement programs; and swift and aggressive investigation and prosecution of wrongdoing, with sanctions and fines levied for the maximum remedial and deterrent effect.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The process of working across professional disciplines and programs via the Strategic Planning Task Force ensured the inclusion of a significant number of performance measures. The fiscal year 1999 Annual Performance Plan includes, 12 performance goals and 46 quantitative performance indicators for Goal One; nine performance goals and 76 quantitative performance indicators for Goal Two; and nine performance goals and 80 quantitative performance indicators for Goal Three. It is our goal to assess these goals and indicators after the first year to determine their usefulness and effectiveness.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. The Commission's program managers understand the concept of moving from measuring outputs to measuring outcomes. As we put together measurement tools and develop a system for tracking and reporting on the fiscal year 1999 Annual Performance Plan, we will continue to search for ways better to measure outcome. It is often difficult for regulatory agencies to demonstrate the causal relationship between efforts and stated desired outcomes. As we have expressed to the Office of Management and Budget and our Congressional oversight staff, we welcome any suggestions.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The Commission's strategic goals are all broadly aimed at serving the broad and diverse set of customers who use the US futures and options markets. Accomplishing our goals helps to provide globally competitive US futures and option markets free of disruption and accessible to the public through registered and fit market professionals. The Commission also meets customer needs through its goal of ensuring that the self-regulatory organizations operating in the industry have sound financial practices and effective enforcement programs. Most broadly, the Commission serves all market users and the public through swift and aggressive investigation and prosecution of wrongdoing.

Beginning in fiscal year 1999, the Commission will monitor progress toward each of these customer goals through its annual performance plan.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The format of the CFTC's fiscal year 1999 budget and annual performance plan allows analysis from both a program perspective and performance planning perspective. Every staff-year can be attributed to a program and every staff-year can be attributed to one, or more, agency goals. As the agency's priorities change, so will the resources devoted to specific activities and goals. Because activities are linked to our program accounts the Commission is able to develop a budget that reflects agency priorities.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Generally, the answer is yes. The CFTC budget can be analyzed by program or by goal; any change in the budget will impact either a specific program or goal or all programs and goals depending on the nature of the change.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. The agency does not have a comprehensive technological system for measuring an reporting data. To achieve the goal of tracking performance and reporting on it regularly, we rely on the labor-hour distribution system which is a byproduct of our payroll system to capture data on how the Commission staff spend their time by project. We combine this data with data from a variety of data collection systems for reporting performance. Currently we analyze performance twice a year, once with the development of the OMB Budget Estimate and later with the development of the President's Budget. The Commission's GPRA Task Force is studying the feasibility of using our existing quarterly review process to incorporate additional types of measures reportable under GPRA. It may be possible to use this process to measure the accomplishment of performance goals on a more regular process.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty? Would the linkages be clearer if your budget account structure were modified? If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. The CFTC has no plans to modify the budget account structure currently in use. CFTC financial staff devoted considerable resources in fiscal year 1997 to the reconfiguration of the Commission's budget formulation system to capture and report data by goal, outcome objective, and activity in addition to the current budget account structure which is by program and subprogram activity.

Aligning the new requirements created by GPRA to the existing budget account structure allows the Commission to report on resource requirements in both formats while ensuring that we may continue to use of the underlying financial data from the Commission's payroll and labor distribution systems without altering significantly either of those systems.

However, challenges remain as the Commission seeks to modify the current labor distribution, or Management Account Structure Code System, to better align it with the structure of the activities set forth in the strategic plan.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement? If so, what steps have you identified to prepare, anticipate, and plan for such influences? What impact might external factors have on your resource estimates?

Answer. Yes, the Strategic Plan identified ten external challenges or factors that may impact planning and goal achievement at the Commission. They are: the volume of trading in futures and commodity options; the number and sophistication of market users; the variety of markets traded; the growing use of over-the-counter derivatives; the structural changes in the financial services industry; the globalization of financial markets; the effect of federal law and policies; the advancement of technology; the standards, resources and priorities of other organizations, and; events that destabilize the commodity markets such as the 1987 stock market break, the 1995 collapse of Baring Bank and the 1996 copper market events precipitated by the Sumitomo Corporation.

The possibility exists for any number of these external factors to influence Commission priorities or to place additional demands, whether short or long-term, on the Commission staff. It is the Commission's intent to meet these challenges by using existing resources effectively, finding efficient methods—such as the Global Markets Advisory Committee—to strengthen its capacity to respond to these challenges, and seeking the appropriate level of budgetary resources each year to fulfill its legislative mandate.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. In developing the Performance Plan, the Commission did not identify overlapping functions or program duplication, although the Plan did highlight the linkages between the agency's programs. One of the positive outcomes of the process was a greater understanding of how each program contributes to the agency's goals.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that, to what extent are your performance measures sufficiently mature to allow for these kinds of uses? Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. As mentioned earlier, performance measures data are being tracked for the first time in fiscal year 1998 for some performance goals. While some data may be available, it would be imprudent to infer too much from "unseasoned" data. The Commission is approaching the GPRA initiative as an iterative process and hopes to build on its positive experiences from year-to-year. Our ultimate goal is to understand how the agency best accomplishes its mission and at what cost.

Perhaps the most challenging question facing the Commission is how to measure deterrence of wrongdoing, manipulation, and fraudulent activity at its incipiency It is very difficult to establish a measurable causal relationship between regulatory oversight that relies in large measure on deterrence and specific activities of the market and market users.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. As of this date, the CFTC has no plans for a substantive revision to the Strategic Plan released in September 1997. We will continue to evaluate the Plan internally and as we receive any further comments on it. The Commission continues to invite comments on our Plan, which can be found on the Commission website at http://www.cftc.gov.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

NEW PRODUCTS FOR A FARM SAFETY NET

Question. Since passage of the 1996 Farm Bill, farmers' concerns are growing about the lack of an adequate safety net to protect them from an unstable market. For years, various financial instruments under the jurisdiction of the CFTC have been considered as tools farmers could use to lock in a satisfactory price for their products. Is CFTC actively working to help develop products to help provide a farm safety net against unstable prices? If so, what are some of these products?

Answer. The CFTC has no statutory authority to develop risk management products such as futures and options. It, however, has taken actions that should facilitate the development of such products by US futures exchanges and agricultural firms and institutions.

Examples of recent Commission actions that have facilitated the development of agricultural risk management products include: adoption of a pilot program to permit the trading of agricultural trade options; lifting the ban on US exchange-traded options on physical agricultural commodities—previously, futures exchanges could list options only on agricultural futures contracts; continuing efforts to streamline its contract designation process, resulting in significantly reduced review times for new contracts and the virtual elimination of designation backlogs; and the release of a statement of guidance on hedge-to-arrive contracts and prudent risk-reduction practices.

Question. Is CFTC working with USDA's Risk Management Agency to develop useful risk management products for farmers?

Answer. As required by the statute, the CFTC consults closely with USDA's Risk Management Agency to help provide risk management education to farmers and ranchers and to provide any technical assistance required by USDA. For example, the Commission has provided technical assistance to that agency in its development of a dairy option pilot program.

FAST-TRACK PROCEDURES

Question. In fiscal year 1997, CFTC implemented new "fast track" procedures to approve certain types of contracts and to better streamline CFTC activities. What are some of the elements of this "fast-track" procedure?

Answer. In April 1997, the Commission implemented fast-track procedures for processing certain contract designation applications and rule changes to contract terms and conditions. These procedures streamlined the review process for most types of contracts so that the administrative process for approval could be completed in time periods as short as 10 or 45 days following receipt by the Commission. These procedures were intended to cut in half the average, 90-day, period during which new contracts and substantive rule changes had been pending with the Commission.

Filings under fast-track are at the discretion of the exchange. Filings must comply with the form and content requirements of the Commission's rules, and may not be amended except as requested by the Commission. Under the fast-track procedures, an exchange may list a contract for trading on the "effective date," which is the day following the end of the 10- or 45-day period, unless the date is extended or fast-track review is ended. Under the fast-track procedures, the initial 10- or 45-day effective date may be extended once for an additional 30 days if the proposed rule raises novel or complex issues which require additional time for review. For applications not meeting fast-track requirements, or if requested by the exchange, fast-track review is ended and the regular review procedures for new contract applications apply.

Question. What safeguards are in place to assure the soundness of contract approvals on an expedited basis?

Answer. The abbreviated review periods established by the Commission under the fast-track procedures have not adversely affected the soundness of the contract approval process. The Commission continues to assess the legality of exchange proposals and their impact on the public interest. Moreover, to be eligible for fast-track filing, applications must be complete upon submission. Applications that are complete can be more readily reviewed within the specified time frames. When applica-

tions are not complete or contain deficiencies, the Commission has the authority to remove them from fast-track to conduct a more extensive review.

To ensure that proposed contracts meet the approval standards and that public interest issues are addressed within the streamlined time frames, the Commission has modified certain of its internal processing procedures, including the standardization of its approval documents and streamlined review procedures. While the overall effect on Commission staffing has been neutral, the most substantive resource impact has been to change the timeline of the reviews rather than the total work. In this regard, the new procedures require that the workload be concentrated in the time periods immediately following submission of the proposals to the Commission, rather than being spread out more uniformly over a longer period of time. In addition, the Commission has encouraged informal discussions with exchange staffs about potential proposals prior to their submission so that issues may be identified and corrected by the exchanges prior to submission as well as to facilitate the Commission's reviews.

Also, the Commission's website has been enhanced to include a page showing all pending new contracts along with provisions for downloading the proposed terms and conditions and filing electronic comments or questions. The address is http://www.cftc.gov/dea/pending/newcontr.htm. This enhancement will enhance the public's ability to monitor pending proposals and to submit comments related to public interest or other concerns.

"SOPHISTICATED CUSTOMERS"

Question. Last month, CFTC approved rules designed to speed up the account opening process for certain customers. The rule allows flexibility for "futures commission merchants" and "introducing brokers" to design their own "disclosure of risk" procedures. You state that this rule is a response to a request by industry to provide different regulatory treatment for "sophisticated customers" where appropriate. What is your definition of "sophisticated customer?"

Answer. In February 1998, the CFTC approved rule changes that eliminated requirements that futures commission merchants and introducing brokers provide certain defined categories of customers with Commission-mandated risk disclosure statements and obtain from these customers written acknowledgment of receipt of these statements as part of the account-opening process. The customers affected by this rule change, who are carefully defined in the rule amendments, would generally be considered "sophisticated" because they are institutional investors, entities regulated by federal or state agencies, high net-worth individuals or regulated foreign entities which perform similar functions to qualifying US regulated entities. Specifically, these customers include securities broker-dealers, banks, insurance companies, and other regulated financial intermediaries; investment companies with total assets in excess of $5 million; employee benefit plans subject to ERISA with total assets exceeding $5 million or whose investments are managed by specified investment professionals; corporations and other entities with total assets exceeding $10 million or having a net worth of at least $1 million; and natural persons with assets exceeding $10 million.

These recent rule amendments built upon other CFTC efforts to streamline registrants' disclosure obligations. For example, since 1992, the CFTC's rules have allowed commodity pool operators and commodity trading advisors to meet less onerous disclosure requirements in pool offerings and managed accounts offered to investors who satisfy certain net worth or other financial requirements. In this regard, it should be noted that the CFTC rules do not use the term sophisticated customer, nor do these rules apply a single definition for qualifying customers. Instead, the standards used to define categories of customers for whom specific relief can be claimed have been developed in each instance to assure that the overall customer protection goals of the Commodity Exchange Act are fully maintained.

Question. Are there any provisions of this rule that could result in inadequate CFTC oversight of market activities?

Answer. The CFTC does not believe that these rule changes will reduce its ability to oversee the commodity futures or options markets or in any way erode customer protections. These rule changes provide futures commission merchants and introducing brokers with relief from mandated disclosure requirements when opening accounts for certain defined categories of customers. Futures commission merchants or introducing brokers relying on this relief continue to have obligations under other CFTC rules to provide all their customers with information material to a specific transaction. Moreover, in adopting these rule amendments, the CFTC carefully considered comments made by members of the public. In fact, the CFTC removed government entities from the list of customers for whom this relief could be claimed

after the Government Finance Officers Association indicated that its members would benefit from continued receipt of the CFTC-mandated risk disclosure statements.

Question. Is this rule a precursor of deregulation of certain sectors of the futures industry?

Answer. These rule amendments are not a precursor of deregulation of certain sectors of the futures industry. They are part of an ongoing CFTC effort to reduce unnecessary regulatory burdens on registrants while assuring that customers and the futures and options markets themselves continue to receive the high levels of protection required by the Commodity Exchange Act.

CFTC AND THE SEC

Question. In the past, there has been discussion about merging the functions of CFTC with the Securities Exchange Commission. What are the views of the CFTC to that proposal?

Answer. The Commission previously has opposed specific proposals to merge the CFTC and the SEC. It has been the Commission's view that a merger would not result in appreciable cost savings or increased efficiency, nor would it result in any other clear benefits. Furthermore, it has been the Commission's view that the public interest is best served by retaining an expert and independent agency that can devote full attention to the futures and option markets. The Commission believes that a more productive approach would be to continue close communication and coordinated action between the two agencies on issues of common concern.

In creating the CFTC as an independent agency in 1974, Congress determined that the regulator for commodity futures and option risk-shifting instruments should not be part of an agency regulating the underlying cash markets, whether that agency is the Department of Agriculture, the Securities and Exchange Commission, or the Department of Energy. Congress recognized that price neutral regulation of risk-shifting activity would suffer if placed within a larger agency with different, and perhaps at times conflicting, priorities.

The existing regulatory structure also reflects a functional regulatory approach to the financial markets which the Commission supports. The jurisdiction of the CFTC and the SEC is divided based on the function of the particular financial instrument. The CFTC regulates futures and option contracts that serve a price discovery or hedging function, and the SEC regulates securities that serve a capital formation purpose. The separate regulatory framework for futures and options that has evolved over the decades reflects the different purposes that those instruments serve.

Question. What, if any, overlapping exists between the two agencies?

Answer. As I mentioned earlier, the two agencies regulate instruments and markets that serve different economic functions. We do not believe that there is any overlap between the regulatory missions of the two agencies. However, the markets for commodity futures and securities are interrelated and share common participants. Accordingly, the agencies routinely coordinate and cooperate in carrying out their separate regulatory missions.

Question. Please describe CFTC's relationship with the SEC.

Answer. Because the markets are inter-related and share common participants, the CFTC and the SEC often work together closely in an attempt to ensure a consistent regulatory approach and an effective enforcement program.

In the regulatory area, the agencies have worked together over the years to ensure that circuit breakers (e.g., price limits and trading restrictions that are triggered when the stock market and stock index futures markets move a certain number of points) operate across markets in a coordinated fashion. The agencies have also coordinated their financial reporting rules in order to avoid placing unnecessary and duplicative regulatory burdens on market professionals. These are just a few examples how the CFTC and the SEC have worked together in the regulatory area and how that coordination has benefited the markets.

In the enforcement area, the staff of the Commission's Division of Enforcement and their counterparts at the SEC routinely cooperate in their efforts to police wrongdoing in the nation's financial markets. From time to time conduct comes to the attention of the two enforcement offices that implicates both the futures and securities laws. In those circumstances, the offices join forces, often devising coordinated investigation strategies for gathering and sharing information. In this way, duplication of effort is avoided and expertise and resources are shared. Where appropriate, we also coordinate the filing and settlement of enforcement actions to ensure a consistent governmental response to misconduct.

ELECTRONIC COMMUNICATION SECURITY

Question. You mention that CFTC has adopted measures to permit the electronic filing of documents with the Commission. As more and more governmental and market transactions are handled through electronic communications such as E-mail, what is CFTC doing to help ensure that computer-based communications are reliable and not susceptible to invasion by computer "hackers" who might place at risk the integrity of market transactions?

Answer. The Commission's electronic filing and analysis systems for financial reports and disclosure documents are independent of the systems used to track market data, such as large trader and trade practice data. Accordingly, the security of the latter data is not threatened by recent Commission initiatives.

The Commission has taken a variety of steps to address relevant security/integrity issues in the course of its recent initiatives. For communications between Commission registrants and the Commission, such measures have varied with the nature of the information being provided. Permitting FCM's to provide important financial information electronically raises issues concerning the reliability of the information provided and the confidentiality of the communication system. The Commission has addressed these concerns by requiring firms to use Commission-issued personal identification numbers, PIN's, in submitting financial information to the Commission. A firm's use of its PIN is deemed the equivalent of a manual signature for purposes of the Commission's attestation requirement. Moreover, the electronic filing system being used by the Commission provides a safeguard to minimize the likelihood of an unauthorized interception and alteration of financial data transmitted by an FCM. Additionally, financial data files are encrypted prior to transmission and unencrypted by Commission personnel prior to processing and review.

Security/integrity issues are of lesser concern in the system for electronic filing of CTA and CPO disclosure documents with the Commission because the documents at issue generally do not include confidential financial information and are subject to review and discussion prior to circulation to the public. Registrants who file electronically must use their NFA identification number to authenticate their submission and receive an electronic receipt as evidence that the Commission received the electronic submission. At the time the Commission adopted this initiative, consideration was given to requiring encryption procedures to guard against unauthorized interception of disclosure documents transmitted to the Commission electronically. The Commission determined that such a requirement was unnecessary in light of the voluntary nature of the program, but did state that Commission staff would cooperate with registrants that voluntarily adopted an encryption procedure.

INTERNATIONAL MARKET STABILITY

Question. You mention your meetings in London in November of 1996 and in Tokyo last October in an effort to establish international standards for market transactions. Over the past few years, we have seen dramatic shocks to the markets originating in foreign countries that sometimes had a regional or global effect. In some cases, these incidents were direct results of improper market manipulation. Please describe the state of market stability and security from international market incidents?

Answer. The Commission's recent international initiatives have encouraged international action to address the issues of systemic risk posed by our linked markets and have encouraged the worldwide adoption of higher regulatory standards. These international initiatives are designed to enhance international supervisory cooperation and emergency procedures, to establish concrete standards of best practices that set international benchmarks for regulation of futures and derivatives markets, to encourage improved transparency in those markets, to improve the quality and timeliness of international information sharing; and to encourage jurisdictions around the world to remove any legal or practical obstacles to achieving these goals.

These structural measures can assist market authorities in dealing better with crises and in safeguarding customer funds and assets in case of defaults. In addition to such structural measures, the relationships established over the years with foreign regulators, both through formal memoranda of understanding and informal relationships, facilitate the Commission's ability to obtain critical information and to assist US firms in addressing the consequences of market events.

The Commission continues to work in these areas to improve the design of regulatory programs to withstand market shocks and to improve the execution of existing programs. I would like to submit for the record a list of recent Commission initiatives addressing systemic risk.

[The information follows:]

Barings & Windsor Conference.—Following the collapse of Barings Plc., a UK firm which traded on numerous world futures markets including those in Singapore, Japan, Hong Kong and the UK, the CFTC co-chaired a meeting in Windsor, England, with the UK Securities and Investments Board—which has since been renamed the Financial Services Authority, or FSA. That meeting, and the resulting Windsor Declaration, set in motion a series of international initiatives at both the regulatory and market level intended to enhance the resilience of the financial marketplace against shocks or stress caused by such defaults. These initiatives included:

—the development of procedures to coordinate and to respond to a market crisis once it has materialized;

—initiatives to increase transparency of market protections and procedures, including proposals for the strengthening of protections accorded customer funds deposited for investment or safekeeping; and

—initiatives to encourage the development by all markets of default procedures intended to isolate risks to the defaulting firm and to restrict potential impact on other firms or markets.

Development of Large Exposure Information Sharing Arrangement.—In an era in which exchange member firms and market participants typically trade on multiple exchanges, no one regulator or market authority will have the information necessary to evaluate the risks to its markets. For example, at Barings, a rogue trader with high exposures in Singapore claimed that his positions in the Japanese markets were risk reducing, but there was no regulatory mechanism available to any single regulator to verify this claim. A notable accomplishment resulting from the Windsor meeting was the signing in March 1996 at Boca Raton, Florida, of the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations, an arrangement under which the occurrence of certain triggering events affecting an exchange member's financial resources or exposures prompts the sharing of information among regulators. The Declaration, which has been signed by 26 regulators to date, and a companion agreement among self-regulatory organizations which has been executed by approximately 65 exchanges and clearinghouses, facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets.

Sumitomo & Tokyo Communiqué.—Similarly, in November 1996, following the revelations of huge losses at Sumitomo and the related adverse effects on the global copper markets, the CFTC and the UK SIB, along with the relevant Japanese authorities, the Ministry of International Trade and Industry ("MITI") and the Ministry of Agriculture, Forestry and Fisheries ("MAFF"), co-sponsored an international regulators conference in London on physical delivery markets in international commodities. The London conference focused on the special problems that physical delivery markets pose for regulators and considered how contract design, market surveillance and international information-sharing can reduce the potential for, and assist in the management of, manipulation and other market disruptions. The 17 countries participating in that meeting issued a Communiqué agreeing on certain basic principles of regulation and on a year-long work program.

That effort culminated on October 30 and 31, 1997, at a conference in Tokyo, Japan, jointly chaired by the CFTC, the Japanese MITI and MAFF and the UK FSA where representatives of regulators from 16 jurisdictions responsible for supervising commodity futures markets announced the completion of the work program contained in the London Communiqué issued in November 1996. At the end of the meeting, the regulators issued a Tokyo Communiqué which, among other things, endorsed two guidance papers, one on best practices for the design and/or review of commodity contracts and another on market surveillance and information sharing. The guidances represent the first occasion on which regulators responsible for overseeing commodity derivative markets have agreed to international standards for the supervision of these markets.

Significantly, the regulators at the Tokyo meeting agreed that they should move beyond the mere adoption of statements and expressly committed to seeking the removal of domestic legal and other barriers to ensure access to information that permits them to detect and deter abusive practices and disorderly conditions in the markets, including information on concentrations of positions and the overall composition of the market. This commitment is significant because many regulators need new or expanded powers in order to attain this goal.

Enhancements in Boca Declaration: removal of restrictive language and addition of manipulative activities to scope.—The Tokyo Communiqué also encouraged regulators to participate in, and to make use of, the arrangements for sharing large exposure information which are set out in the "Declaration on Cooperation and Supervision of International Futures Markets and Clearing Organizations." However, we recognized that restrictive language in the Declaration made it impossible for cer-

tain regulators of commodity markets to join in that arrangement. Accordingly, in 1997 the CFTC and UK FSA, as co-chairs of the Windsor Declaration, successfully led an effort to remove such restrictive language from the Declaration. We are pleased to report that the following regulators have subsequently signed the declaration: Japanese MITI and MAFF, the New Zealand Securities Commission, the Securities Commission of Argentina, the Capital Markets Board of Turkey and the Securities Commission of Taiwan.

Participants in the Tokyo Conference also determined that the utility of the Declaration could be enhanced by further amending the Declaration to clarify its application to potential manipulative or abusive practices. Again, the CFTC joined with its Japanese and UK colleagues to lead this initiative which was successfully concluded and announced at the international regulators conference in Boca Raton, Florida on March 20, 1998.

Question. In what ways will the international standards reduce the threat of spreading international market disruptions?

Answer. At the end of the meeting in Tokyo in November 1997, the participating jurisdictions issued the Tokyo Communiqué which, among other things, endorsed two guidance papers—one on best practices for the design and/or review of commodity contracts and another on market surveillance and information-sharing. The guidances represent the first occasion on which regulators responsible for overseeing commodity derivative markets have agreed to international standards for the supervision of these markets.

By creating international best practices standards, we hope to establish worldwide regulatory benchmarks which can help each regulator to assess how its standards and practices compare with the benchmarks and to consider possible regulatory improvements. We anticipate that market authorities, both regulators and markets, will refer to the standards of contract design as providing an international consensus as to the elements that should be considered in order to reduce the possibility that a commodity contract may be susceptible to manipulation or other disorderly conditions.

Contract design, however, is merely part of overall market regulation. Accordingly, the regulators issuing the Tokyo Communiqué also endorsed standards of best practices for market surveillance and information-sharing. Among other things, the guidance on market surveillance and information sharing recommends that regulators have access to information about the exchange positions of large traders. Also, they should have access to traders' related cash and over-the-counter positions so that they can assess fully the risk of such persons' positions to the markets.

Significantly, the regulators at the Tokyo meeting agreed to move beyond the mere adoption of statements and expressly committed to seeking the removal of domestic legal and other barriers to ensure access to information that permits them to detect and deter abusive practices and disorderly conditions in the markets, including information on concentrations of positions and the overall composition of the market. This commitment is significant because many regulators need new or expanded powers in order to attain this goal.

The best practices guidances adopted in Tokyo demonstrate an international consensus on how to regulate derivatives markets and a commitment on the part of regulators to enhance their regulatory effectiveness.

The CFTC also has actively participated in the ongoing project of the International Organization of Securities Commissions, or IOSCO, to articulate the basic elements of an effective regulatory regime for the supervision of securities and derivatives markets. We expect a consultative document to be released in May, setting forth thirty Principles of Securities Regulation and collating, in a user-friendly fashion, all existing IOSCO guidance on effective regulation of financial services.

Question. What additional steps, if any, should the United States take for protection against international market disruptions?

Answer. Domestically, the Commission continues to evaluate its regulations to ensure that necessary safeguards are in place to respond to market events and that its regulations are updated to address changes in the marketplace. The Commission supports various on-going international initiatives and inter-governmental dialogue to improve the transparency of market information. The Commission also supports enhanced disclosure of information about relevant rules in place in specific markets to permit end-users of markets to advise themselves adequately about specific risk. The Commission also supports improvements in the protections available worldwide to address the insolvency of financial services firms without adversely affecting the liquidity of the markets in which they transact or the ability of solvent customers of insolvent firms to manage their position risk; improvements in the capacity to share information on the whole position of market participants, including over-the-

counter, cash and futures markets positions, wherever located; better policing and oversight of markets generally; and appropriate coverage of over-the-counter risks.

These issues were identified by the Commission in the Windsor Declaration and the Tokyo Communiqué, but may require new national law, removal of national barriers or other action at an international level. While reforms are in process, the work necessary is by no means complete—nor can it be accomplished by a single jurisdiction acting alone.

The CFTC has paid close attention to addressing preparations for and containment of market risks in its domestic markets. We have updated our contingency plan, developed programs to promote readiness for Year 2000 and Euro conversion, engaged in stress testing, performed oversight audits of markets and firms, required upgrades of firm internal controls, and modified core regulations to address evolution of the market. We continue to be vigilant as markets evolve.

QUESTION SUBMITTED BY SENATOR HARKIN

Question. Has the CFTC encountered problems in having access to any kinds of information on livestock prices and markets it would need to investigate claims, should they arise, about market manipulation in the futures markets?

Answer. Reliable cash prices that accurately reflect supply and demand conditions are critical to the Commission's market surveillance program. One aspect of that program is assessing how well futures prices reflect the cash market as a futures contract approaches expiration. For physical delivery futures contracts, this entails an analysis of the basis or the difference between the futures price and the relevant cash price for the commodity. For cash-settled futures contracts, the futures price will ultimately be set at the specified cash price used for settlement. Consequently, for these markets the surveillance issue is whether the cash price is representative of the market or is susceptible to manipulation to benefit a futures position.

For domestic agricultural markets, the reliability of available cash price quotations has increasingly been of concern to Commission surveillance staff. In the cattle market, cash prices at terminal markets are of declining importance due to the prevalence of direct marketing from feedlots to packers at prices that may not be reported. Several cash-settled contracts, like live hogs, boneless beef, and the new pork belly contract, are settled on the basis of prices reported by the USDA. The staff also has some concerns about the thinness of the underlying cash prices for some of these commodities. Moreover, some USDA price reporters are concerned that, by sharing with the CFTC the confidential data price they collect, they may jeopardize the willingness of some firms to report price data to the USDA. Accordingly, the Commission would support initiatives to strengthen the USDA's ability to collect and publish reliable price data.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

STATEMENT OF MICHAEL A. FRIEDMAN, M.D., LEAD DEPUTY COMMISSIONER

ACCOMPANIED BY:

ROBERT J. BYRD, DEPUTY COMMISSIONER, MANAGEMENT AND SYSTEMS

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DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY, BUDGET, DEPARTMENT OF HEALTH AND HUMAN SERVICES

INTRODUCTION OF WITNESSES

Senator COCHRAN. The subcommittee will please come to order.

We resume our hearing for the purpose of considering the annual budget request that has been submitted by the administration for funding for the Food and Drug Administration. We are very pleased to have Dr. Michael Friedman, who is the Lead Deputy Commissioner of the Food and Drug Administration, here with us with colleagues. We invite you to introduce those who are with you.

We have your written testimony which we appreciate very much. We will make that a part of the record in full and encourage you to make any summary comments or other statements that you think would be helpful to our committee in understanding the budget request. You may proceed.

STATEMENT OF MICHAEL A. FRIEDMAN

Dr. FRIEDMAN. Thank you very much, Mr. Chairman.

As the Lead Deputy Commissioner of the Food and Drug Administration, it is my privilege to be here today to present our proposed budget for fiscal year 1999.

With me are Mr. William Schultz, our Deputy Commissioner for Policy; Mr. Robert Byrd, our Deputy Commissioner for Management and Systems, both from the Food and Drug Administration. Mr. Dennis Williams accompanies us. He is the Deputy Assistant Secretary for Budget at the Department of Health and Human Services. They and others from the FDA are here to help respond to your questions.

As you recognize, sir, FDA is an agency that serves a vital and unique role in promoting and protecting the public health. The public demands are great. All Americans expect that the food they eat will be safe and wholesome, that the medical products they use,

drugs, biologicals, and devices, will be safe and effective, that children will be protected from the harmful effects of tobacco, and that information on the products regulated by FDA will be useful and understandable.

These are important public health responsibilities and we take them very, very seriously. Our commitment is an enduring one and our high level of performance in the last year demonstrates our ability to make good on that commitment.

As you know, one of our most visible activities is the review of new products before they go to market. I am proud to say that the agency has performed at historically high levels this past year. For example, FDA reviewed and approved 144 new drugs and biologicals last year, a record number, as well as 125 therapeutic supplements. We were 100 percent on time in meeting our pharmaceutical review deadlines. We conducted the reviews in a median of only 12.2 months. That is for both standard drugs and priority products. At the same time we also reviewed a record number of generic products, more than 400.

The Center for Devices and Radiological Health approved 48 major new devices, 5 more than the previous year, even as it cut review times by one-third. Eighteen of these devices presented important diagnostic or therapeutic advances such as the first surgical implant to restore partial hand movement in quadriplegics, a deep brain stimulator for helping to control tremors in people with Parkinson's disease, and the first laser system for treating tooth decay.

Overall, FDA's output, as measured by the number of annual approvals for all new products reviewed by the agency, has improved 17 percent per year for each of the last 4 years. This level of performance is even more noteworthy since in each of the last 4 years, FDA's workload, as measured by the number of all types of applications we receive, has steadily risen at the annual rate of 12 percent per year. As you recognize, our workload is doubling every 6 years, and we fully expect the number of new applications to continue to rise at this very exciting but very challenging rate.

The engine of practical scientific progress is fueled by increased support for biomedical research, at NIH now at a level of $13.6 billion, and very substantial investments by private industry, more than $25 billion per year. These organizations are working to turn scientific discoveries into practical, marketable therapeutics.

As a result, we foresee a medical product pipeline filled with novel and promising remedies for years to come. The very uniqueness of these products challenges FDA's own scientists to remain on the cutting edge. We must improve both our intramural scientific and research programs and foster better links with external scientific bodies in order to be able to understand and appropriately evaluate and regulate the very newest products.

In addition, FDA manages important new responsibilities, such as the expanded food safety programs and the tobacco regulation. Moreover, the agency must be prepared for the unexpected, the next outbreak of a novel foodborne pathogen such as E. coli O157:H7 or unexpected problems with therapeutics already on the market such as the diet drugs fenfluramine and dexfenfluramine which were recalled last year.

Last, let me say a couple of words, if I may, about the challenges presented by the FDA Modernization Act of 1997, this major piece of legislation intended to improve the regulation of medical products, foods, and cosmetics.

The timely implementation of this ambitious law will be a substantial challenge to FDA. The act directs FDA to publish 42 regulations, 23 guidances, 13 other publications in the Federal Register, as well as 25 other tasks such as postmarketing approval studies, electronic application submissions, and so forth. This will consume a considerable amount of FDA resources for which there is no specific budget allocation.

We, of course, are committed to carrying out the congressional directives delineated in the act, even though many FDA programs have not benefited from funding increases over the last several years.

To meet these expectations and to support the agency's activities, FDA requires $1.26 billion in fiscal year 1999. The appropriation request includes $970 million in budget authority, $281 million in user fees, and $13 million in other reimbursable activities.

Sir, I want to acknowledge that the proposed budget is complicated and I am sure you will have many questions that we will do our very best to answer, but before I close, I would like to thank you, sir, and the committee for your past commitment to bettering the health of our citizens.

Last year you authorized $24 million for the President's food safety initiative. We are using that money to take several very important steps to improve the safety of the Nation's food supply. These include increasing surveillance for potential outbreaks, improving consumer education, increasing focused research aimed at detecting pathogens and eliminating them, developing strategies to prevent microbial contamination of food, developing microbial risk assessment techniques, and strengthening the coordination between Federal, State, and local authorities. These are very important steps, but the road to safer food is long and difficult.

In our fiscal year 1999 proposal, we are requesting an additional $50 million. We plan to further enhance the foodborne illness surveillance program, as well as to expand our coverage of imported products. Research will focus on developing improved methodology for detecting microbial contaminants in food, technologies to eliminate or prevent food contamination, and enhancing our understanding of how microbial resistance to food preservation techniques and to antibiotics occur.

I also want to acknowledge the committee's support for our efforts to reduce tobacco use by youngsters. With the $34 million the committee provided last year, we have taken important first steps to protecting the Nation's youth from tobacco products. We have established compliance programs in 10 States already, signed contracts with 3, and are negotiating with the next 15. North Carolina signed the first contract for this year, and we expect to have compliance programs in all 50 States by the end of the year.

With the budget increase proposed for the next fiscal year, FDA will expand the enforcement and outreach efforts designed to ensure that retailers do not sell tobacco products to minors.

I believe it is clear, Mr. Chairman, that the investment of each American taxpayer dollar in the Food and Drug Administration is a solid investment in promoting and protecting the public health. Americans expect their FDA to be caring, to remain vigilant, to promote their health and well-being, and to protect them from all types of health hazards. This is an important trust. It is a trust this agency will do its very best to keep.

If I may close, Mr. Chairman, with one personal comment, I on behalf of the agency want to recognize the contributions of Senator Bumpers, convey to him our best wishes as he moves on in his retirement this year. He has dealt fairly and thoughtfully with complex issues and it has always been a pleasure to work with him.

Mr. Chairman, I appreciate very much this chance to address you, to answer your questions, and we look forward to working with you. Thank you, sir.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Dr. Friedman. We have your complete statement and it will be inserted in the hearing record.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL A. FRIEDMAN

Mr. Chairman, members of Congress, ladies and gentlemen, my name is Michael Friedman. I am the lead deputy commissioner for the Food and Drug Administration and it is my privilege to be here today to tell you about our plans and expectations as presented in the Administration's proposed budget for fiscal year 1999. And, of course, I am happy to answer your questions.

FDA is an agency that serves a vital role in promoting and protecting the public health. Our primary obligation is to the public—but we recognize the value of positive interaction with industry, academia and other governmental bodies. Moreover, we value a close and cooperative relationship with Congress.

But it is the public that we serve and it is the public that has high expectations about the performance of my Agency. Americans expect that the food they set on their family table will be safe and wholesome. The public expects that new medical products—drugs, biologicals and devices—will be safe and effective and available in a timely way. The nation expects that children will not use tobacco. And it expects that the information provided on the products that FDA regulates will be useful and understandable.

These are important public health responsibilities and we take them very seriously. Our commitment is an enduring one, but our practices are the subject of reevaluation and renewal. Important progress was made with the FDA Modernization Act of 1997 toward achieving the expectations of the public and Congress.

OVERVIEW

Today, I would like to examine these public expectations, highlight the actions FDA has taken in the past year and project what we anticipate doing in the next.

Food Safety

Stimulated by recent, publicized outbreaks of food-borne illnesses, food safety has become a subject of increased attention and concern. What's more, public health experts worry that the risks of food-borne disease may be rising as Americans grow older, eat out more, and food is more widely distributed and therefore more vulnerable to contamination. In addition, we face new threats, such as the emergence of novel pathogens like E. coli O157:H7, the strain that led to the recent recall of more than 25 million pounds of hamburger and sickened consumers of unpasteurized apple juice on the West coast just over a year ago, and a drug-resistant strain of salmonella called DT104.

Outbreaks like these, and the President's ongoing concern about food safety, prompted him to launch the National Food Safety Initiative last year. Congress responded by allocating $24 million to the FDA's food safety initiative for the current

fiscal year, as well as giving additional funds to other relevant federal agencies. With these resources, FDA took specific steps to improve the safety of the nation's food supply, including: increasing surveillance for potential outbreaks, improving consumer education, increasing research aimed at improving detection of pathogens, producing strategies to prevent microbial contamination of food, developing microbial risk assessment techniques and strengthening the coordination between federal, state and local governments.

In addition, we have moved rapidly on a number of fronts to improve the safety of the nation's food. At the end of last year, FDA began implementation of the HACCP rules on seafood. As you know, HACCP stands for Hazard Analysis and Critical Control Point (HACCP). It is a scientifically designed program that identifies the steps in food production where contamination is most likely to occur and then puts in place preventive measures. FDA recently announced its intention to develop HACCP regulations for fresh fruit and vegetable juices and proposed regulations to require fruit juice makers to label their products so consumers will know which are treated to prevent contamination and which are not. We also called on manufacturers to voluntarily label their products as soon as possible, even though the regulation is not yet in effect.

In July 1997, FDA hosted a public meeting on the risks of Cyclospora. We also convened a federal interagency meeting on food safety research and began drafting a federal plan to set research priorities. That plan should be available this spring. FDA also helped set up a public-private partnership on food safety education along with industry, consumer groups, states and other federal agencies.

In December, after a thorough scientific review, FDA approved the irradiation of meat products for controlling disease-causing microorganisms. The decision applies to fresh and frozen beef, lamb and pork. The Agency concluded that irradiation is safe and does not compromise the nutritional quality of these products. Studies show that it does reduce the number of disease-causing microbes in or on meats.

Last summer, FDA acted to prevent the contamination of feed for American beef, sheep and goats with the agent that causes bovine spongiform encephalopathy or BSE. BSE is a brain-infection by an incompletely understood infectious agent related to a degenerative disorder in humans called Creutzfeldt-Jakob disease. A cluster of Creutzfeldt-Jakob cases in England was associated with eating English beef contaminated with BSE. The resulting outcry seriously damaged the British beef industry. Although there has not been a documented case of BSE in the U.S., FDA acted to protect the safety of America's red meats by banning production practices that raised the risk of BSE transmission.

And finally, on the food front, FDA's Center for Food Safety and Nutrition (CFSAN) has worked hard to reduce the backlog of food additive petitions. By eliminating lower priority activities and through hard work and improved management, the center cut the number of pending petitions in half—from a high of 295 in 1995 to 143 in 1997—and the center continues to make decisions on more petitions than it receives. CFSAN fashioned pragmatic solutions without compromising scientific rigor.

This year, FDA is asking for an additional $50 million for food safety in fiscal year 1999. With it, we plan to enhance food-borne illness surveillance, as well as increase coverage of imported products by expanding lab certification. Research will focus on developing improved methods of detecting microbial contaminants in foods, technologies to eliminate or prevent food contamination and understanding microbial resistance to food preservation techniques and antibiotics.

To help implement the National Food Safety Initiative, FDA made key personnel changes in January. We reassigned Joseph A. Levitt, an innovative and effective manager within FDA who has served as the Agency's acting deputy commissioner, to take the directorship of the Center for Food Safety and Nutrition. In addition, FDA hired Dr. Robert L. Buchanan, a leading authority on food microbiology and quantitative risk assessment for microbial foodborne pathogens with the USDA's Agricultural Research Service, to be a senior scientist for the National Food Safety Initiative. Other high-level recruitment is underway. This team will lead CFSAN into the next century as it implements an ambitious agenda to improve the safety of the nation's food supply.

In addition, under the President's Initiative to Ensure the Safety of Fresh Fruits and Vegetables, FDA, working with the Department of Agriculture, will develop and finalize good agricultural practice and good manufacturing practice guidances for use by the domestic and foreign produce industry. To minimize microbial contamination, FDA also will provide technical assistance and educational outreach to the domestic and foreign produce industries to promote adoption of the voluntary guidance. To support these activities, research is being accelerated to develop techniques that prevent microbial contamination of produce from the farm to the table.

FDA will move aggressively to deliver on America's expectation for a safe and wholesome food supply, and to work cooperatively with sister agencies in the federal government as well as state and local officials. Each makes a unique and valuable contribution to the safety of the food we eat.

Pharmaceuticals and Biologicals

In addition to safe food, Americans expect that they will have timely access to new pharmaceutical and biological agents that are safe and effective. Since the 1962 Kefauver-Harris Amendments to the Food, Drug and Cosmetic Act, FDA has acted as the gatekeeper, allowing new therapeutic products onto the American market after clinical studies prove their worth. This scientifically complex and time-consuming procedure of reviewing applications has sometimes bogged down in the past. Since 1992, however, FDA significantly picked up the pace of pre-market approvals for drugs and biologics after Congress authorized additional resources through the Prescription Drug User Fee Act of 1992.

Last year, FDA received a record number of new drugs and biologics for review and the Agency approved a record number of them, 144. Among these were 62 new molecular entities or NME's, a record number of these important new products, which went on the market for the first time in this country. NME's often represent hope for patients by providing new treatments or by providing significant improvements over existing therapies, either through heightened effectiveness or reduced side-effects.

And the Agency has done all this even as it reduced the time it takes—on average—to get a drug through review and onto the market from 14.8 months in calendar year 1996 to 12.2 months in calendar year 1997. That's for all types of drugs, both priority drugs and standard drugs. FDA has met the agreed to deadlines negotiated by the Agency, Congress and the industry. For the last two years, we have approached or hit 100 percent on-time performance.

With the renewal of the Prescription Drug User Fee Act last year, FDA will increase the number of reviewers and support staff under this program to 820 in fiscal year 1999, ensuring that the Agency will be able to continue to perform at its current high level.

The evidence of PDUFA's success comes not only from the performance statistics, but also from the strong support FDA received from industry for its renewal, as well as the prestigious Innovations in Government Award given for the improvements in the drug and biologics approval process. The award is sponsored by the Ford Foundation, Harvard University's John F. Kennedy School of Government in partnership with the Council in Excellence in Government.

FDA launched a number of other initiatives related to drugs and biologics in the last year. For example, FDA proposed a rule that would provide health care professionals with the information necessary to prescribe medications more safely for children. The proposed rule would assure that labeling for certain new and already marketed drug products contain information on the use of the drug in pediatric populations. In some cases, companies have been allowed to put pediatric information on the label after extrapolating from adult studies along with safety and pharmacokinetic data obtained from trials in children.

Currently, many widely used medicines are not properly labeled for use in children, forcing pediatricians to estimate the proper dose of an adult medicine for use in a child. Too often this can lead either to the side effects of an overdose or a therapeutic failure when too small a dose is given. FDA's pediatric labeling initiative is complemented by the provisions of the FDA Modernization Act of 1997 that grants a six month period of market exclusivity for studies of the pediatric use of certain drugs.

FDA moved to ensure that women are included in early clinical trials of drugs and biologics designed to treat life-threatening diseases. In the past, women have been excluded because they might be pregnant at the time that they receive the experimental therapy. The Agency's proposed rule would give it the power to suspend a clinical study if the sponsor routinely excluded men or women from the clinical study because of potential toxic risks to offspring or reproductive organs.

Under the PDUFA renewal, FDA has promised to improve its drug-review performance still more. Under the previous version of the program, FDA had 12 months to review a standard drug and six months to review priority drugs. We have been meeting those deadlines. Under the new program, FDA will gradually ratchet down approval times for standard drugs by an additional two months.

In addition to requesting the increased resources authorized in fiscal year 1999, the President's budget also requests supplemental appropriations for fiscal year 1998 of $26 million in additional revenue for the Agency to begin, in earnest, the enhancements envisioned in the reauthorization of PDUFA. With the resources pro-

vided by this renewal, FDA expects to continue its high level of performance and provide American patients with speedy access to drugs and biologics while maintaining the Agency's customarily high scientific standards.

Medical Devices

Third, Americans expect that the medical devices used to detect and treat their illnesses—from diagnosing breast cancer to treating Parkinson's disease—will be safe and effective and that they will have access to them in a timely way. In addition, we need to be sure products include information on how and when to use them and what patients can expect when they are cleared for market. That means FDA must work closely with manufacturers throughout product development and clinical study so useful information is generated efficiently. That also helps FDA act quickly to review, independently, the data on safety and effectiveness.

Since 1994, when Congress provided the Center for Devices and Radiological Health (CDRH) with some additional resources, the center's staff has made substantial and sustained improvements in the quality and speed of its reviews. In the past year, CDRH approved a record number of pre-market applications (PMA's), eliminated all remaining backlogs and improved review times in every product category.

Forty-eight PMA's were approved in fiscal year 1997, five more than the previous year. Nearly all were for new products and 18 of them represented important diagnostic or therapeutic advances. The average time to approval decreased from 26 months in fiscal year 1996 to only 17 months in fiscal year 1997. Key device approvals last year included the first surgical implant to restore partial hand movement in quadriplegics, a deep brain simulator to help control tremors in people with Parkinson's disease and the first a laser system for treating tooth decay. At the same time, CDRH eliminated the backlog of PMA's and PMA supplements.

The center also made substantial improvement in its 510(k) application review times, cutting almost in half the peak average review time of 194 days in fiscal year 1994. These 510(k) applications are for medical devices substantially like devices already approved for marketing.

CDRH has every hope of its ability to maintain this high performance level as it begins the complex implementation of the FDA Modernization Act of 1997. Unlike the provisions that renew the Prescription Drug User Fee Act, the legislation does not provide CDRH with additional resources, so all of the costs to implement FDAMA and meet performance expectations must come out of the device program's budget. The center's leadership is deeply concerned about the effect this will have on existing programs and resources, but they are committed to making every effort to provide American patients with speedy access to safe and effective medical devices.

Tobacco

Fourth, Americans expect that their children will be protected from the seduction of tobacco products and the addictive nicotine that they contain. In February 1997, the first provisions of FDA's final rule on tobacco went into effect, making it a violation of federal law to sell cigarettes or smokeless tobacco to anyone younger than age 18. The new rule also requires retailers to ask for photo ID from anyone younger than 27 before selling tobacco products.

To enforce the new provisions, FDA established contracts with its first 10 states—Arkansas, California, Colorado, Florida, Illinois, Massachusetts, Minnesota, Pennsylvania, Texas and Washington—to conduct enforcement surveillance. In the current fiscal year, FDA will sign contracts with the remaining states and U.S. territories that are willing to join with us so they can conduct the enforcement inspections of retail operations.

The Agency also launched an education campaign last year to inform retailers of their responsibilities under the new rule—including a nationally broadcast teleconference—and a training program for state officials.

FDA's tobacco rule was challenged in federal district court by tobacco manufacturers and others. The court upheld the Agency's jurisdiction and the age and photo ID provisions were allowed to proceed but other portions of the rule were not upheld or suspended pending appeal. FDA appealed these adverse rulings and is currently awaiting a decision by the U.S. Circuit Court of Appeals.

For fiscal year 1999, the Administration is asking for a $100 million increase in the tobacco program for additional enforcement and evaluation activities as well as compliance outreach, including trade advertising and direct mail targeted to retailers, advertising on radio, print and billboards, public education aimed at parents, community organizations and voluntary health groups. FDA also anticipates beginning a scientifically based product regulation program, including setting up a system to review and analyze product ingredients.

When all the provisions of FDA's final tobacco rule are implemented, FDA believes that it will significantly reduce the number of young people who become addicted to tobacco and will achieve the Administration's goal of cutting by half the 3,000 teenagers who become regular smokers every day.

Information

Fifth, Americans expect that they will be able to make individual decisions and choices about their personal health and the health of family members. To do that, they expect and need to receive reliable, useful and understandable information about the products that FDA regulates.

Some 1.3 million times a year, Americans misuse their medicines and are injured, causing thousands of preventable hospitalizations resulting in estimated annual costs of $20 to $75 billion. To reduce the risk of medical misadventures, FDA helped launch the Medguide program last year. Under Medguide, private contractors will develop and distribute scientifically accurate and unbiased information that gives patients sufficiently specific, comprehensive and easy to understand directions on the proper use of their medications. The goal is to provide a Medguide brochure every time a patient fills a prescription.

The Agency also proposed new, easy-to-understand labeling for over-the-counter drugs. Consumers spend some $18 billion a year on OTC drugs currently. The instructions and warnings on their labels are neither standardized nor easy to use. The new regulation is designed to give consumers the kind of information they need to make informed decisions—just like the food label—in a format that is easier to read and understand. As a result, patients will know how to use OTC products correctly and better understand their risks and benefits.

A new guidance proposed by FDA last summer will make it easier for pharmaceutical manufacturers to advertise prescription drugs directly to consumers. The guidance clarifies the requirements for advertisements on television and on radio, including information about any major risks, as well as instructions for how consumers can easily obtain more detailed information about the drug's approved uses and risks. This new guidance will help promote greater consumer awareness about prescription drugs.

To speed the flow of information between FDA and industry, the agency is rapidly moving into the age of electronic submissions of applications for marketing approval for drugs, biologics and devices. A paperless approach has the potential to increase efficiency, speed up the review process and even make it easier to retrieve information when problems arise after a drug is approved. The full impact of electronic filing has yet to be appreciated but the Agency's leaders expect it to be profound.

Information is also the engine of scientific advancement. FDA actively tries to ensure that it stays on the cutting edge through excellent intramural scientific programs and collaborations with sister agencies such as the NIH and the CDC and academia.

As a science-based organization, FDA will continue to search for the best ways to gather and digest the mountains of new information pouring out of the nation's biomedical research centers and present it to consumers in ways that are timely and useful.

Other Achievements

FDA's many accomplishments cannot be covered in a single document. There has been important progress in many centers and activities, from re-engineering the drug approval process in the Center for Veterinary Medicine to breaking ground for the new regional laboratories in Arkansas, next to FDA's National Center for Toxicological Research, and another at York College in Jamaica, N.Y.

I should specifically mention that OASIS, the Operational and Administrative System for Import Support, became fully operational in every U.S. port of entry where FDA-regulated products come into the country by sea, land and air. This computerized system electronically links all FDA inspection offices with the brokers who bring foreign products into the country. Based on the information supplied by the broker, OASIS can give automated and immediate clearance for the imports or trigger an inspection by a FDA official.

The implementation of this system comes at a critical time for FDA's Office of Regulatory Affairs, which manages the nation's imports of foods and medical products. The quantity of FDA-regulated imports has nearly doubled from 1.5 million at the beginning of the decade to more than 3 million entries or shipments today. Yet the number of FDA inspectors and analysts has increased only slightly from just under 700 in 1990 to just over 800 today. Without the OASIS system, FDA would have a difficult time monitoring the products flowing into this country and keeping out those that pose a threat to our citizens.

THE BUDGET

The President has requested $1.26 billion for FDA's budget in fiscal year 1999. To support this program level, the appropriation request includes $970 million in budget authority, $281 million in user fees, and $13 million in other reimbursable activities. This amount will allow the Agency to carry out a core of critical activities and move forward with new initiatives to protect and promote the health of the American people.

The fiscal year 1999 budget for FDA contains the first annual performance plan for the Agency. FDA priorities, goals and objectives for the year are detailed in the performance plan as well as in the budget. Moreover, the plan is closely linked to the resource levels requested in the budget.

User Fees

The budget proposal for fiscal year 1999 includes $281 million in user fees. Nearly $153 million in currently authorized user fees will be collected, including $132 million under the enhanced Prescription Drug User Fee Act and $21 million in other existing user-fee programs to support Mammography Quality Standards Act inspections, export certification and the certification of color additives.

What's more, the budget proposes $128 million in additional proposed, but not yet authorized, user fees. These new fees, if authorized by Congress, would cover a portion of the cost of the full range of premarket and postmarket activities in most of FDA's program areas including foods, human drugs, biologics, animal drugs and medical devices.

FDA provides a vital public service by promoting health and protecting consumers from unsafe and impure regulated products. Additionally, industry derives a direct commercial benefit from consumers' confidence in FDA's review process and product surveillance, which provides a substantial guarantee of safety. Given the benefits to both the public and the industry, and given that workloads are growing far faster than government resources, FDA believes it is reasonable to share some of the cost between the taxpayer and the industry. Consumers, through tax dollars, already substantially support FDA's activities. In order to maintain necessary funding program levels in an era of fixed, disciplined resource allocation under the balanced budget agreement, the Agency is proposing user fees to help support the whole range of FDA activities.

FDA will work with Congress and the Agency's many constituencies, including the regulated industries, to further develop the proposed fees in conjunction with agreed-upon performance measures and goals that will be linked with the proposed resource levels.

CONCERNS FOR THE FUTURE

Although the Agency's performance has been steadily improving, we have concerns about the future. Our portfolio of important public health responsibilities continues to grow. New and sometimes unexpected issues, such as concerns about imported foods, safety of novel technologies and the emergence of new pathogens, arise continually.

Rising Workload

FDA will continue to face a growing workload. The number of applications for all of the types of products that FDA reviews each year has been going up at 12 percent per year for the last four years. With PDUFA funding for drugs and biologics and innovative management initiatives in all of the centers, we have kept pace with the growing workload; in fact, we have exceeded it. As measured by the number of annual approvals for all new products, our output has increased 17 percent per year Agency-wide.

We are concerned that we may not be able to continue to achieve annual improvements in performance, especially if we do not receive the level of resources included in the President's budget. If the workload continues to rise at 12 percent per year, it will be a great challenge to continue to increase performance given budget projections.

Fluctuating Staffing

FDA's staffing has not grown with increased responsibilities. Over the past five years, the Agency has steadily reduced staff in many core functions supported by appropriations alone even as it increased staff in areas supported by user fees. The overall staff levels rose slightly from the beginning of PDUFA in 1992 from a total of 8,868 FTE's to a high of 9,242 FTE's in fiscal year 1995. After that, there has been a modest decline, though an increase is expected in fiscal year 1999 as FDA expands with the renewal of PDUFA.

In addition, total FTE's will rise this year as the Agency adds staff for food safety and tobacco. These, however, are focused programs that have received specially designated appropriations. While these specialized programs continue to grow, core FDA functions have seen a steady decline in non-PDUFA FTE's from the fiscal year 1992 level of 8,868 to a low of 8,444 in the current fiscal year, a 4.8 percent drop.

The Agency leadership is concerned that the performance improvements made in the past few years may not be maintained if staffing continues to shrink and workloads continue to increase.

Increasingly Full Pipeline

There's little doubt that the workload pressures will continue to rise in the future. The National Institutes of Health, with an annual budget of $13.6 billion, is an engine of biomedical research and medical progress. The basic research that it supports in universities and private labs across the country will lead to the development of many new medical products.

At the same time, the industry's research and development investment of some $21 billion in drugs and nearly $4 billion in medical devices last year continues to grow as companies try to transform the advancing medical science into new products. The payoff is a product development pipeline filled with promising new therapeutics, some of which are strikingly novel.

For society, the benefit from this investment in basic research is great. For FDA, as society's technological midwife for medical products, the burden also is great as it struggles to manage the burgeoning flow of new products to the market.

In addition, new issues arise and add to our workload. Let me give you an example:

PostMarket Surveillance

As more medical products move through the development pipeline and receive FDA approval every year, the number of therapeutics on the market has reached record proportions. Because FDA has a never-ending responsibility for every product—from the time it is first used until it becomes obsolete and is withdrawn from the market—the Agency must remain vigilant for unanticipated or rare, but serious, problems that might arise after patients begin to use it.

In recent years, much less attention has been paid to postmarketing surveillance, FDA's responsibility to understand what happens to a product after it is approved and marketed. This is a critical part of FDA's responsibility because approved drugs and devices sometimes cause unexpected consequences, such as the discovery of heart-valve damage caused by the diet drugs fenfluramine and dexfenfluramine last year. As you know, we moved quickly to take fenfluramine off the market.

Postmarketing surveillance becomes even more important for devices as the FDA Modernization Act of 1997 is implemented. The act directs the Agency to consider how postmarketing surveillance can reduce the amount of efficacy evidence required to get a device on the market.

Clearly, the need for this kind of surveillance is growing rapidly. Industry is developing more and more new products; FDA is approving them at record rates. At the same time, FDA launched MEDWATCH to get doctors to report adverse events and cross-drug reactions. The program is accumulating information so rapidly that the number of reports is going up logarithmically. We will be increasingly challenged to properly analyze those trends.

With this budget, the Agency expects to respond to the problem through increased efficiency, use of information technology—for example the computerized Adverse Event Reporting System that is being implemented for pharmaceuticals—and by partnering with health professional organizations, academia, industry and our international regulatory colleagues. If these approaches are not successful, however, unexpected adverse effects from already approved therapeutics could become a serious problem in the future.

Emergencies and Other Uncertainties

When FDA discovers that an approved therapeutic is injuring patients or a food product is contaminated with a pathogen, the Agency must react quickly and competently. The rapid removal of the diet drug Fenfluramine, the quick action of tracking down the source of *E. coli* contamination in apple juice, requires substantial Agency resources. As the technology for surveillance improves for food-borne illnesses and as more and more pharmaceuticals and medical devices reach the marketplace, FDA predicts that there will be an increasing number of these kinds of emergencies.

In addition, we know that FDA will face future uncertainty and novel problems. No one could have predicted the first drug tampering cases let alone the advent of animal—and the potential of human—cloning or avian flu spreading to humans. No

one can say what future crises will arise, but we do know they will come. And when they do, they will consume unbudgeted resources.

Consider, for example, the avian flu. FDA reacted quickly to the first reports, consulting with sister agencies such as CDC, NIH, DOD and USDA as well as international health agencies such as the World Health Organization and vaccine manufacturers. Once the critical parts of the virus were identified, FDA acquired recombinant H5 HA antigen from a biotech company and injected it into sheep to produce standardization reagents for vaccines that might have to be developed on an emergency basis. A high-security, biological containment lab at FDA is being used to safely study the virus while preventing the unintended release of the H5N1 avian flu into domestic poultry or people. FDA already is working with NIH to permit testing of experimental purified H5 HA vaccine to prevent the spread of avian flu in America.

Based on the past, the Agency knows that the unexpected lies ahead. We need to think about ways to prepare for it.

International Issues

FDA has experienced a dramatic increase in its international operations. It has been an active participant in the development of common approaches to the international approval of new medical therapeutics under the International Harmonization Conference with the European Union. It has also entered into Memoranda of Understanding and Mutual Recognition Agreements for a variety of activities including inspection of international production facilities for pharmaceuticals and medical devices as well as increased inspection responsibilities for imported foods. International activities, however, have proved to be more and more complex and resource intensive than expected.

As global trade in FDA-regulated products continues to grow exponentially, the Agency will face an increasing challenge to its ability to protect American citizens while maintaining good relationships with other countries.

Implementing FDA Modernization

Lastly, let me say a few words about the FDA Modernization Act of 1997. This major piece of legislation focused on modernizing the regulation of medical products, food and cosmetics. The act directed FDA to carry out a number of programs that will include publishing 42 regulations, 23 guidances, 13 other publications in the Federal Register as well as 25 other tasks, such as mutual recognition agreements and global harmonization, postmarketing approval studies and electronic applications and submissions, and seven reports. This will consume a considerable amount of FDA resources for which there is no specific budget allocation. We, of course, are committed to carrying out the congressional directives delineated in the act.

CONCLUSION

I believe it is clear that the investment of each American taxpayer dollar in the Food and Drug Administration is a solid investment in protecting the public health. From the programs I have described, you can see that when Congress invests its trust and resources in FDA, the Agency uses the money well and is productive.

This is an Agency staffed by professionals. We deliver on the expectations of Congress and the American public. When we have sufficient resources, we meet our goals because we are disciplined. When confronted with problems, we make the hard public health choices to ensure the greatest good for the largest number of Americans.

Because FDA is a science-based Agency, it is judicious in the problems it chooses and the way it goes about solving them. We know what's important and we invest where it will do the most good.

Americans expect their FDA to remain vigilant, to promote their health and well being and to protect them from all sorts of hazards. That is an important trust. And it is a trust this Agency will not fail to keep.

Thank you.

BIOGRAPHICAL SKETCHES

MICHAEL A. FRIEDMAN

As Lead Deputy Commissioner, Michael A. Friedman, M.D. is the senior manager for the Food and Drug Administration. He will act in this capacity until a new Commissioner of Food and Drugs is named/confirmed. In addition, he continues his duties as Deputy Commissioner for Operations, overseeing the operations of the Agency's 6 Centers and the Office of Regulatory Affairs, including all field offices. He

manages high priority scientific and public health issues both within and across Centers and participates in a broad range of public health issues sponsored by the Department of Health and Human Services. As a member of the Agency's senior management team of Center Directors and Deputy Commissioners, Dr. Friedman is involved daily in negotiations and discussions of food and drug issues with regulated industries, patient and consumer groups, congressional staff, other federal and state agencies, and representatives of foreign governments.

Dr. Friedman received a B.A. degree in English from Tulane University, New Orleans, Louisiana and an M.D. degree from the University of Texas, Southwestern Medical School, Dallas, Texas. His postgraduate medical training was at Stanford University, Stanford, California and the National Cancer Institute, Bethesda, Maryland, and he has Board Certification in Internal Medicine and Medical Oncology.

Prior to his October 1995 appointment as Deputy Commissioner for Operations, Dr. Friedman served as the Associate Director of the Cancer Therapy Evaluation Program from 1988–1995 and from 1985–1988 as Chief of the Clinical Investigation Branch within the Division of Cancer Treatment at the National Cancer Institute, National Institutes of Health. From 1975 to 1983, Dr. Friedman was a faculty member at the University of California San Francisco Medical Center serving as an Associate Professor in the Department of Medicine, and the Director of Clinical Affairs and the Interim Director of their Cancer Research Institute. Dr. Friedman's professional activities at the local and national level have included appointment to the various posts in the American Society for Clinical Oncology, as well as membership in the American Cancer Society, the American Federation for Clinical Research and the Western Society for Clinical Investigation. His scholarly activities include authorship of numerous scientific articles and book chapters as well as editorial board responsibilities for books and journals.

Dr. Friedman is a career Public Health Service Commissioned Corps member and currently holds the rank of an Assistant Surgeon General. He has received the PHS Commendation Award in 1992, the EEO Special Achievement Award in 1993, and the PHS Distinguished Service Medal in 1997. He is a member of Phi Beta Kappa and Alpha Omega Alpha honor societies.

ROBERT J. BYRD

Appointed to this position in December 1995, Mr. Byrd is responsible for Strategic Planning and Management Systems, and providing leadership and direction in all phases of management operations. Mr. Byrd is the Chief Financial Officer for FDA and the Commissioner's Chief Advisor on all aspects of managing FDA resources. Mr. Byrd is also responsible for providing cost effective, customer focussed management support for the operating programs, including financial management, human resources management, facilities management, procurement, grant and contract management, safety and security, information systems, and effective planning and assessment of Agency programmatic activities.

Prior to joining FDA in 1994 as Associate Commissioner for Management, he was recruited into the U.S. Department of Agriculture's Senior Executive Service Career Development Program as a management specialist, 1992–1994. There, he designed a model for integrating procurement management within USDA. Many of the elements of his model, which was presented to the Vice President and to the Secretary of Agriculture, were incorporated into the "Report of the National Performance Review."

He also served as Assistant Secretary, Services and Logistics in Maryland state government from 1990–1992. Prior to that, Mr. Byrd served in Maryland's Department of General Services as Director of Operations, 1986–1990; Executive Assistant to the Secretary, 1984–1986; Administrator, Special Projects, 1981–1984; Executive Director Maryland Minority Educational Fund, 1976–1981; Administrator, Architect/Engineer Selection Board, Maryland state government, 1975–1984; Accountant/Auditor, Maryland Department of Transportation and Maryland Department of General Services from 1973–1975. Mr. Byrd received a B.B.A. from Loyola College and an M.B.A. with honors from Loyola College in 1987. His awards include the Governor's Citation for Outstanding State Service, MD, 1983 and 1992; Governor, Comptroller, and Treasurer's Distinguished Service Award, MD, 1984; FDA's Award of Merit, 1996; and FDA Commissioner's Special Citation, 1997.

WILLIAM B. SCHULTZ

Mr. Schultz is the Deputy Commissioner for Policy at the Food and Drug Administration (FDA). As the Deputy Commissioner, Mr. Schultz oversees the Agency's

policy development activities and the processing of all FDA regulations. He is the principal advisor to the Commissioner on policy matters before the Agency and bears primary responsibility for coordinating FDA's policies with other government agencies and countries. He also oversees implementation of the President's Tobacco Initiative and the development of the Agency policy positions on legislative matters before Congress.

Prior to his appointment, Mr. Schultz served as Counsel to the House Subcommittee on Health and the Environment, which was chaired by Congressman Henry A. Waxman of California. Mr. Schultz was the Counsel principally responsible for the following laws: Nutrition Labeling and Education Act of 1990; Safe Medical Devices Act of 1990; the Prescription Drug User Fee Act of 1992; Generic Drug Enforcement Act of 1992; and DES Education and Research Amendments of 1992.

Prior to becoming Counsel to the Subcommittee, Mr. Schultz was a Senior Attorney at Public Citizen Litigation Group, where he litigated cases in state and federal court (at all levels) on a variety of issues, including food and drug law, automobile safety, nuclear power, voting rights and anti-trust. He also represented Public Citizen before Congress and has written a number of articles, principally on food and drug law issues.

Between 1982 and 1996, he was an Adjunct Professor at Georgetown University Law Center, where he taught Civil Litigation and Food and Drug Law.

Mr. Schultz served as a Law Clerk to United States District Judge William B. Bryant.

He received his J.D. from the University of Virginia Law School and his B.A. from Yale University.

DENNIS P. WILLIAMS

Dennis Williams has served as Deputy Assistant Secretary for Budget since 1984.

Dennis provides advice and assistance to the Assistant Secretary for Management and Budget, and the Secretary, on program policy and management issues dealing with the Department's budget. He is responsible for the formulation of the budget for HHS and its presentation to the Office of Management and Budget and to Congress.

From 1982 until 1984 he served as the Director, Division of Welfare Budget Analysis in HHS. Before that, starting in 1980 until 1982 he served as Chief, Health Care Financing Branch, Division of Health Budget Analysis.

From 1977 until 1980 Dennis was a Program Analyst in the Division of Health Budget Analysis.

Prior to his appointment at HHS, Dennis served from 1968 until 1971 as a Program Specialist with the Office of Economic Opportunity and from 1965 to 1967 with the Peace Corps in Turkey. He was awarded a doctorate in International Relations at the Johns Hopkins School of Advanced International Studies in 1976.

FOOD SAFETY INITIATIVE

Senator COCHRAN. We appreciate the cooperation that we have received from you, Dr. Friedman, in the work of this agency. I know that as an acting director, you have been called on to do an awful lot of heavy lifting. We have admired the efforts that you have made to assume responsibility for the actions of the agency and to try to provide strong leadership as the acting administrator.

The questions I have are centered primarily on the substantial increases in the budget request. Specifically, the first item is the food safety initiative. You pointed out that there had been an additional $24 million provided for this food safety initiative for the current fiscal year. Now we see an additional $50 million increase over that amount being requested for this initiative.

It seems like an awful lot of money and at a time when we do not anticipate an increase in allocation to this subcommittee. So, if we provide increases in funding, they have to come from other programs. We do not have the luxury of just reaching up in thin air and pulling down new money to support these increases. So, that presents us with some hard choices that we have to make.

So, we need to know what is being done in this area that justifies taking $50 million from some other program either at FDA or from some other agency that is funded in this appropriations bill. So, it is going to be a hard sell I think.

You pointed out surveillance, education, research, imported products requirements.

Dr. FRIEDMAN. Let me do my very best to make that case to you, sir.

Senator COCHRAN. Why do you need so much more money?

Dr. FRIEDMAN. It is a very appropriate question and I want to convey to you both the reasons why we think this is a very important investment in our future and the recognition of how many worthwhile activities compete for your committee's attention and resources. I do recognize that as a very significant tension.

You recognized the background upon which all of these discussions occur. Our current assessment of the number of illnesses from foodborne infections is rather imprecise, but at a low it is a little over 6 million and at a high, perhaps 33 million individuals become ill each year in the United States from foodborne illness. The dollar figures associated with their loss of ability to work and function is significant. More critical, of course, are the perhaps 9,000 deaths that occur each year from foodborne illness.

The background upon which we are facing food threats is a very substantial one. Our population is becoming older and more sensitive to foodborne infections. The kind of foods that we eat are changing dramatically, much more imports. Our imports have virtually doubled over the past 7 years and are going up at an even more rapid rate as our consumers want to have fresh produce or other products available year-round from all over the world.

Not only that, but the micro-organisms themselves have changed. We have seen the evolution of more virulent, more deadly micro-organisms. The E. coli O157:H7 is one example but by no means the only one. There is a Salmonella subtype. There are Campylobacter microbes that are becoming more virulent and more deadly.

When you put all this together, you realize that America has a very safe food supply now, but that our citizens want this to remain safe and even safer and that the challenges that we confront in the future are going to be very substantial.

I am sorry for that long introduction. I know you recognized that but I thought it was worth just restating it.

We are working very closely and very cooperatively with our colleagues in the Centers for Disease Control and Prevention, at the U.S. Department of Agriculture, at the Environmental Protection Agency, with State and local authorities to try and have the most integrated, most powerful system for preventing infection, detecting infection, and dealing with it once we identify it.

The paradigm is that we want to control all the possible contaminations from the farm where the food is produced, until it reaches the consumer's table. It is a formidable challenge to cover that entire range, but if you think about the vast number of food types, the vast number of opportunities for infection—I do not want to seem arrogant—this is a modest request and one that we agonized over because we did not want to come to this committee asking for

an exorbitant amount. We think the programs identified here are really very sensible scientifically from a public health point of view. We do recognize how difficult it is to make these budgetary allocations, but this is what I think our citizens want as one of their primary desires and I think we can make a very strong case for it, sir.

Senator COCHRAN. There is one part of the program that we understand includes expanding the effort to inspect seafood under the new HACCP requirements. What level of funding is being allocated for the hazard analysis and critical control point requirements and the implementation of a seafood inspection program?

Dr. FRIEDMAN. This year we are committing to fully implementing the seafood HACCP program with some $8 million to recruit an additional 80 seafood inspectors.

In addition to that, though, there are extensive activities in terms of education for State and local regulatory officials, but also educational activities for the seafood processors and the industry people as well.

This looks to be so far a very promising start. This was the pilot program which the U.S. Department of Agriculture has been watching very closely as they model their own HACCP program. It seems to be one where there is a good deal of cooperation between industry, local authorities, and Federal authorities. At this point, sir, we are enthusiastic about it. It is the pilot program in some sense. We are deeply committed to a full and vigorous implementation of the HACCP program for seafood.

We are of course, examining and will be moving to HACCP programs for juices this year as well.

Senator COCHRAN. The budget justification that has been submitted to the committee indicates that FDA intends to expand implementation of HACCP and other food safety assurance systems in the food industry. What expansions and new systems do you intend to implement?

Dr. FRIEDMAN. Our juice program is No. 1 in that regard.

Senator COCHRAN. What is that?

Dr. FRIEDMAN. Fruit juice.

Senator COCHRAN. OK. I just did not understand what you said.

Senator BUMPERS. You say you are planning to expand it to fruit juices?

Dr. FRIEDMAN. Yes, sir; that is right. That will be the next area.

I think that we want to only expand HACCP programs in those areas where there is scientific basis and where there is an expectation that such a system, as attractive as it is intellectually, will actually be practical and will in fact offer the consumer something positive.

Mr. Schultz.

Mr. SCHULTZ. If I could just comment. I think this represents a new philosophy by the FDA and really reflects the sort of Reinventing Government approach of this administration. We are moving away from what we did before, which was having inspectors go in plants. We were accused, I think sometimes justifiably, of nitpicking, and it was a very confrontational relationship with the industry.

With HACCP, we are starting with the areas where there is the greatest concern, the greatest risk. It involves FDA working with the company to develop what is called a HACCP plan, which is a plan that says how often do you clean the counters, how often do you check the temperature in the refrigerator, where do you have to have pasteurization or something equivalent in the case of juice. Then, what our inspectors do is they come in, they look at the plan, and they look at the records, not just what is happening that day, such as is the floor dirty? But looking back in time what happened when they checked the temperature, when they did this, and when they did that.

It is much more effective in terms of food safety and I think it is much more constructive. Obviously, where there are serious violations, we will bring enforcement actions, but the idea is to get away from the single day, nitpicking kind of approach, and really focus on what is important.

Senator COCHRAN. It does sound like that is the kind of thing that inspectors do in city governments or in local governments. Are there not agencies involved in going around and certifying restaurants and other food establishments where people buy food to see if the counters are clean, et cetera? Or am I missing something here? Why do we need a Federal agency doing that?

Dr. FRIEDMAN. Well, State and local inspectors inspect at the retail level. I think the value of having Federal inspectors is a couple of fold. One is in setting the principles. For example, the State of Alaska has recently come to us and so much appreciated our seafood HACCP program, the scientific basis of it, the clarity of it, the logic of it. They are incorporating it as their State program and following it there.

In terms of dealing with international suppliers who may not supply just one city or one locality but many parts, we have a very important role to play there. In terms of interstate commerce where seafood is distributed widely across parts of the country, we have a very important role to play there.

In terms of having certain authority to set the standards, I think that we have a very valuable contribution, but I must recognize the important role that State and local authorities do play in this. We work closely with them in that regard.

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman. First, let me apologize to you for being a little late. I have a responsibility on the Energy Committee as ranking member, and they had a big——

Senator COCHRAN. Knock down, drag out?

Senator BUMPERS. Yes; exactly. [Laughter.]

Dr. FRIEDMAN. Thank you for being here, sir.

Senator BUMPERS. Like a train wreck, I did not want to miss it, but I have sat where you have sat many mornings by myself in this committee holding these hearings, and I know what that can be like.

Dr. Friedman, let me first thank you. My staff tells me that you paid a great tribute to me before I got here. I wish you would have saved it. I would like to have heard it. [Laughter.]

But I know that everything you said was true and a lot more. [Laughter.]

Dr. FRIEDMAN. I edited those remarks, sir, yes.

Senator BUMPERS. Thank you very sincerely for your kind remarks. I have had an excellent relationship with you and Dr. Kessler, all the FDA directors.

In any event, I have the highest approval rating in my State I have ever had, even when I was a young, dynamic, good looking Governor, which tells you that when you tell them you are going to exit, they all love you. [Laughter.]

Dr. Friedman, let me just ask you a few questions. I hope these have not been asked before, but do not hesitate in telling me if this question has been presented to you before.

I wanted to ask you, first, how long have you been inspecting seafood and how is that going?

Dr. FRIEDMAN. Well, I do not have the exact date of when we began inspecting seafood.

Senator BUMPERS. Let me tell you. A couple of years ago.

Dr. FRIEDMAN. Do you mean under the HACCP program?

Senator BUMPERS. Pardon?

Dr. FRIEDMAN. Under the HACCP program?

Senator BUMPERS. Yes; I am sorry. Under the HACCP program. I am sorry. I left that out.

Dr. FRIEDMAN. Mr. Levitt, who is the Director of our Center for Food Safety, may be prepared to deal with more of these.

The full implementation of HACCP only occurred this last December.

Senator BUMPERS. This past December?

Dr. FRIEDMAN. The full implementation.

Senator BUMPERS. I guess it is fair to say then, Mr. Levitt, you have not had enough experience yet to know how it is going to work, have you?

Mr. LEVITT. We are clearly in the first year of its implementation, and we consider this both a learning experience for us and the industry. One thing we are doing, I think No. 1, we have a goal of inspecting every seafood processor within the calendar year.

Senator BUMPERS. Where are you in that goal now?

Mr. LEVITT. Well, we are a quarter of the way into the year.

Senator BUMPERS. You are at 25 percent?

Mr. LEVITT. I am not positive we are at 25 percent as yet, but we have been doing it for the first quarter of the year.

What we are doing, which I think is a little unusual, is we are providing feedback letters to companies after the inspection. Again as Mr. Schultz said, the traditional mode is for FDA to have a very kind of arm's length relationship with the industry. We are trying to do this much more cooperatively and after the inspections, we are providing written feedback to companies of potential areas we think improvement could be made in their HACCP program in an effort to use this program as a way to raise the standards overall and enhance the safety of the program.

So, we consider this first phase of implementation to be both the first year that companies are expected to have a full seafood HACCP program in place, but also recognizing there is a learning curve involved. So, we are trying to provide constructive feedback on how they can make it even better.

IRRADIATION OF FOOD

Senator BUMPERS. Do you permit irradiation of seafood? Anybody?

Mr. SCHULTZ. No.

Senator BUMPERS. You do not irradiate seafood. Is there a specific FDA prohibition against irradiating seafood?

Mr. SCHULTZ. In order to irradiate food, we treat that as a food additive, so a sponsor has to come and ask permission, and I do not know that kind of request has been made for seafood.

Senator BUMPERS. But do you have an answer for them if it is made?

Mr. SCHULTZ. Well, we have to look at the data.

Senator BUMPERS. Do you have any data?

Dr. FRIEDMAN. This is Janice Oliver, Deputy Director in our Center.

Ms. OLIVER. Good morning.

Senator BUMPERS. Ms. Oliver.

Ms. OLIVER. We have some data that has been supplied to us on irradiation for seafood and we have petitions that are in-house that I cannot comment on. But we also have some additional data that the seafood industry is gathering at the present moment to supply us.

Senator BUMPERS. While you are there, Ms. Oliver, you may be the one to answer this. What percentage of the poultry in this country is irradiated? Does anybody know the answer to that?

Mr. SCHULTZ. Small.

Dr. FRIEDMAN. I believe it would be a USDA issue.

Senator BUMPERS. I know this is USDA's responsibility but I thought you might have some idea.

Dr. FRIEDMAN. My understanding is it is a small percentage but I cannot give you a quantified number on that.

Senator BUMPERS. Let me ask you this. If I wanted to start irradiating foods, for example, poultry, would I have to come to you and ask your permission?

Mr. SCHULTZ. The answer is yes, and it has been done and we gave the permission.

Senator BUMPERS. So, it is done on an individual basis. The poultry industry does not have ad hoc authority to just go ahead and start, what shall I say——

Mr. LEVITT. Irradiation is considered a food additive under the Food, Drug, and Cosmetic Act and needs prior FDA approval. Irradiation has been approved for particular products including poultry and most recently for red meat.

Dr. FRIEDMAN. Currently, there are several food commodities that can be irradiated to kill microbes, spices, poultry, red meat. It is perfectly permissible.

Senator BUMPERS. Do you have any idea what percentage of the red meat in this country is being irradiated?

Dr. FRIEDMAN. Again, sir, my understanding is that it is small. I am not sure that the labeling has been fully worked out by the U.S. Department of Agriculture. We have been working with them on that. I know they are committed to that, but they could give you a better sense of the exact status.

Senator BUMPERS. Did FDA develop this process of doing something to the chicken to eliminate all salmonella?

Dr. FRIEDMAN. It is a very interesting product, sir. The competitive exclusion, is essentially colonizing the chicks' intestines with friendly, less harmful organisms to keep the more harmful organisms from setting up colonies there. This particular product was developed by USDA researchers. They then, working with a private company, submitted that application to the Food and Drug Administration. We reviewed the application. Our Center for Veterinary Medicine in fact agreed that it did exclude some of the harmful bacteria, and as you know, that was approved recently.

There are a number of other products also under consideration for the same kind of thing. This is a very interesting microbiologic technique that has even been used in humans in some situations.

Senator BUMPERS. I do not know whether this is pervasive in the industry or not, but I am hearing from some of them that because of a new requirement—and it may be related to this—they are having to use 2 gallons of water more per bird than they have in the past. Do you know what that is about?

Dr. FRIEDMAN. I do not, sir. I think USDA may be able to provide that answer.

Senator BUMPERS. Well, I am advised that that is an FSIS thing. I am sorry.

Dr. FRIEDMAN. No, no; it is perfectly OK, sir.

Senator BUMPERS. Do you have any idea how foreigners treat irradiation, what their view of it is?

Dr. FRIEDMAN. I know that irradiated products have been available in foreign countries.

Senator BUMPERS. There is some resistance to it, is there not?

Dr. FRIEDMAN. There is a small symbol that is put on irradiated food. I have not seen specific data suggesting how many people find it an attractive treatment and how many people are worried about it. I do not know that information, sir.

MEDGUIDE PROGRAM

Senator BUMPERS. Mr. Chairman, I guess this is close to my last question. I have two questions.

Last year you launched the so-called Medguide program to give consumers better information about the drugs they were buying. Now, that works pretty well for me. I take a few medications and they always give me this little poop sheet. But I thought 2 years ago we also decided that FDA would be the final determiner of what information is given on all these different drugs that required that. Is that correct?

Mr. SCHULTZ. Maybe I could try that.

Senator BUMPERS. All right.

Mr. SCHULTZ. What was worked out with the Congress last year was a two-step program. The first step would be to let the industry and industry groups voluntarily try and do Medguides and to reach certain goals. So, we are currently in that voluntary phase where we are looking at two things. One is how often do consumers actually get a piece of paper when they get a prescription drug, and the answer today is fairly frequently.

Senator BUMPERS. Virtually all the big drug companies do that, do they not?

Mr. SCHULTZ. The drugstores do, the drug chains, yes.

Senator BUMPERS. That is what I am talking about.

Mr. SCHULTZ. The computer has just helped us immensely because there are companies that basically put out packages of the information and then the pharmacist can very easily print it out on an inexpensive printer.

The second issue, though, also very important, is what is the quality of the information. That varies quite a bit. So, I think the effort over the next few years is going to be to get that information up to a very high quality, not such that FDA is writing it, or saying exactly what the words have to be, but making sure the key elements are there. We will then do a survey in the year 2000 to see if, I believe the goal is, 75 or 80 percent of people get adequate information. If the answer is no, then the FDA could play a more active role.

Senator BUMPERS. I think all drugs have an admonition, do not drink if you take this drug, do they not?

Dr. FRIEDMAN. Not all drugs.

Senator BUMPERS. Not all of them?

Dr. FRIEDMAN. No, sir.

Senator BUMPERS. Just the ones that I buy? [Laughter.]

Dr. FRIEDMAN. I know that you are not proposing new regulations for us in that regard.

ARKANSAS REGIONAL LABORATORY

Senator BUMPERS. Finally, I talked to you, Dr. Friedman, in the office about the disappointment those of us in Arkansas experienced when we found out we were not in the budget for phase 3 of NCTR, the National Center for Toxicological Research.

Let me ask you. As you know, the consolidation of the laboratories by FDA which was designed to save money and become more efficient—as long as Arkansas was one of them, I was hot for it, of course, and we are one of them and I thank you and Dr. Kessler for that.

But I am just curious. We have got the money and we are under construction on phases 1 and 2. I forget the amounts this year. I think in 1998 we got $14 million for phase 2. My question is, What impact will that have on the efficiency of that laboratory or its ability to do what it is supposed to do without phase 3 being built at least sometime in the immediate future?

Dr. FRIEDMAN. As you recognize, sir, the first two phases have to do with the construction of the laboratory components for our regulatory activities. The attractiveness of having our regulatory laboratories interacting directly with our applied scientific laboratories—it is an obvious opportunity that we want to take advantage of.

Phase 3 is constructing office/conference space for the staff not only for our regulatory affairs staff, but also for some of our scientists at NCTR. We will use temporary buildings. We will use other facilities to have offices for these individuals.

Our consolidation plan for our field laboratories is moving forward. We have been very successful. I have been very gratified

with how that has been handled so far. We are consolidating. We will be appreciating real savings and efficiencies.

Nonetheless, we recognize that not having phase 3 will mean that we cannot be as efficient at our Arkansas facility as we possibly could be. As you know, sir, we requested the money this year. We are planning to do so again next year. We think this is a legitimate, valid project for us to be engaged in. As you recognize, the Department recognizes, we all struggle with the competition for very important things that need resources. We will put this forward again, sir.

Senator BUMPERS. Dr. Friedman, I appreciate your remarks.

Mr. Chairman, if I may just in closing say that I have been a fairly unabashed supporter of the Food and Drug Administration. Three years ago, I believe it was, there was a mad dash in the Congress to force FDA to speed up the licensing of drugs. While that is always a highly desirable goal, it is not a goal if you are going to sacrifice any of the kinds of experiments and information you need to protect the consumers. Every time I talk about how we as Americans are so lucky because when we eat our food, we know it has been inspected, and when we take medicine, we know that the medicine has been tested and tested and tested.

Dr. Kessler was a little bit on the defensive but certainly not because of anything I said. It is very easy to sit up here when you are down there and browbeat you and demand that you do certain things more expeditiously, but I never joined that herd because if it takes longer to be sure that you are not dispensing a drug that is going to have some terrible side effect—and oftentimes those do not show up for years. So, sometimes I know that it is just a roll of the dice almost when you do license these drugs because they have not been tested long enough to know for sure that somebody is not going to have liver cancer 10 years from now and it is going to be traced back to that.

So, as I say, I have always thought you did an excellent job. Dr. Kessler's role in this tobacco brouhaha is legendary, and he was always tough-minded and deserves a lot of credit for it.

As I say, I think you do a very fine job. We have had a great relationship with you in my State at the National Center for Toxicological Research, and we appreciate that.

So, since this will be the last time I will have this bittersweet experience of having FDA before me, I just wanted to make those comments to you to assure you that I will continue to feel that way. If I were king—I have said many times I should be. [Laughter.]

I would take the space station—better still, I would just take the cost overruns of the space station. [Laughter.]

And split it between you and the National Institutes of Health. I might give NIH a lot more than I would FDA because they are actually on the cutting edge of doing the medical research in this country. You are not going to get anything out of the space station. We never have.

I mean, I am a proponent of the space program. Do not misunderstand me. But the space station is now—and I am in my "I told you so" mode this morning. For 7 years I have tried to kill that sucker without success, and now we are looking at, the first time, the admission of NASA that just the building of it, not the deploy-

ment and the operation of it, is going to cost $6.6 billion more than we had been led to believe. That is just the opening salvo.

As I have said many times, when NIH can only approve about 27 percent of the good medical applications for good research that they get and us getting ready to spend well over $100 billion over something that has no payback, unless you are intent on going to Mars, as I say, I would just take the cost overruns and give it to you and NIH and the Centers for Disease Control. I will add them too.

Thank you, Mr. Chairman.

IRRADIATION OF FOOD

Senator COCHRAN. Thank you very much, Senator Bumpers.

Dr. Friedman, I have one other question on this food safety issue and that relates to irradiation. I understood that FDA had issued an order, regulation finding that irradiation, when used for the purpose of killing bacteria and other things that made food harmful, was safe and it could be used in the food processing industries. Is that a correct statement?

Dr. FRIEDMAN. It is correct, sir, for a number of kinds of food. It is true for muscle meats of animals like beef and pork and sheep. It is true for poultry. It is true for certain spices. There are a number of kinds of foods where it has been approved for the killing of bacteria, yes, sir.

Senator COCHRAN. My concern is that we are spending a lot of money on visual inspections of carcasses to try to find things that are unhealthy or could cause people to get sick if they ate the food. But we are not spending anything in the food processing industries that I know anything about on irradiation, or at least it is a very small amount devoted to that right now.

You point out that one of the things that you are doing with the money in the food safety initiative is education. Why are you not spending some money educating the public that irradiation is safe so that there will not be the fear of it that exists right now?

Dr. FRIEDMAN. I think the public's perception of irradiation and the attractiveness of irradiation to the public is an important consideration, and I know that the livestock industry, meat producers are certainly focusing on this very much.

As you appreciate, sir, even if irradiation were uniformly applied to all products today, that would be very good for that particular moment, but if the consumer then did not properly handle it, did not clean the surface, did not wash his or her hands, did not store it properly, did not cook it properly, the opportunities for contamination at the home or at the retail store or at the restaurant are still very substantial. We are looking at the range of educational activities.

I think for some consumers, for some products, irradiation makes a great deal of sense, and we believe that it is safe. We believe it is appropriate, and that is why we approved it. We have said that publicly and continue to do so.

I think that how we use our scarce education dollars over the whole range of responsibilities is something that we are still looking at.

Senator COCHRAN. I may have it wrong but it just seems to me that the Federal regulations right now require a lot of things to be done in food inspection that are unnecessary or that do not really meet the problem head on. Yet, when we come up with new technological advances, the Federal Government does very little to advance the use of that and to try to help acquaint the general public with the benefits of it, the processing industries with the benefits of it, and to go to the next step. It may be because it is like I said about the food safety initiative and the additional $50 million that you need. It is a hard sell unless we are going to get some benefits from it.

Dr. FRIEDMAN. We certainly expect to get benefits from it.

I think that the remarks that you are making are important remarks, but probably are more appropriate to be directed at USDA than ourselves in that regard since they are the ones who are developing the labeling for meat irradiation.

In addition, though, you make a very important point about how you use your inspectional resources. Just to reprise what Mr. Schultz said, one of the really attractive features about the HACCP program is that it is prevention, it is scientifically based, it uses our resources much more efficiently. We are really trying to explore this because we agree with you. To inspect every piece of seafood is not a very efficient use of our time and may not even be the very best way to do it. We believe that looking at the processes, having a scientifically validated way of doing things just makes a lot more sense. It is not only more practical but it makes a lot more sense. I think your points are very cogent in that regard.

Senator COCHRAN. Mr. Schultz, you appear to want to say something.

Mr. SCHULTZ. No, no; I cannot improve on it.

I think that there are two issues on irradiation that you are alluding to. One is, is it really safe? Nobody is going to get irradiated, but what does it do to the nutrients in the food? We looked at that, as Dr. Friedman said, for meat and poultry and are ready to look at it for other products.

Then there is this major consumer acceptance issue. Because of the word "irradiation," people are afraid of it. I think you make a very valid point, and we ought to, with USDA, look at this issue of consumer education. It is a little bit of a chicken and egg issue since nobody is using it, it is a little odd to start the education now. But I think it is something we should look at.

USER FEES

Senator COCHRAN. I hope you will. I think that would be a wise use of some of your resources.

In the budget request, there are proposals for new user fees. Could you tell us how much in user fees you are suggesting be imposed on industries, which industries, and how much do the user fees amount to?

Dr. FRIEDMAN. Our budget outlines several kinds of user fees.

Senator COCHRAN. I am referring to all of them. I want you to hang it all out. Tell us what the administration is proposing. I am tired of just stating it myself. I want you to tell what you are proposing.

Dr. FRIEDMAN. Very good. I will ask Mr. Byrd to assist me in this.

We are asking for a component for prescription drug user fees which was reauthorized in our 1997 FDA Modernization Act which I believe were $132 million. In addition, there is approximately $128 million of new user fees which are distributed in a way that Mr. Byrd can outline for you.

Senator COCHRAN. Mr. Byrd.

Mr. BYRD. We are distributing the $128 million of new user fees: $10 million for the food additive petitions, $12 million for generic drugs, $25 million for devices, $10 million for animal drugs and feed, $57 million for postmarket surveillance, and $12 million for import reviews, a total of $128 million in new user fees.

Senator COCHRAN. Who would pay the postmarket surveillance user fees, that $57 or $58 million?

Mr. BYRD. That is right. That is intended to be paid by establishments.

Senator COCHRAN. What kind of establishments?

Mr. BYRD. Well, the medical device establishments, the businesses. When we talk about establishments, we mean the businesses.

Senator COCHRAN. What businesses? I want people to know who you are going to tax or who you are going to ask to pay for these things.

Mr. BYRD. Medical device businesses, the food establishments. When I say food establishments, I mean those food—that part of industry that makes food and distributes food, processes food. Human drug establishments. Those are the pharmaceutical and biologics industries. Those are the establishments that we are referring to when we talk about postmarket surveillance.

About $31 million of that $57 million would come through the food establishments, about $7 million through human drug establishments, about $11 million for medical device establishments, about $4.6 million for biologics establishments, and about $4 million for animal drugs and feeds establishments.

YOUTH TOBACCO PREVENTION INITIATIVE

Senator COCHRAN. The budget also proposes a substantial increase in funding for the youth tobacco prevention initiative. In looking at the budget request, it appears that compared with this fiscal year where $34 million was provided to the administration for this initiative, next year's request is for $100 more million. So, a total of $134 million is requested for that initiative. Is that correct?

Dr. FRIEDMAN. Yes, sir; that is correct.

Senator COCHRAN. Like the budget request for the additional $50 million for the food safety initiative, there is no offset anywhere suggested, and it is unlikely that the committee is going to get an allocation any higher than it got this year. So, we are confronted with a new $100 million request for this initiative that either has to be taken from other programs administered by the Food and Drug Administration, or from programs administered by the Department of Agriculture or the Commodity Futures Trading Commission that come under the jurisdiction of this committee because

we are not anticipating an increase in allocation under the budget resolution. There is in effect an agreement that was entered into last year called the Balanced Budget Act which imposed restraints on spending. That applies to this next fiscal year just as well as it did the current fiscal year.

Dr. FRIEDMAN. Yes, sir.

Senator COCHRAN. So, this is a part of reality that we are confronting this morning in looking at FDA's budget request.

The part I specifically want to ask about I guess is, as we try to decide what to put in the bill as we recommend it to the full Senate, we have to justify to the Senate that these are going to be funds that are well used and that are needed and that there is legal authority to use them.

As I understand it, $24 million of the request is for tobacco product regulation. Is there legal authority for the Food and Drug Administration to spend $24 million in product regulation?

Dr. FRIEDMAN. I will ask Mr. Schultz or Mr. Zeller if you would please help with that.

Mr. SCHULTZ. Well, I think it is straightforward. As you know, the agency has said it has jurisdiction over tobacco products, and there are some new products coming along. Now, the jurisdiction issue is in litigation. The district court upheld jurisdiction. It is on appeal to the fourth circuit. It has been argued. But, we believe we have jurisdiction and the district court upheld it. So, that would mean as new and novel products come along, the agency would have the obligation to review them.

Senator COCHRAN. The additional $51 million over this current year's level is for enforcement and evaluation. What is to be enforced and evaluated? What do you intend to enforce?

Dr. FRIEDMAN. The enforcement activity referred to is the prohibition of selling tobacco products to underage youth. These are to be moneys distributed to States. One of the really attractive features about this program is its distributed nature, the fact that there are not a lot of FDA staff who will be working on this here in the Washington area. It is at State and local communities where this money will be distributed to check and see whether there is compliance with the restrictions on selling tobacco products to underage youth and asking for identification before such a sale is made to a young individual.

Senator COCHRAN. I am curious to know whether you are going to make decisions on allocating the funds on the basis of whether States have already settled cases with the tobacco industry and obtain funds for this purpose already on their own initiative. Will that be a factor in determining who gets the money?

Dr. FRIEDMAN. I do not believe it will be.

Mr. SCHULTZ. What we have done is we have asked the States that are interested to submit contract proposals to us. Basically, their people are going out and doing the inspections. If they find violations, then we send warning letters and can impose fines.

I do not know that the State settlements are really to enforce our 18-year-old restriction, although they obviously involve a lot of money that could be used for good purposes in terms of tobacco.

Senator COCHRAN. How many States have actually applied for these funds in the current fiscal year? You have $24 million avail-

able for the enforcement and outreach program this year. Have you made any allocations of these funds to the States?

Dr. FRIEDMAN. I would ask Mr. Zeller who is most conversant with that to speak.

Mr. ZELLER. Last year we signed 10 contracts on a pilot basis. The total for those first 10 contracts was just under $2 million. So far this fiscal year we have signed renewals with 4 of the first 10 States. We have signed three new contracts, North Carolina, Nevada, and Rhode Island, and we are in negotiations with another 12 to 13 States. We have yet to receive word from a single State that they definitely will not be applying for funding to help us in the enforcement this year. So, we remain confident by the end of the fiscal year, we will have signed contracts with 50 States. We even have interest from some of the territories.

Senator COCHRAN. So, you think you are going to spend all the $24 million by giving it to the States?

Mr. ZELLER. The overwhelming majority of the $24 million is for the States. It is not 100 percent. We are setting aside some money for followup enforcement action that we could take at the Federal level. We do not want to reveal how much of the $24 million is for the States, but the great bulk of it is for State contracts.

Senator COCHRAN. I may have missed something, but I am not familiar with the details of the Federal laws regarding violations of the prohibitions against selling tobacco to underage people. Does the Federal Government presume to prosecute and deal with offenders, or is this something that comes under the State and local jurisdictions?

Mr. ZELLER. A violation of our final rule is pursued by FDA.

Senator COCHRAN. So, it is a rule. It is not a law then. It is not a Federal criminal law.

Mr. ZELLER. No; it is a civil violation of the rule. For a first violation, since the program is new, the retailers get a written warning from FDA, and then civil money penalties begin with a second violation. We have sent out and received our first set of civil money penalty payments. For the second violation, the fine is $250.

Senator COCHRAN. What if these acts are also prohibited by local statutes or ordinances? Do you respect the right of local law enforcement officials to deal with that?

Mr. ZELLER. Absolutely, as long as they are coordinating with us so that we know what actions they are taking separately. There is nothing that would happen to the States by signing contracts with us to enforce the Federal regulation that would impede their ability to proceed separately under State law.

Senator COCHRAN. So, what is the policy? If someone has already been punished, in effect, or disciplined in some way for violating these rules, you do not come in and try to put a Federal penalty on them on top of the local penalty?

Mr. ZELLER. Only if we have been able to document a violation of the Federal regulation. Prior violations of the State or local ordinance have no effect on when a particular penalty would kick in under the FDA rule. We have to document individual violations of our regulation.

Senator COCHRAN. Compliance outreach is a part of the program, and in this year $10 million was allocated for that purpose, as I

understand it. Next year you are proposing to spend $35 million. What will you do with the additional funds in the area of compliance outreach?

Dr. FRIEDMAN. I think it is important to put in perspective both what the goal is—that is, to help educate and work with the retailers so they understand what the regulations are and understand the importance of not selling tobacco products to underage youth—and also to recognize really the vast amount of money that is spent advertising tobacco products.

This is a considerable amount of money, $35 million, but compared to $5 billion, which is what the tobacco industry spends on advertising products, it is a drop in the bucket. There are some States like California, for example, that have programs that are more expensive and larger than what we are proposing for the whole Nation.

The goal here is to help educate the retailers so that their sales staff, cash registers at a 7-Eleven or some other kind of store, will understand the necessity of assuring that it is an adult who is buying the product and understanding that the owner of the store may be at risk for a financial penalty should that not be properly applied.

Mr. Zeller.

Mr. ZELLER. Let me give you some detail on how we would propose to spend the increase. With the money for outreach this year, just over a month ago, the Vice President announced a national multimedia advertising campaign to the tune of about $7 million out of the $10 million. It is a combination of radio, newspaper, billboard, and in-store advertising. And the way it works is each time we sign an enforcement contract with the State, when the compliance checks are ready to begin, we go in and we make a media buy. It will average about $100,000 to $150,000 per State this year. What that means is, if it is a smaller State, we will be in two media markets. If it is a larger State, we will only be in one media market and only for about 4 weeks. So, that is basically what the $7 million buys you.

If we can get the money that we are requesting for next year, we will take what is a very modest presence, getting the word out to retailers and, just as importantly, to the public. And we will be able to do more media next year, and we think that it is very important to bring the enforcement and the outreach together. It will enhance retailers' understanding and hopefully compliance with the rule. We have extensively researched this package. We will be researching and monitoring the effectiveness of each of the media buys as they are done over the course of the year, and we will be able to report our progress when we come back next year.

Senator COCHRAN. Is it the assumption of the agency that these activities are authorized by law now, or are you assuming that the Congress will pass legislation that will authorize the Federal Government to make these expenditures?

Mr. SCHULTZ. In this case, this particular issue was before the district court. After Judge Epstein issued his decision, he had to decide which part of the rule to let go into effect and which part to hold back on until there was a further decision. He allowed this piece, the prohibition on the sale, to go into effect.

Senator COCHRAN. I am talking about the part that we were just talking about, compliance outreach. This is advertising, as I understand it, buying 7 million dollars' worth of advertising. You have already done that.

Mr. ZELLER. We have signed the contract and then the agency that has the money will then, on a State-by-State basis, place the ads as each of the contracts are signed. We will be in the first 10 States by the end of the spring. The program started about a month ago in Little Rock, AR.

Senator COCHRAN. Has the agency ever done any advertising of this kind for any other products or any other subject matter area under its jurisdiction?

Dr. FRIEDMAN. I think in terms of public education, there are a variety of things that we have done.

Mr. SCHULTZ. I think we have done some. We do have explicit legal authority to use publicity in connection with——

Senator COCHRAN. I was just curious as to whether you have done it before.

Mr. SCHULTZ. I do not think on this scale.

Dr. FRIEDMAN. Certainly not on this scale.

Senator COCHRAN. You have not, for instance, advertised that irradiation has been found to be safe in food.

Dr. FRIEDMAN. No, sir; but we have advertised through a variety of activities, important health messages, nutritional messages, women's health messages, through written materials that we have made widely available through our website, through personal speaking activities of FDA staff. I think in the overall trend of wanting to get good information to the public about things that are important to their health, we certainly do have a track record.

BLOOD SAFETY

Senator COCHRAN. Changing the subject to blood safety, there has been a good deal of concern over whether or not the Federal Government has been doing enough or been aggressive enough to address blood safety concerns of the hemophilia community and other users of blood products. I know that FDA has taken steps to enhance inspections of blood product manufacturing facilities and to improve enforcement of better manufacturing practices.

My question is, Do you intend to spend any funds that are provided in next year's appropriations for the purpose of helping to ensure, through collaborative efforts with the Centers for Disease Control or others, surveillance or detection of problems with blood products and then doing something to help ensure their safety?

Dr. FRIEDMAN. This has been one of our areas of greatest activity this current year. There is a very distinguished physician who has joined our Center for Biologics to have as his primary activity the coordination of the blood safety program, Dr. David Feigel, who had a very distinguished career in coming up with AIDS treatments previously. He and a team that he has assembled plus the staff in our Center for Biologics, many of whom are absolutely first rate, have done a remarkable job in coming up with a plan which aggressively and ambitiously improves our blood safety system.

There are resources that are being devoted to that this year. There will be resources from our Center for Biologics and from the

Commissioner's office that will be devoted to this next year. There are, for example, inspectional resources from our field activities.

We face some difficult choices this year, and there are some areas that have had to be deemphasized in terms of having fewer inspections. I have made sure that our inspections go up, both the number of inspectors and the number of inspections, is in the blood and blood product area. This is a very deeply held commitment from our agency at this time.

Senator COCHRAN. Are there any efforts to convene a working group, as the committee directed last year, to develop a system to notify patients of adverse events in the blood supply system?

Dr. FRIEDMAN. We have reached out I think extraordinarily successfully already this year to link our Blood Safety Committee to certain communities through the chairmanship of our new Surgeon General and Assistant Secretary for Health. Dr. Satcher recently testified before House Members on lookback for hepatitis C and activities that we were going to be engaging in. FDA has a role in that. They are very important activities for education that we have been working on. If I may, let me give you one or two examples of how that has worked this past year.

There was a product for hemophiliacs that was made with a tiny amount of a protein that came from a patient who was later found to have Creutzfeldt-Jakob's disease. There was no indication that this material would spread that disease, but there is a lot we do not understand about that very subtle neurologic, degenerative disease.

What we did was to work directly with the hemophilia communities, informing them of this, advising them about it, getting their input as to how exactly we should deal with this particular product. I think there was a very fruitful exchange between those communities, who are very sensitive and very knowledgeable about these risks, the manufacturers and our own regulatory authorities.

NEW PRODUCT APPLICATIONS

Senator COCHRAN. In the area of new product applications and approvals, you talked about the fact that this is growing at a fairly substantial rate each year. I think you said 12 percent per year for the last 4 years.

Dr. FRIEDMAN. Correct, sir.

Senator COCHRAN. Applications being submitted for all types of products that FDA reviews.

To what extent does this reflect an expansion by FDA on its own of its application requirements and to what extent does it reflect a rise in the number of products companies are seeking to market that have traditionally been approved by FDA?

Dr. FRIEDMAN. It is a very good question. The vast majority of this—and I do not have the exact percentage, but I would venture to guess more than 90 percent of this represents simply the robustness of industry. As a Nation we have been investing in basic biomedical research for the past two decades. I think that has been one of the most valuable investments that we as a Nation could ever make. The fruits of that are being born now both in private industry and in our public institutions, universities, government organizations, and so forth. What we are seeing is a vast wave of new

products for things that we have traditionally been involved in, and the pressure on us is both the novelty of these products, the sheer number of these products, and the fact that we are dealing with disease areas for which there have never been treatments before in the past. It is a very remarkable time. It is a very exciting time, and we want to make sure that we make the best of possible judgments about these products and the speediest possible judgments about these products.

Senator COCHRAN. Well, there is no doubt that the Food and Drug Administration has an enormous responsibility in terms of the consequences of what you do on public health and our country in general in many respects. We appreciate the leadership you have provided, Dr. Friedman. We know it is a big job, and we have been impressed with your high level of energy that you brought to the task and your personal enthusiasm for trying to do the best possible job at that agency. And we commend you for that. I am impressed and congratulate you on the job that you have done personally.

I frankly think the agency has bitten off more than it can chew and you are taking on a lot of responsibilities that could very easily be handled by State and local authorities and other agencies of the Government, and I think you ought to take a hard look at that. I know within your own agency and in the administration and the Office of the Vice President and the President, there is a tremendous amount of political appeal about all these new ventures that you are getting into, and I will not attempt to list them all. But it seems to me that it is time to go back to the basics, take a look at the basics and what your original mandate from the Congress required of the agency. I think some of the traditional responsibilities are being short-changed.

You do not have the money to do it all. Obviously, if you look at the budget request, you are requesting way more money than you are going to get. There is just no way in the world for the agency to get all the funds that have been requested. So, it is either pie-in-the-sky time or somebody has got to wake up and realize that it is unrealistic to ask for this kind of money under the budget agreement that we have that governs the appropriation of dollars.

I assume that if you get a bill through Congress, for example, to provide a lot of new revenues from the tobacco companies, that could be a source of additional revenue if it is earmarked for the FDA. But I am not sure the Congress is going to earmark all of it for the FDA.

Anyway, I am troubled by the tendency in this administration to continue to expand the authority and the reach and the activities of the Federal Government. This is not just things that come under the jurisdiction of this budget request but so many others too. But I made that speech the other day in another appropriations subcommittee, and I do not want to hear it again. [Laughter.]

And I know nobody else wants to hear it again, so I will not make it again.

But let me thank all of you for cooperating with our subcommittee and being here to help us understand the budget request. We will do the best we can.

Dr. FRIEDMAN. Thank you, sir, very much.

SUBMITTED QUESTIONS

Senator COCHRAN. We have additional questions that we will submit to you in writing to be answered for the record.

[The following questions were not asked at the hearing, but were submitted to the agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FOOD SAFETY INITIATIVE

Question. FDA's fiscal year 1999 budget includes $74 million for the Administration's food safety initiative, a $50 million increase over the fiscal year 1998 level of $24 million. What is being accomplished with the $24 million provided for this initiative and what is the justification for the significant increase requested for this initiative for fiscal year 1999?

Answer. The fiscal year 1998 Food Safety Initiative, FSI, request represented the first installment on a major government-wide effort to reduce foodborne illness through significant enhancements to food safety and public health systems that were designed in the early part of this century. The requested fiscal year 1999 FSI increase represents a second installment, and has two major objectives. One is to permit FDA to work jointly with other federal agencies, including USDA, EPA, and CDC, and the states to strengthen and expand the food safety activities underway and build on gains made with the fiscal year 1998 resources. The second objective is to increase the emphasis on ensuring the safety of domestic and imported fresh produce in response to the President's October 2, 1997, directive to ensure the safety of fresh produce.

With the requested resources, FDA and its federal and state partners will be able to respond more rapidly and effectively to a wide range of health threats posed by foodborne hazards, including emerging pathogens, natural toxins, and antimicrobial resistant pathogens. These expanded efforts are needed to permit the Nation's food safety regulatory systems to deliver on national goals related to protecting and improving the health and well-being of our citizens.

One example is in research conducted at FDA's National Center for Toxicological Research, NCTR. Part of their research focus with fiscal year 1999 funding will be in the areas of pathogen identification, antibiotic resistance, microbial risk assessment and foodborne contamination, to include exploring the prevalence of resistance determinants in microorganisms and how these determinants are affected by selective pressure from the environment. Other studies will be initiated to evaluate the bioremediation of veterinary drug residues in the environment and to develop procedures to measure pathogens in animal feeds.

Other examples of this increased effort are to enhance surveillance systems by expanding the ongoing systematic collection, analysis, and interpretation of antimicrobial susceptibility surveillance data, which will enable FDA to ensure accurate and valid information that can be used to minimize further the transmission of resistant pathogens through the food chain. FDA plans to increase the overall capacity—the number of microbial isolates in the database—of the National Antimicrobial Susceptibility Monitoring Program by 20 percent in order to ensure a high likelihood of detection of emerging resistance trends in zoonotic enteric pathogens. Educational partnership agreements with state and local agencies will be initiated and use existing mechanisms such as Cooperative Extension and professional associations to strengthen and implement programs to educate producers, veterinarians, state and local regulators about proper drug use and the incorporation of HACCP principles to reduce foodborne pathogens into industry quality assurance programs to ensure public health by minimizing the occurrence of residues in edible tissues. Improved and more standardized risk assessments would permit the ranking of food safety concerns to provide for better public health protection and more efficient utilization of resources. These initiatives will also improve the utility of confidence in risk assessment among scientists and the general public by providing for more transparent risk analysis. These initiatives will provide better risk assessments in order to set priorities, to evaluate surveillance plans, risk reduction strategies, and research programs for improving food safety.

The second objective of the fiscal year 1999 Food Safety Initiative is to increase the emphasis on ensuring the safety of domestic and imported fresh produce in response to the President's October 2, 1997, directive to ensure the safety of fresh produce. The President's Fresh Produce Initiative is designed to expand the scope and focus of the original FSI and to develop and implement strategies required to

address more effectively critical safety issues associated with fresh produce. Over the past several years, several major foodborne illness outbreaks have been associated with the consumption of fresh fruits and vegetables or fruit and vegetable products. These include outbreaks linked to Cyclospora contamination of raspberries imported from Guatemala and domestically-produced apple juice contaminated with E. coli O157:H7. Also, Salmonella contamination has been found on melons and other produce.

There are several important food safety issues that necessitate a special focus on hazardous microbial contamination of fresh produce. One is the low rate of monitoring provided annually for imported produce products. With existing resources, FDA examines for microbial contamination only about 0.2 percent of the approximately 430,000 import entries of fresh produce for microbial contamination. Also, it is anticipated that the per capita consumption of fresh produce will increase significantly in the future as health conscious consumers follow government dietary guidance and take advantage of the scientifically established benefits of these products. Current estimates indicate that there will be a 33 percent increase in the importation of fresh produce between now and fiscal year 2002. FDA needs resources to develop and implement science based strategies to minimize levels of contaminants that may be injurious to human health in these foods.

Under this initiative, FDA is developing with USDA and the agricultural community draft Good Manufacturing Practices—GMP's—and Good Agricultural Practices—GAP's—guidance for use by producers, domestic as well as foreign. FDA is accelerating research to develop or improve the detection and intervention/prevention techniques for pathogens, develop and implement education and technical assistance programs to promote appropriate appreciation of the guidance, and develop appropriate specific guidance on an as needed basis. The resources requested for this new initiative will promote use of voluntary GAP/GMP guidance through education and technical assistance to domestic and foreign producers; and evaluate growing, harvesting and production practices in countries that export fresh produce to the U.S. Moreover, the President directed that a legislative proposal be developed to expand FDA's authority over imported foods to be similar to that already provided to USDA for meat and poultry products. The bill permits the agency under appropriate circumstances to declare foods or specific commodities from a country to be adulterated if FDA determines that a particular facility or country's food system does not provide the same level of protection that is provided for comparable domestic products, and thus, refuse them entry into the United States.

FDA will continue to work with foreign governments and producers to take any steps necessary to help ensure that imported food products meet U.S. food safety requirements or otherwise achieve the level of protection required. If FDA determines that the steps needed to address an existing or potential risk have not been taken and that the affected products therefore will not meet U.S. food safety requirements or otherwise achieve the level of protection required, FDA is authorized to deny such products entry into the United States.

For fiscal year 1998, FDA has accomplished a significant number of activities under the Food Safety Initiative that will contribute to a safer food supply. This is due in part to the cooperation received from other entities that are involved in food safety, such as the Department of Agriculture and the Centers for Disease Control and Prevention, I would be happy to provide a listing of these accomplishments by each of the six categories.

I would first like to share a success story that was possible with the funding provided in fiscal year 1998. The National Antimicrobial Susceptibility Monitoring Program—NASMP—was initiated in 1996. It began as a collaboration among FDA, CDC, and USDA to monitor bacterial foodborne pathogens for changes in antimicrobial susceptibility, using Salmonella as a sentinel organism. The goals of the program are: to identify resistance as it emerges and to identify patterns of resistance, to allow timely response to changes in susceptibility through information sharing and other mechanisms, and to identify areas that require more detailed investigation. This initial effort was the precursor to the FSI Early Warning System for Foodborne Disease Surveillance related to antimicrobial resistance. The 1998 FSI monies allowed extensive expansion and augmentation of the NASMP. Isolates which are tested through this program originate from clinically ill animals and humans, healthy farm animals, and animals at slaughter. The number of isolates is increasing annually to obtain an increasing representativeness of the sample, including the incorporation of produce and animal feed isolates and new bacterial species such as E. coli and Campylobacter.

Having an established surveillance system enabled the Federal partners to identify the presence of a multi-drug resistant Salmonella typhimurium DT 104—StmDT104—in humans and animals. StmDT104 had been responsible for human

disease outbreaks in the United Kingdom and was recognized as widespread in distribution and increasingly prevalent in the United States. This early warning of a potential epidemic, such as that seen in the United Kingdom, was achieved through the NASMP and enabled CDC to warn state health departments of STMDT104's presence, and allowed augmented monitoring for this pathogen. As a result public health officials were prepared for the Vermont dairy farm outbreak and were in a position to take preventative steps to minimize the spread. This farm is currently part of an ongoing investigation as part of the NASMP investigational activities. Continuing work in 1998 includes international collaborations between USPHS epidemiologists and researchers in the U.K. The funding requested would allow for continued expansion of this program.

[The information follows:]

FISCAL YEAR 1998 FOOD SAFETY INITIATIVE ACCOMPLISHMENTS

Surveillance

Worked with CDC and other federal agencies to expand the FoodNet sites from five to seven (with an eighth site to come scheduled online in fiscal year 1998), and expanded the scope of data by adding two new State Health Department partnerships/FoodNet sites to the National Antimicrobial Resistance Monitoring Programs, increased Salmonella, Campylobacter, and E. coli isolates (human database).

Worked with CDC to create a national electronic network for rapid fingerprint comparison for pathogens that will link FDA, USDA and states together to allow the rapid sharing of information and permit quick determinations about whether outbreaks in different states have a common source.

Increased animal Hazard Analysis Critical Control Point, HACCP bacterial isolates (veterinary database).

Expanded the scope of data by adding three new veterinary diagnostic laboratories to further facilitate the comparison of veterinary and human resistance trends.

Expanded data in animal database by initiating Campylobacter isolates testing.

Expanded the information on resistance by initiating multi-resistant Salmonella strain testing.

Developed a plan to conduct molecular microbiological and genetic studies to clarify the role of across species transmission of resistance.

Developed a plan to evaluate antimicrobial use databases—promote prudent use of antimicrobials.

Will sponsor a public meeting related to research on antimicrobial resistance between August 31 and September 2, 1998.

Coordination

Worked with other federal agencies to form the Foodborne Outbreak Response Coordinating Group (FORCG) consisting of representatives from FDA, the Centers for Disease Control and Prevention, United States Department of Agriculture, Environmental Protection Agency, Council of State and Territorial Epidemiologists, Association of State and Territorial Public Health Laboratory Directors, Association of Food and Drug Officials, National Association of City and County Health Officials, and National Association of State Departments of Agriculture to improve responses to foodborne illness outbreaks.

The information provided will be used to develop guidance for handling future outbreaks. An actual outbreak response was evaluated to determine which of the currently used response procedures worked well and which needed improvements.

Inspections

Expanded efforts to implement HACCP systems in the seafood industry. Major accomplishments related to seafood HACCP include:

—Trained over 1,137 federal, state, and local regulators in seafood HACCP. An additional 6,861 persons, including industry officials and state and federal inspectors, were provided a three-day basic HACCP course by the Seafood HACCP Alliance in cooperation with FDA. Also, 30 partnerships were established with states to conduct seafood HACCP inspections.

—In the process of hiring 80 investigators and microbiologists for seafood HACCP implementation.

—After the HACCP regulation became effective in December 1997, initiated verification inspections to ensure that domestic seafood establishments have effective HACCP systems in place. FDA plans to complete initial verification inspections in 2,700 domestic seafood establishments this fiscal year and to date, more than 500 of these inspections have been conducted.

—Published a proposed rule to require a warning statement on fruit and vegetable juice products that have not been processed to destroy pathogens and a proposed rule to require HACCP in fresh juice production.

Published draft guidance containing criteria FDA intends to use to decide whether another country's regulatory system for food safety provides a level of protection that is equivalent to the U.S. system. We are currently reviewing the comments received.

Developed Recommended National Retail Food Program Standards that identify the components of an effective retail food regulatory program at the state and local level.

Developed a draft HACCP Principles at Retail Guide.

Education

Established the Partnership for Food Safety Education with other federal agencies, industry, state associations and consumer groups. The Partnership is a broad-based coalition committed to educating the public about safe food handling and preparation. Using the combined resources of the industry, several consumer and public health organizations, and the federal government, the Partnership will conduct a multi-year food safety education campaign to make American consumers aware of food safety problems and provide information on how these problems may be prevented.

The Partnership launched the "Fight BAC!" consumer food safety education campaign. The "Fight BAC!" campaign features colorful, 30 second television public service announcements that focus on food safety in the home. The television spot highlights four basic safe food handling steps that consumers may use to prevent food contamination. These steps include washing hands and surfaces often, preventing cross-contamination, cooking foods to proper temperatures, and refrigerating foods promptly.

Cooperated with other federal agencies on a Food Safety Education Conference, and conducted consumer research on consumer behaviors to develop effective food safety advisory and juice warning labels.

Formed the "Food Safety Training and Education Alliance for Retail, Food Service, Vending Institutions, and Regulators," (FSTEA) to promote the use of safe food handling techniques by retail food service workers.

Risk Assessment

Established an interagency Risk Assessment Consortium with particular focus on microbiological risk assessment. The Consortium includes representation from FDA, USDA, National Institutes of Health, CDC, and EPA and operates out of the Joint Institutes for Food Safety and Applied Nutrition located at the University of Maryland. Among the goals of the Consortium are to inventory existing data research and expertise; establish a clearinghouse of risk assessment related data and models; and determine long-term research needs.

Formed a dose response workgroup that is tentatively planning a public meeting in July 1998.

Initiated a comprehensive review of available risk assessment methodologies and data.

Initiated a process to establish the clearinghouse of available methodology and data repository for use by all Consortium members.

Research

Developed DNA fingerprinting methods for a variety of pathogens to increase the ability to trace the source of foodborne disease outbreaks.

Standardized DNA fingerprinting methods for Vibrio cholerae, Vibrio vulnificus, toxigenic Staphylococci, Group A Strepotococci, Listeria, Salmonella and pathogenic E. coli.

Published a draft GAP/GMP guidance document to help producers and processors minimize microbial hazards in fresh fruits and vegetables.

Held six grassroots and one international meeting with the agricultural communities and other interested parties to gather input for the development of GAP's/GMP's.

Developed enhanced methods for the more rapid isolation and detection of a variety of foodborne pathogens from produce and juices.

Prepared, in collaboration with other federal agencies, a multi-year research plan to accelerate research associated with improving the safety of fresh produce. This plan focuses on research to develop and improve methods for detection, prevention and control of microbial contamination in these products.

Established intramural FSI microbiological staff.

Began validation of detection procedures for all FSI research and surveillance programs.

Will begin development of detection procedures—meat, milk, eggs, animal feeds—for feces, and environmental pathogens.

Will evaluate procedures to detect salmonella in animal feeds.

Will initiate research to reduce pathogens in animal feeds.

Will initiate research to determine impact of animal feed pathogens on the food supply.

Plan to initiate research to reduce resistant pathogens from antibiotics used in food producing animals including fish.

Plan to initiate evaluation of procedures for reducing pathogen load in food producing animals including extended withdrawal periods and competitive exclusion products.

Will develop food animal management procedures to mitigate the proliferation of resistant pathogens.

Will begin evaluation of effects of multiple drugs/routes of administration/multiple exposure on resistance development and pathogen load.

Plan to initiate studies to determine the cause and factors which impact the development of resistant pathogens and the transmission of resistance between pathogens in food producing animals and the environment.

Question. What are the specific goals of the food safety initiative?

Answer. The May 1997 report to the President on the Food Safety Initiative established several major goals related to improving the safety of the Nation's food supply. These goals include decreasing foodborne illness; building a new national early-warning and surveillance system to help detect and respond to outbreaks of foodborne illnesses earlier, and give federal agencies and states the data needed to prevent future outbreaks; improving responses to foodborne illness outbreaks; improving risk assessment capability, particularly microbial risk assessment, to determine the likelihood that exposure to a hazard, such as a foodborne pathogen, will result in harm or disease in humans; developing better methods for more rapidly detecting, preventing and controlling foodborne safety hazards, especially microbial pathogens and mycotoxins; improving the safety of the food supply through more effective inspection and compliance strategies; and using innovative food safety education programs to ensure that food preparers and handlers at each point of the food chain are fully informed of food safety risks and appropriate safe handling practices.

The FSI also has a set of goals that relate to our work in the area of animal drugs and feeds, including reversing the resistance trend of animal pathogen development and reducing the transfer of resistant animal pathogens to humans; developing, through the National Antimicrobial Resistance Monitoring System, timely information upon which to base public health decisions relating to the control of resistant foodborne pathogens and to be proactive in assisting practitioners in the appropriate use of antimicrobials; developing alternative strategies to antimicrobial drug use in food-producing animals such as improved management techniques and novel drug treatments including competitive exclusion to reduce both the overall prevalence of animal-carried pathogens and specifically target animal carried resistant pathogens; and working to identify and limit animal feed contaminants from entering the human food supply.

Question. How has the food safety initiative improved the safety of the food supply since its implementation last year?

Answer. Though we are only mid-way through fiscal year 1998, FDA has still accomplished a significant number of activities under the Food Safety Initiative that will contribute to a safer food supply. This is due partially to the cooperation and interactions occurring with other entities that are involved in food safety, such as the Department of Agriculture and the Centers for Disease Control and Prevention. I would be happy to provide a listing of these activities by each of the six categories.

[The information follows:]

FISCAL YEAR 1998 FOOD SAFETY INITIATIVE ACTIVITIES

Surveillance

By the end of fiscal year 1998, FoodNet sites will be operating in areas that are representative of the geographic and demographic population distribution in the U.S. Data from these sites currently allow FDA and other agencies to identify outbreaks and link outbreaks in different locations. By the year 2002, the FoodNet sites will be able to produce the volume and quality of baseline data against which federal agencies can more accurately measure declines in foodborne illnesses, the effect of intervention measures and increases in illnesses that require the need for new interventions. In addition, data produced by the sites will permit FDA and other

federal agencies to establish more realistic and measurable performance goals and targets for their food safety programs.

FDA, USDA and several states are now linked to the CDC national electronic network for rapid DNA fingerprint comparison of microbial pathogens. This new system allows data on microbial pathogens associated with outbreaks to be exchanged and compared in 10 to 30 minutes. This eliminates the necessity of mailing cultures of pathogens in order to compare isolates from patients and from incriminated foods and reduces the time for comparisons from days to minutes. This capability will allow the agencies and states to link more rapidly distant outbreaks, to identify the implicated food, and to trace it back to the source.

Coordination

The Foodborne Outbreak Response Coordinating Group (FORCG), which consists of representatives from FDA, CDC, USDA, EPA, the Council of State and Territorial Epidemiologists (CSTE), the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD), the Association of Food and Drug Officials (AFDO), the National Association of City and County Health Officials (NACCHO), and the National Association of State Departments of Agriculture (NASDA), will help ensure that responses to foodborne illness outbreaks are more rapid and more effectively coordinated. This is critical since each day saved in responding to a foodborne illness incident can significantly reduce the number of illnesses that occur as well as their economic impact.

As a "test case" to evaluate a typical illness outbreak response, FORCG completed an evaluation of the response to an actual outbreak. Results of evaluation are being used in the development of SOP's for sharing information on outbreaks among agencies and with the public.

Inspections

HACCP systems are a key component of FDA's strategy for reducing the incidence of foodborne illnesses. HACCP, which places emphasis on identifying and properly controlling points in a food processing system where safety problems could occur, is designed to prevent food safety hazards. Because HACCP systems are designed to prevent food safety problems, wide spread use of these systems in the food industry will result in safer end products, help eliminate the cost and delay of end product testing, and will permit FDA to use its food safety inspection resources more efficiently and focus on the highest risks.

With the FSI resources provided in the fiscal year 1998 appropriation for the Food Safety Program, FDA is expanding efforts to verify that domestic seafood establishments have HACCP systems capable of ensuring the safety of seafood products. FDA is planning to conduct 2,700 initial verification inspections this fiscal year and the States will conduct approximately 2000 additional inspections under contract. Without the FSI funding, FDA would have taken at least 2 to 3 years to conduct these 2,700 initial seafood HACCP verification inspections.

FDA published a Notice of Intent to mandate the application of HACCP systems for fruit and vegetable juice products and require a warning statement on fruit and vegetable juice products that have not been processed to destroy pathogens. The expansion of HACCP to fresh fruits and vegetable juices will help ensure that these products do not contain hazardous contaminants that could cause foodborne infections and the warning labels will alert consumers, particularly parents, to the potential health hazard.

Education

The Partnership for Food Safety Education permits FDA and other federal agencies to leverage the resources of industry, consumer groups and professional associations to increase the effectiveness and breadth of food safety education activities. "Fight BAC!" and other education campaigns undertaken by the Partnership will help prevent foodborne illnesses by making American consumers aware of proper safe food handling practices. More than 50 national and local organizations from the public health, government, consumer and industry sectors have agreed to support the campaign and disseminate educational materials. There is also a web site where consumers, health professionals, educators and the media can obtain the latest information on preventing foodborne illness.

Consumer research conducted on consumer behaviors, and to identify barriers to safe food handling, is the basis of developing effective food safety advisories, and juice warning labels. This research helps FDA determine the most effective medium for reaching the consumer and provides information required to more effectively focus future education activities to achieve changes in unsafe food handling behaviors.

Risk Assessment

The Risk Assessment Consortium, which was established in November 1997, permits FDA and other federal agencies to work with academia to advance collectively the science of microbial risk assessment and assist federal agencies (HHS, USDA and EPA) to protect consumers more effectively from foodborne illness. Through its efforts to coordinate and guide overarching federal microbial risk assessment research, the Consortium will help eliminate duplication and increase the effectiveness of efforts to improve the speed and accuracy of techniques for assessing risks associated with microbial pathogens and other hazardous foodborne contaminants. The development of microbial risk assessment techniques, now in their infancy, will be a critical tool agencies use in targeting their food safety activities and resources on the highest public health risk.

Research

The more rapid isolation and detection methods developed for a variety of foodborne pathogens will permit the Agency to identify more accurately foodborne safety hazards and increase the ability to trace more quickly the source of foodborne disease outbreaks.

Fresh Produce Initiative

The information FDA, USDA and other federal agencies obtained through the six grassroots and one international meeting with the agricultural communities and other interested parties has been incorporated into the draft GAP/GMP guidance for fresh produce. This guidance is designed to prevent foodborne illnesses by providing producers and processors information on how they can minimize microbial contamination in fresh fruits and vegetables.

The Interagency Research Planning Document developed in conjunction with USDA and other agencies will ensure that analytical development and other research conducted on microbial pathogens and mycotoxins is properly focused and coordinated. This will help both agencies eliminate any duplications of effort and ensure that available research resources are focused where the greatest needs exist.

Question. Please explain how the "early warning" and surveillance system to detect and respond to outbreaks of food borne illness and provide the data needed to prevent future outbreaks works, how it is being enhanced through the President's food safety initiative, and what FDA's role is in this system.

Answer. This system, FoodNet, is an active surveillance program, currently functioning at seven sites located around the U.S., that will provide more accurate and comprehensive baseline data on foodborne illness in this country. The sites currently cover 20 million people or 8 percent of the U.S. population.

FoodNet has the capability to detect widely dispersed outbreaks. Local health departments have long been able to detect outbreaks of several people being made ill from a single occasion such as a banquet. Widely distributed outbreaks from commercial ice cream or bean sprouts consumed in homes were rarely discovered by the old passive surveillance system. FoodNet investigators, at the state level, contact clinical microbiology laboratories regularly to obtain information on all cases of bacterial and parasitic diseases most often associated with foodborne diarrheal illness. The sites submit regularly selected microbial isolates for DNA fingerprinting. State-of-the-art computer networks compare these isolates looking for matches that could indicate widely dispersed common source outbreaks. FoodNet staff enlist many of the cases in case-control studies to estimate probable sources of infection. When unusual patterns are noted in any of this data, special studies are begun to pinpoint the source of the problem. This newly expanded capability will mean more discovery of foodborne disease risks and more interventions to protect the public.

The FoodNet data collection technique has already demonstrated its usefulness. For example, in the 1980's, CDC surveyed for the occurrence of listeriosis over a period of years at the request of FDA. The data showed that the incidence of listeriosis decreased as a result of measures initiated by the Agency and industry. These studies were the predecessor to the FoodNet system. The data currently being generated is proving useful, despite a relatively low level of funding support. Data from the sites has contributed to investigations of foodborne outbreaks, such as a multi-state outbreak of E. coli O157:H7 detected in Illinois and Connecticut associated with California lettuce.

Food Safety Initiative funding will allow CDC, with support from FDA and USDA to increase the number of FoodNet sites and greatly expand the good work already underway. With the addition of an eighth site later this year, FoodNet will improve its representation of the U.S. population, both demographically and geographically. Food safety initiative funding is being used to conduct focused surveys to learn more about the occurrence of specific pathogens and foodborne illness, food sources of con-

tamination, e.g., for Campylobacter, based on data derived from the FoodNet system. All FoodNet sites have received increased assistance in DNA fingerprinting capabilities through the addition of FSI funds. FDA's role in this system is to provide support funding for the system, participating in the design of ancillary studies (e.g., case-control studies for hemolytic uremia syndrome), and using FoodNet data to design more effective intervention measures to reduce the risk of foodborne illness and to develop policy and regulations to enhance food safety.

With regard to animal drugs and feeds, in 1996, FDA, CDC and USDA established the National Antimicrobial Resistance Monitoring System, a nationally based program to prospectively monitor changes in antimicrobial susceptibilities of zoonotic enteric pathogens from human and animal isolates. Beginning in fiscal year 1998, the Monitoring System was moved into the Food Safety Initiative and substantially expanded and enhanced.

FoodNet has been used as the foundation for the human arm of the National Antimicrobial Resistance Monitoring Program. The FoodNet sites plus ten additional sites, consisting of state or county public health laboratories, are submitting human Salmonella, E. coli, and Campylobacter isolates to CDC's Foodborne Disease Laboratory for susceptibility testing to 17 antimicrobics.

Veterinary isolate testing is conducted at the United States Department of Agriculture's Russell Research Center in Athens, Georgia. Isolates are collected from three primary sources: clinical samples from the APHIS National Veterinary Services Laboratory in Ames, Iowa; on-farm studies of health animals from the APHIS National Animal Health Monitoring Surveys; and, as of January 1998, healthy animal samples collected for Salmonella monitoring at all large slaughter plants as part of the Food Safety and Inspection Service mandatory HACCP requirement. In addition, samples from large epidemiology studies undertaken by USDA are added to the collection. The Salmonella isolates are collected and serotyped by USDA as part of their mission. These isolates are then susceptibility tested in Athens under an interagency agreement with FDA. Only Salmonella was tested until 1998, when Campylobacter and E. coli were added.

The objectives of the Monitoring System are to provide descriptive data on the extent and temporal trends of antimicrobial resistance among enteric pathogens in human and animal populations, provide timely information to physicians and veterinarians, prolong the lifespan of approved drugs by promoting the prudent use of antibiotics, investigate areas for more detailed investigation, and guide research in the area of antibiotic resistance. The capability to investigate resistance patterns and trends identified through the Monitoring System are essential elements to facilitate timely and appropriate public health response activities.

Question. How are federal agencies coordinating with each other and with other state and local public health agencies to detect and respond to food-borne disease outbreaks?

Answer. An interagency Foodborne Outbreak Response Coordinating Group—FORCG—has been formed with representatives of FDA, CDC, USDA/FSIS, EPA, and organizations of state health and regulatory officials. This group is evaluating the current system of outbreak response at the local, state, and federal levels to determine what works well and where improvements might be made to make the response faster and more efficient. As a first step, a subgroup of FORCG conducted a retroactive analysis of an actual outbreak response to identify what worked well and where improvement was needed. Among the areas identified for improvement were: communication among the various agencies; more rapid sharing of information and data among the agencies, and providing timely, accurate information about an outbreak and implicated products to the public. FORCG is now working with state organizations to develop standard operating procedures for more rapid communication and sharing of information and data among the agencies and with the public.

Another example is the National Antimicrobial Resistance Monitoring System which was initially developed by expanding or redirecting existing programs in several federal agencies. FDA is in the planning stages to develop and conduct veterinary prescribing practices and producer antimicrobial use surveys in collaboration with USDA for feedlot cattle. The survey will begin in 1999, and will combine antimicrobial use information with on-farm sampling by nesting within the ongoing USDA National Animal Health Monitoring Survey. USDA's Agency Animal and Plant Health Inspection Service works directly with the National Agriculture Statistics Service to develop representative samples and we anticipate the quality of results will be much better than any obtainable through a contractual arrangement with a private organization. This process will also allow several agencies to share and use the data obtained from the survey.

The federal agencies have also worked closely with states in developing the Monitoring System. The sources of human isolates are the FoodNet state sites plus ten

additional state sites. As of January 1, 1998, we also established veterinary sentinel sites in the states of California, Washington, and New York. A recent collaborative effort was undertaken in response to an outbreak of salmonellosis among residents of a Vermont dairy farm. FDA, CDC, and USDA jointly initiated the investigation of this illness caused by Salmonella Typhimurium DT104, a multi-resistant pathogen, on the Vermont farm and surrounding area. The investigation is on-going in order to determine the status of DT104 colonization and shedding in cattle and other animal species on the farm is on-going.

Question. Please provide a breakdown of how the funds provided to FDA for fiscal year 1998 for the food safety initiative and requested for fiscal year 1999 are being allocated to: (1) surveillance, (2) coordination, (3) inspections and compliance, (4) education, (5) research, and (6) risk assessment.

Answer. I would be happy to provide a table showing this break-down as reflected in our fiscal year 1998 and fiscal year 1999 budget requests, as well as our most recent estimate for fiscal year 1998, for the record.

[The information follows:]

FOOD SAFETY INITIATIVE FUNDING

[Dolars in millions]

Category	Fiscal year—		
	1998 request	1998 estimate [1]	1999 request
Surveillance	$3.16	$3.18	$2.40
Coordination	0.55	0.55	0.20
Inspections/compliance [2]	7.87	8.99	27.40
Education	2.07	1.84	3.70
Research	6.40	5.96	9.20
Risk Assessment	3.95	3.48	7.10
Total	24.00	24.00	50.00

[1] Estimates as of March 30, 1998.

[2] Inspections/compliance estimates are about $1 million higher than originally planned to reflect unanticipated costs associated with fiscal year 1998 activities for the Fresh Produce Initiative. This increase was derived from small reductions from some of the other food safety activities.

Question. For both fiscal year 1998 and the fiscal year 1999 request, provide a detailed list of the specific activities being funded or proposed to be funded by FDA under the above categories of the food safety initiative, including the funds and full-time equivalent positions allocated to each activity.

Answer. I would be happy to provide tables showing a detailed list of food safety activities that will be funded with both the fiscal year 1998 appropriation and the proposed fiscal year 1999 level.

[The information follows:]

FISCAL YEAR 1998 FOOD SAFETY INITIATIVE ACTIVITIES

[Dollars in millions]

Activity	FTE's	Amount
Surveillance	8	$3.18
FoodNet		
Methylmercury study		
Voluntary retail HACCP pilot program		
S.E. Tracebacks		
State Health Department partnerships—increase Salmonella, Campylobacter, and E. coli isolates (human database)		
Animal HACCP bacterial isolates (veterinary database)		
Veterinary diagnostic laboratories to compare veterinary and human resistance trends		
Campylobacter isolates testing		
Multi-resistant Salmonella strain testing		
Molecular microbiological and genetic studies for species transmission of resistance		
Evaluate antimicrobial use databases		
Public meeting on antimicrobial resistance research		
Coordination	3	0. 55
Inspections & Compliance	85	8.99
HACCP implementation and training		
Lab certification		
Federal/State Partnerships		
Retail		
Foreign Country Education & Technical Assistance		
Workshops/Public meetings		
Sample analyses		
Import lot screening		
Guidance & legislative regulation development		
Risk Assessment	.....	3.48
Risk Assessment Consortium—Develop modeling techniques		
JIFSAN		
HACCP review		
Food consumption survey		
Sample retrieval for dose measurements		
Research (many of these projects will carry into fiscal year 1999)	13	5.96

FISCAL YEAR 1998 FOOD SAFETY INITIATIVE ACTIVITIES—Continued

[Dollars in millions]

Activity	FTE's	Amount
ISSC—Vibrio vulnificus		
Pfiesteria Piscicida workshop		
Toxicological forum		
Evaluation of vacuum packed hot smoked salmon		
Sampling for Pathogens on Produce		
Molecular Characterization-Maverick Strains of E. Coli		
Effects of Environmental Conditions, Pytochemicals, Modified Atmosphere Packaging and other Parameters for the Growth and Survival of Foodborne Pathogens on Produce, Particularly Sprouted Seeds		
Molecular Mechanisms for Pathogen Emergence		
Identification and Characterization of Virulence Determinants for Salmonella enteritidis and Vibrio vulnificus		
Cyclospora Detection and Viability Assessment		
Characterization of Pathogenic Aquatic Eucaryotes and their Toxins		
Control of Viral and Bacterial Human Pathogens in Seafood		
Assessment of Technologies for Pathogen Reduction or Elimination		
Mycotoxins		
Virulence Assessment and Molecular Pathogenisis of Salmonella typhimurium DT 104 and Shigella		
Minimizing Biogenic Armine Formation in Seafood and Other Commodities		
Quantification of Effects of processing on Foodborne Pathogens for minimally processed foods		
Survival of Food Pathogens during the 60-day Aging Period of Hard Cheeses Made from Unpasteurized Milk		
Pathway Analysis: Assessment of the Pathogen Transmission Capabilities of Disease-Carrying Insects		
Effect of a Variety of Stress Factors on the Immune Systems of Poultry and Subsequent Infection of Shell Eggs by Salmonella enteritidis		
Levels of Vibrio vulnificus and Vibrio parahaemolyticus in Retail Seafood		
Development of gastroenteritis animal models and biomarkers for food-borne pathogens to serve as surrogate models for human disease		
Develop Alternative Modeling Tools to Assessing Dose Response/Severity Sampling for Pathogens on Produce		
Molecular Mechanisms for Pathogen Emergence		
Identification and Characterization of Virulence Determinants for Salmonella enteritidis and Vibrio vulnificus		
Cyclospora Detection and Viability Assessment		
Characterization of Pathogenic Aquatic Eucaryotes and their Toxins		
Quantification of Effects of processing on Foodborne Pathogens for minimally processed foods		
Education	6	1.84

FISCAL YEAR 1998 FOOD SAFETY INITIATIVE ACTIVITIES—Continued

[Dollars in millions]

Activity	FTE's	Amount
Strategic plan for consumer education		
Food Code—Consumer Advisory Research Focus Group		
Evaluate FSI education in schools		
Fight BAC! brochures		
Juice safety mailings		
USDA/FDA Foodborne Illness Education Information Center		
Consumer Hotline		
National Food Safety Education Month		
Partnership for Food Safety Education		
Multi-lingual and special population education		
Education forums and local alliances		
Total	115	24.00

FISCAL YEAR 1999 FOOD SAFETY INITIATIVE ACTIVITIES

[Dollars in millions]

Activity	FTE's	Amount
Surveillance	13	$2.40
Postmarket surveillance data		
New sentinel site for the collection of animal microbial resistance data		
Collaborate with APHIS to evaluate drug prescribing practices and animal production drug use		
Integrate veterinary diagnostic laboratories into an international database for evaluating health risks from veterinary drug use		
Monitoring		
FoodNet support		
Coordination	2	0.20
Inspections/compliance	159	27.40
HACCP implementation and training		
Lab certification		
Federal/State Partnerships		
Retail		
Foreign Country Education & Technical Assistance		
Workshops/public meetings		
Sample analyses		
Import lot screening		
Risk Assessment	15	7.10

FISCAL YEAR 1999 FOOD SAFETY INITIATIVE ACTIVITIES—Continued

[Dollars in millions]

Activity	FTE's	Amount
Continuation of fiscal year 1998 activities		
Multi-disciplinary risk assessment team		
Framework to identify and fully characterize potential human health risks		
Strategies to characterize the impact of animal drug use on the pathogen load and resistance patterns		
Identify data gaps regarding the ecology of on farm microbial pathogens—Salmonella, Campylobacter, and E. Coli O157		
Data and modeling techniques—understand casual relationship between antimicrobial drug use in animals and human disease		
Introduce HACCP planning in the rendering industry—emphasizing controls against BSE infective agent		
Research	44	9.20
Continuation of projects begun in fiscal year 1998		
Detection procedures—meat, milk, eggs, animal feeds, feces, and environmental pathogens		
Detection procedures for all FSI research and surveillance programs		
Evaluate procedures to detect salmonella in animal feeds		
Reduce pathogens in animal feeds		
Determine impact of animal feed pathogens on the food supply		
Reduce resistant pathogens from antibiotics used in food producing animals including fish		
Develop food animal management procedures to mitigate the proliferation of resistant pathogens		
Education	17	3.70
Educational partnerships with veterinary practitioner and producer organizations to promote good production practices		
Producer quality assurance programs to foster appropriate agricultural drug use		
Incorporate food safety into veterinary curriculum and veterinary continuing education programs		
Educational partnerships with other federal agencies, state, and local agencies		
Total	250	50.00

Question. Provide a list, in priority order, of the FDA food safety initiative activities proposed to be funded for fiscal year 1999.

Answer. The $50 million request for fiscal year 1999 would allow FDA—as part of the intergovernmental efforts in food safety with the Department of Agriculture and the Centers for Disease Control and Prevention, among others—to continue with some of the important steps begun in fiscal year 1998 in the areas of surveillance, coordination, inspections/compliance, education, research, and risk assessment. This request would also allow the Agency to fulfill commitments made by the President to improve the safety of domestic and imported fruits and vegetables. We strongly believe in the programs outlined in our budget request, and cannot, at this time, put these initiatives in priority order. Each is essential to improving for the long term the safety of the foods available from all sources to the American consumer. If provided an amount less than the full request of $50 million, we would be forced, after consultations with USDA and CDC, to restructure our plans and reduce coverage and efforts in certain areas.

INSPECTIONS AND COMPLIANCE

Question. FDA indicates that it is particularly concerned about the safety of produce and the potential risks associated with produce imports. The food safety initiative proposes to expand inspection and compliance efforts. How much of this money in each of fiscal years 1998 and 1999 will go towards inspections at the border?

Answer. There are no funds in the fiscal year 1998 budget for the Food Safety Initiative directed to the expansion of inspection of fresh fruits and vegetables at the border. In the proposed fiscal year 1999 budget, we have requested an additional $2.7 million for sample analysis, some of which will be used for analysis of samples collected from entries of imported foods. Another $5.3 million would support screening activities at the border. However, monitoring at the border has been acknowledged by FDA, GAO, and other experts as not the most efficient utilization of resources, as it is a reactive process. In addition to the efforts included in our fiscal year 1999 request, we will target resources for our monitoring activities on products that have a high potential for pathogen contamination or have a history of violations of public health significance.

Question. How much will go to increasing inspections of fresh produce?

Answer. We will refocus import activities and target resources toward more prevention activities that should be more effective in preventing entry of foods likely to be contaminated with pathogens. These activities will include foreign country evaluation, education and technical assistance and outreach activities to promote appropriate application of the GAP's/GMP's guidance, verifying use of the guidance, and inspections, but only when an outbreak has occurred.

Question. Will a risk-based selectivity system be used to determine which food products are inspected? Which foods would that involve?

Answer. Yes. One of the principles underlying effective food safety programs is that efforts should be focused on the hazards that represent the greatest risk to consumers. This is a key attribute of HACCP programs, and is why this approach to food safety is being increasingly adopted by industry and regulatory agencies. The Food Safety Initiative correctly identified our inability to measure accurately the risks associated with different microbial food safety concerns as a serious impediment to the adoption of risk-based systems such as HACCP. To that end, the initiative has called for the development of microbial risk assessment methods and databases.

Question. Will part of the food safety initiative inspection and compliance funding be used to pay for U.S. inspectors dispatched to foreign plants?

Answer. Funds are requested in the fiscal year 1999 budget for seafood HACCP implementation that may be directed towards evaluating HACCP implementation in foreign countries. In the fiscal year 1999 budget request for the Food Safety Initiative and the Produce Initiative, FDA has requested $11.9 to support foreign country education, evaluation and technical cooperation and assistance. We will also provide further GAP/GMP guidance, as a need is indicated, for use by the fresh and minimally processed produce industry. Providing the type of expertise and assistance that results in safety mechanisms being built into food production systems will have a far more profound impact on the safety of products offered for import than merely depending on end product testing at the borders.

Question. Does FDA currently have personnel that go into other countries to inspect foreign facilities?

Answer. Yes, FDA does have personnel that go to foreign facilities to conduct two types of inspections: low-acid canned food inspections and those related to foodborne disease outbreaks from food exported to the U.S. For fiscal year 1998, FDA plans on using three fully-supported FTE for 40 foreign inspections related to the low-acid canned foods program. While we can never accurately predict the number of inspections that will be needed for foodborne disease outbreaks, for the past three years, in the foods area, we have conducted 72, 9, and 29 inspections, for fiscal years 1995 through 1997, respectively.

Question. Is the FDA budget authority request for fiscal year 1999 adequate to cover both increased domestic and foreign inspections, as well as any needed infrastructure?

Answer. The fiscal year 1999 request is part of a multi-year initiative designed to restructure various aspects of the existing food safety system in order to reduce the estimated numbers of deaths and illnesses related to foodborne pathogens. The fiscal year 1999 budget request will provide the resources necessary to carry out the initiatives proposed in that document. We would continue with the next steps for the fiscal year 1998 Food Safety Initiative, as well as expand our efforts in the area of domestic and imported fresh fruits and vegetables. This latter effort would include evaluation, not inspection, of foreign growing, harvesting, and processing systems in order to provide guidance on improving the safety of these products. The $50 million request for fiscal year 1999, plus the initial funding of $24 million provided in fiscal year 1998, will allow the Agency to move toward its goal of reducing the deaths and illnesses associated with foodborne outbreaks.

Question. How many new inspectors does FDA plan to hire for fiscal year 1999? How many inspectors are on board (FTE) currently (fiscal year 1998)? What was FDA's inspection staffing level for fiscal year 1997?

Answer. The fiscal year 1999 budget request includes 104 Consumer Safety Inspectors/Officers for the Foods program. The food activities performed by these positions include, but are not limited to, providing foreign technical assistance, screening and review of import entries, policy and guidance for fresh produce development, and HACCP for juices and continued implementation of seafood HACCP. These Consumer Safety Inspectors/Officers will monitor the safety of food imports by sampling and screening at the border with improved methods and targeted sampling techniques. They will also evaluate food production systems in foreign countries and provide technical assistance and education, as necessary, to improve the capability of those systems to provide safe products for export to the U.S. A large part of this work will be in the area of fresh fruits and vegetables.

FDA's Foods inspection staffing level in fiscal year 1997 was 407 total investigative positions and in fiscal year 1998, 455 total investigative positions.

Question. The justification indicates that FDA examined approximately 0.2 percent of fresh produce entering the United States in fiscal year 1996. What are your goals for expanding FDA's inspection of imported fresh produce in each of fiscal years 1998 and 1999?

Answer. FDA does not plan increase coverage for fiscal year 1998 but intends to maintain the same coverage as that in the previous years. Because the number of fresh produce imports is expected to rise, FDA will still need to increase resources to continue to match past levels. The fiscal year 1999 President's Budget includes a substantial focus on imported fresh fruits and vegetables, and specifically providing technical assistance and information, based on the fresh fruit and vegetable GAP's/GMP's, to foreign countries and the foreign produce industry that will enable them to improve the safety of produce exported to the U.S. In following years, increased coverage of imports in general will include increased monitoring of imported fresh produce.

Question. The justification indicates that the Administration is proposing legislation "to expand FDA's authority over imported foods to equal that already provided to USDA." What does this mean? What new authority is the Administration proposing to give the FDA?

Answer. This bill permits the agency, under appropriate circumstances, to declare foods or specific commodities from a country to be adulterated if FDA determines that a particular facility or country's food system does not provide the same level of protection that is provided for comparable domestic products, and thus, refuse them entry into the United States.

FDA will continue to work with foreign governments and producers to take any steps necessary to help ensure that imported food products meet U.S. food safety requirements or otherwise achieve the level of protection required. If FDA determines that the steps needed to address an existing or potential risk have not been taken and that the affected products therefore will not meet U.S. food safety requirements or otherwise achieve the level of protection required, FDA is authorized to deny such products entry into the United States.

Question. How many MOU's are in existence and with which countries? What is the substance, scope and objectives of these agreements?

Answer. FDA has 55 international agreements. This includes memorandums of understandings, memorandums of cooperation, and exchanges of letters. A manual containing all international agreements is being sent under separate cover. I would be happy to provide the information for the record.

[The information follows:]

Number	Country	Sponsor	Title	Effect date	Term date
225–80–8000	Australia	CFSAN	Dry Milk Products	11/28/79	Indef.
225–86–2001	Australia	CFSA N-S	Shellfish Certification	9/12/8 6	Indef.
EOL	Australia	CDRH	Insp Info on Med Dev GMP (EOL's).	2/17/93	Indef.
225–97–8003 EOL	Australia	FDA	Orphan Products	8/13/97	Indef.
225–96–4004	Belarus	CDER CBER	Info Exchange on Drugs/ Biologics.	3/27/96	3/25/99.
225–75–2027	Belgium	CFSAN	Dry Milk Products	11/6/74	Indef.
225–75–2027	Canada	CDER	GMPs Exchange of Drug Plan Inspection Info.	10/1/73	Indef.
225–75–6001	Canada	CDRH	Exchange Info on Compliance Prgm Efforts.	12/16/74	Indef.

Number	Country	Sponsor	Title	Effect date	Term date
225–75–2021	Canada	CFSA N-S	Shellfish Sanitary Controls.	4/30/48	Indef.
225–76–4003	Canada	CFSAN	Monitoring Food, Beverage & Sanitary Srvs on Common Carriers.	7/26/88	7/26/98.
225–79–8400	Canada	ORA-GLP	GLP's Phase I /Non-Clinical Labs.	5/10/79	Indef.
225–96–4001	Canada & Mexico	FDA	Scientific and Regulatory Fields of Health.	10/30/95	Indef.
225–89–2001	Chile	CFSA N-S	Exported Oyster, Clams & Mussels.	5/18/89	5/18/99.
225–90–8400	Chile	ORA	Safety of Imported Fresh Fruit.	10/27/89	10/27/99.
225–96–4006	Chile	CFSAN	Fish & Fishery Products	5/13/96	5/13/01.
225–88–2002	China	CFSAN	Certification of Ceramicware.	12/26/88	Indef.
225–75–2001	Denmark	CFSAN	Dry Milk Products	1/19/79	Indef.
225–84–8000	Finland	CFSAN	Certification of Imported Food Products.	3/4/84	Indef.
225–86–8400	France	ORA-GLP	GLP's Phase II Info. Exchange of Toxicological Labs.	3/18/86	Indef.
225–75–2024	France	CFSAN	Caseins	1/15/87	Indef.
EOL	France	CFSAN	Cert Program for Listeria in Cheese.	1/21/87	Indef.
225–89–4001	Germany	ORA-GLP	GLP's Phase II (Joint with EPA).	12/23/88	Indef.
225–79–4008	Iceland	CFSA N-S	Shellfish Safety of Fresh/Frozen.	12/28/78	Indef.
225–97–2001	Ireland	CFSAN	Certification Requirements for Caseins.	11/5/96	11/5/01.
225–89–4000	Italy	ORA-GLP	GLP's Phase II	12/19/89	Indef.
225–75–2018	Japan	CFSA N-S	Shellfish Improving & Standardizing Sanitation Practices.	10/24/62	Indef.
Note Verbal	Japan	ORA-GLP	GLP's	4/15/83	Indef.
EOL	Japan	CFSAN	Puffer Fish	10/24/88	Indef.
225–87–2002	Korea	CFSA N-S	Shellfish Certification	4/8/87	4/7/97.
225–88–8001	Mexico	OHA	Cooperation in Scientific & Regulatory Field of Health.	2/22/88	2/22/98.
225–79–4009	Mexico	CFSA N-S	Control of Fresh/Frozen Bivalve Mollusca for Exportation.	11/12/88	11/12/98.
225–89–4002	Mexico	ORA	Regulation of Raw Agricultural Products.	11/28/88	11/28/98.
225–74–2011	Netherlands	CFSAN	Dry Milk Products Examined for Salmonellae.	1/8/79	Indef.
225–89–4003	Netherlands	ORA-GLP	GLP's Phase II	12/20/88	Indef.
225–81–2000	New Zealand	CFSA N-S	Shellfish Sanitation	10/30/80	Indef.
225–96–2004	New Zealand	CFSA N-S	Fish & Fishery Products	12/20/95	12/20/00.
225–76–2000	New Zealand	CFSAN	Dry Milk Products Facilitate & Improve Importation Procedures.	11/11/75	Indef.
225–95–2000 EOL	New Zealand	CFSAN	Horticultural Produce Pesticides.	3/13/9 5	Indef.
225–82–2001	Norway	CFSAN	Importation of Rennet Casein.	2/26/82	Indef.
225–97–2000 EOL	Norway	CFSAN	Listeria Program for Smoked Salmon.	10/15/96	Indef.
225–86–2002	Philippines	CFSAN	Certification of Food Products.	9/18/86	Indef.
225–96–2005	Russia	CFSAN	Food Products	3/29/96	Indef.
225–94–8001	Russia	CDER	Drugs & Biological Products.	2/2/94	2/2/97.

Number	Country	Sponsor	Title	Effect date	Term date
225–94–8001 Revised Annexes.	Russia	CDER	Drugs & Biological Products Annexes.	1/30/96	Indef.
Statement of Intent	Russia	CDRH	Medical Devices Info	1/30/96	Indef.
225–78–1001	Sweden	CFSAN	Dry Milk Products	11/7/77	Indef.
225–79–4011	Sweden	ORA-GLP	GLP's Phase I /Non-clinical Labs.	5/25/79	Indef.
225–75–4057	Sweden	CDER	Upgrade Quality of Drugs in International Commerce.	10/17/72	Indef.
225–75–4058	Switzerland	ORA	Inspection of Production of Swiss Drugs.	10/28/68	Indef.
225–85–8401	Switzerland	ORA-GLP	GLP's Phase II Exchange Info.	4/29/85	Indef.
225–98–8001 EOL	Taiwan	CDRH	Info Exchange on Medical Devices.	1/9/98	Indef.
225–80–2001	United Kingdom	CFSA N-S	Processing/Labeling of Fresh/Frozen Clams.	9/7/82	Indef.
225–86–6000	United Kingdom	CDRH	Mutual Recognition of Medical Device Inspections.	6/6/86	Indef.

Question. How many MOU's have been established in the past two years?

Answer. There have been nine international agreements signed since the beginning of 1996. I would be happy to provide the information for the record.

[The information follows:]

Number	Country	Sponsor	Title	Effect date	Term date
225–97–8003 EOL	Australia	FDA	Orphan Products	8/13/97	Indef.
225–96–4004	Belarus	CDER CBER	Info Exchange on Drugs/Biologics.	3/27/96	3/25/99.
225–96–4006	Chile	CFSAN	Fish & Fishery Products	5/13/96	5/13/01.
225–97–2001	Ireland	CFSAN	Certification Requirements for Caseins.	11/5/96	11/5/01.
225–97–2000 EOL	Norway	CFSAN	Listeria Program for Smoked Salmon.	10/15/96	Indef.
225–96–2005	Russia	CFSAN	Food Products	3/29/96	Indef.
225–94–8001 Revised Annexes.	Russia	CDER	Drugs & Biological Products Annexes.	1/30/96	Indef.
Statement of Intent	Russia	CDRH	Medical Devices Info	1/30/96	Indef.
225–98–8001 EOL	Taiwan	CDRH	Info Exchange on Medical Devices.	1/9/98	Indef.

Question. How are MOU's being used to improve food safety?

Answer. FDA's overall policy for initiating, developing, and monitoring MOU's was set forth in a 1995 Compliance Policy Guide, 60 FR 31485, June 15, 1995. As stated in that document, it is FDA's policy to pursue development of MOU's that will further the Agency's public health mission.

The majority of MOU's and other arrangements currently in effect were developed to improve food safety by establishing a formal mechanism under which a foreign government can address and correct an identified non-compliance situation associated with a particular food or class of foods from the particular country. These types of MOU's are referred to as compliance MOU's. They contain provisions which delineate actions by the foreign government and industry aimed at preventing continuation of a previously identified problem and provide that the foreign government certify that specific foods offered for import will comply with the relevant United States regulations. FDA audits such foreign government certification through paper reviews and laboratory analyses to verify the performance of the foreign government and industry.

Other less formal MOU's and agreements allow FDA to use its limited inspectional resources more efficiently by cooperating with the government of the producing country to help ensure production of safe food. These arrangements normally contain provisions aimed at preventing any safety problems associated with a particular food. The arrangements accomplish this goal through well-controlled production, storage and transportation practices, and sufficient foreign government oversight and testing, which provides FDA with reasonable assurance that exports

of the particular food from that country comply consistently with applicable United States regulations. FDA oversees the arrangement through appropriate audits, but is able to redirect its limited inspectional resources toward those imported products which are not subject to such rigorous government oversight in the producing country. This type of arrangement is a fundamental step in the process of reaching equivalence between the regulatory system of the United States and that of a foreign country.

Question. Please provide the Committee with an update on the status of the implementation of the seafood Hazard Analysis Critical Control Point (HACCP) requirements.

Answer. HACCP implementation has involved four primary elements, each of which are interrelated: education and technical assistance for the industry; education of FDA and state inspectors; regulatory inspections of seafood processors; and Federal/State seafood HACCP inspection partnerships.

Under Education and Technical Assistance for the Industry, HACCP is a system of preventive controls for safety that are operated by the industry. For each processor to be able to operate its own HACCP system, the processor must understand both the food safety hazards that are reasonably likely to occur for the products being processed and the controls that are available to minimize or eliminate the hazards. On a day-to-day basis, a processor's core HACCP activities are monitoring key processing points to ensure that they are operating in a manner that produces a safe product and recording the results of that monitoring.

To help processors understand these concepts and activities, FDA participated in the development of low-cost training for industry in HACCP principles and their application to seafood. This course has been attended by several thousand individuals nationwide. The Agency also developed guidance for processors, entitled "Fish and Fishery Products Hazards and Controls Guide," which provides advice on hazards that are reasonably likely to occur in various situations and on controls that are known to exist for those hazards. This guide also includes a simple, fill-in-the-blank HACCP plan and instructions on how to complete it.

For Education for Inspectors, HACCP-based regulatory inspections involve auditing processor's HACCP systems to determine whether they are appropriate for the circumstances and are being operated properly on a day-to-day basis. Effective auditing involves expertise and judgment on the part of the inspectors and the regulatory agency. The FDA regulations do not require that processors submit their HACCP plans to FDA for approval in advance of the first HACCP-based inspection. FDA does not have the resources to conduct such reviews. Moreover, it is difficult to effectively judge a HACCP plan without actually seeing the processing operation. Thus, FDA's inspectors must be trained in how to evaluate HACCP plans and systems during routine inspections. To prepare FDA's inspectors, the Agency sent them to the course developed for industry, described above, and to an additional course that FDA designed for seafood inspectors on auditing technique. This course has also been made available to state inspectors and has been well attended.

Under Inspections, the seafood HACCP requirements became effective on December 18, 1997, after a two year grace period. FDA started conducting HACCP-based inspections shortly thereafter. The Agency's goal is to inspect all 3,800 U.S. seafood processors, other than processors of raw molluscan shellfish, which are inspected by States under a Federal-State cooperative program, within one calendar year of the effective date.

Even with the training and the guidelines, the Agency has long recognized that the development of HACCP systems in many processing plants will involve a period of trial and error. Thus, it has always been the Agency's expectation that the first round of inspections after the effective date would reveal that a significant percentage of HACCP systems need some improvement. This expectation is turning out to be the case, but it is not regarded as a special problem at this stage of implementation. As planned, FDA's inspections are focusing on evaluating HACCP systems and providing feedback to the firms. During the first round, FDA anticipates that regulatory action will be initiated when, in addition to HACCP system deficiencies, the products themselves contain contaminants or are in imminent danger of becoming contaminated.

FDA is permitting the industry to challenge the conclusions from these inspections. While FDA's inspectors will initially compare each processor's HACCP system to the advice in the guidelines described above, processors are free to choose alternative approaches so long as their HACCP systems provide a level of safety that is equivalent to that provided in the guidelines' approach. Moreover, processors are free to challenge the scientific validity of the approach taken in the guidelines. FDA is always interested in learning about better ways to ensure safety and in making improvements in its own guidelines. In developing alternatives to the guidelines or

challenging their validity, processors should be able to establish the scientific validity of their systems for the Agency to evaluate.

Under Federal-State Seafood HACCP Inspection Partnerships, the FDA seafood HACCP program provides the opportunity for the Federal government and the states to operate inspection systems that are consistent in both philosophy and detail, based on HACCP as the common element. It is possible for the first time to have a consistent, national, Federal-State cooperative program for seafood safety as well as to aggregate the results of both Federal and state inspections into a common national database. It would also enable both the Federal government and the States to leverage their resources by sharing the workload. An integrated Federal-State system would enhance consumer protection by substantially strengthening the domestic program for seafood safety.

In virtually all states that have significant seafood processing, the States conduct their own inspections, often as an offshoot of state licensure of processing establishments. Many of these states inspect their processors at least once per year, with some mandating as many as four inspections per year. Except in certain circumstances, however, FDA traditionally has not been able to fully coordinate its seafood inspection activities with those of the states because of inconsistencies between the programs and the costs associated with developing common data bases. As a result, Federal and State inspections have tended to overlap.

To take advantage of the opportunity that HACCP provides, FDA developed a model Federal-State partnership for seafood HACCP inspection; and a computerized national seafood HACCP inspection database into which both FDA and state partners could enter the results of their inspections. The Agency also set aside some funds to make available to potential state partners to upgrade their inspection capabilities through the acquisition of equipment or other means. Much of those funds have already been committed to States. FDA has also entered into seafood HACCP inspection partnerships with some states and is pursuing agreements with many others. About 30 states have entered into partnerships or are considering doing so.

Question. What level of funding is being allocated for seafood HACCP in fiscal year 1998? How much is included in the fiscal year 1999 request for this purpose?

Answer. The fiscal year 1998 President's Budget included an increase of $8.0 million to implement seafood HACCP, the regulation for which became final in December 1997. The fiscal year 1999 request includes an additional $3.4 million.

Question. The budget justification indicates that FDA intends to expand implementation of HACCP and other food safety assurance systems in the food industry. FDA has indicated that in addition to seafood, it intends to expand HACCP to fruit juice. What other expansions and new systems does FDA intend to implement?

Answer. In addition to fruit juices, the Agency is also evaluating the feasibility and practicality of applying HACCP to the retail food industry and to production of animal feeds. FDA has also engaged in other HACCP pilots with industry. Expanded activities will include working more closely with industry, academia, and professional and trade associations by providing technical assistance, training, and guidance to appropriate entities. In addition, FDA will continue to work with the Department of Agriculture towards the adoption of the Food Code. FDA will work with other agencies to increase the percentage of domestic produce produced consistent with the new voluntary GAP's/GMP's guidance and FDA will monitor and evaluate the effectiveness of that guidance. FDA will evaluate fresh fruit and vegetable production in areas in the U.S. and foreign countries where there is evidence that a potential public health hazard exists and GAP/GMP guidance has not been applied. FDA will evaluate ways to increase coverage of imports through such means as increased personnel, increased partnerships, and innovative partnerships with the states.

Question. The prepared statement indicates that the Operational and Administrative System for Import Support (OASIS) became fully operational in every U.S. port of entry where FDA-regulated products come into the country. What was the total cost of this system? Please provide the resources, both dollars and staff years, which FDA allocated to this system in each fiscal year since its initiation, and under which activity of the budget these funds were provided.

Answer. OASIS development was done by private contractors, to whom $10.5 million has been paid for their system development work. FDA did not spend any staff years on system development of OASIS, since the development work was performed by private contractors. The increase in FTE utilization for OASIS in fiscal year 1996 was largely because that is when the Agency was at the height of the roll out of OASIS to FDA field offices nationwide, and were utilizing FDA personnel to get the computer equipment ready at these sites, to provide training to our field users of OASIS, and to furnish on-site support to the start up of the system. All of the budget activities, except for NCTR and Tobacco, were used to fund the development costs

of OASIS as the ORA import inspection program includes formal entries from all other budget activities. I would be happy to provide, for the record, the information requested.

[The information follows:]

[Dollars in millions]

Fiscal year	Amount	FTE's
1988–91	$2.0	.....
1992	0.7	.....
1993	0.8	.....
1994	0.7	4.0
1995	3.4	2.0
1996	0.8	11.0
1997	0.9	5.0
1998	1.2	4.0
Total	10.5	26.0

Question. What is included in the fiscal year 1999 request for OASIS? Please provide dollars and staff years.

Answer. OASIS will require $600,000 in fiscal year 1999 for system maintenance to be performed by the development contractor. These are funds that relate to the development of OASIS as have been reported in previous years.

Question. Will OASIS allow FDA to regulate imports with fewer inspectors and analysts? If yes, what is the savings in each of fiscal years 1998 and 1999?

Answer. We do not anticipate the OASIS will allow the Agency to monitor the increasing volume of FDA regulated imports with fewer inspectors or analysts. In fiscal year 1992, there were approximately 1.5 million entries of FDA regulated products. In fiscal year 1997, there were approximately 3.9 million entry lines of FDA regulated products offered for entry. This does not include those informal entries with a value less than $1,250, which is to be raised to $2000, effective July 2, 1998, and some formal entries, which may not be electronically processed. Entry lines is a more realistic way of determining the volume of imports which FDA must evaluate. Since each entry could contain more than one line of FDA regulated product, as on average an entry contains 1.7 lines, the number of entries underestimates the challenge posed in maintaining an effective import inspection system.

The efficiencies and economies that OASIS has brought to the processing of import entries has enabled FDA to handle this increased volume of work. However, OASIS does not affect the number of products that FDA examines in the field, or collects for laboratory examination. Nor does it affect the staffing needed to examine product in our laboratories. The benefit from OASIS in terms of examinations and analysis is to help ensure that the most meaningful entry lines are selected for examination and analysis.

FOOD SAFETY EDUCATION

Question. FDA indicates that it will invest its resources in new and innovative education and information sharing strategies for improving food handling practices of consumers and retail food service establishments. USDA has been carrying out and increasing its activities in this area as well. What is the division of labor between the FDA and other agencies, such as USDA, in food safety education and information sharing to prevent duplication of effort?

Answer. FDA and USDA have always worked together to coordinate food safety education. The Food Safety Initiative has provided ample opportunity to become even more closely coordinated. Working groups have been formed and meetings occur on a regular basis to delineate each agency's specific role and assess progress. The breakdown of education programs among the agencies is dependent upon the constituencies serviced and the products regulated. FDA is responsible for education concerning food safety issues in processing and consumer food handling of all foods except meat, poultry, and processed egg products. FDA is also responsible for education involving food handling in retail food service establishments specifically involving the retail Food Code of 1997.

USDA does food safety education on the production, processing, and consumer food handling of meat, poultry, and processed egg products. The Department is also responsible for education at congregate meat sites, gleaning and food recovery pro-

grams sites, school food service facilities, and retail stores and restaurants that have on-site meat or poultry processing. USDA and FDA are working together with industry to develop and educational outreach program for the Good Agricultural Practices/Good Manufacturing Practices guidance for fresh fruits and vegetables. This program will be a well-organized program applicable to the domestic and foreign product industry.

FDA is also pursuing cooperative programs related to veterinary education programs which will focus on proper drug use with a specific emphasis on proper use of antimicrobial drugs. These educational initiatives will be implemented in conjunction with Surveillance activities such as the practitioner prescribing surveys which will serve as the foundation for this activity. These activities will be accomplished in partnership with professional veterinary associations. Additionally, the Agency is working to develop programs dealing with food safety to be used in veterinary continuing education and incorporation into veterinary school curricula. Producer education will be done in partnership with producer associations as well as components of the U.S. Department of Agriculture, such as the Animal Production Food Safety Program, and Cooperative State Research Education and Extension Service.

Question. What areas of food safety education will FDA be responsible for? Please describe in detail the educational strategies FDA will conduct, what information will be provided, how it will be delivered, and who will be the target audience.

Answer. In terms of consumer education, FDA has joined CDC, USDA, and the Department of Education, members of industry, and consumer representatives to form a public-private Partnership for Food Safety Education and launched a nationwide public education campaign in October 1997. The campaign centers on four key food safety principles along with a "FIGHT BAC!" logo. The Partnership distributed community action kits and supermarket kits containing public education materials to support the "FIGHT BAC!" campaign in early 1998. Currently FDA is advising the Partnership on two school-based initiatives. The first is development of a "Presenter's Guide" for introducing the "FIGHT BAC!" message to children in kindergarten through third grade. The presenters, our partners at the local level, cooperative extension agents, health and consumer educators, have many opportunities to present information in a classroom setting. This program will include interactive activities to engage the children, as well as information to take home to parents. The goal is to have this program in place for September. The Partnership is also in the developmental stages of creating a science-based food safety education program for children in grades three through six. This longer-term project will meet the educational needs of children as they are just beginning to learn food preparation in the home.

Both of these projects are based on findings of a report, "Evaluating the Placement of Food Safety Education in American Schools," contracted for by FDA and USDA. Never before has an educational survey been conducted to identify what subjects at what grade levels, and to which school personnel food safety education should be directed. This report, currently under review, will serve as the foundation for developing relevant and effective education programs.

FDA will support National Food Safety Education Month, already designated by industry, by sending posters featuring "FIGHT BAC!" to elementary school food service directors for display in the school cafeteria. Work is also underway on a planning guide for use by community health educators for promoting National Food Safety Education Month that will be distributed this summer.

A video teleconference is scheduled for May that will reach state and local health and education officials concerned with the prevention of foodborne illness. Experts from government and private sector organizations will, among other things, discuss how to use community action materials from the "FIGHT BAC!" campaign along with plans for National Food Safety Education Month.

In an attempt to examine the broad range of research data and its implication on food safety education practice, a meeting of food safety education researchers is planned for this year. The purpose of the meeting will be to review the status of food safety education research, identify gaps in existing research, and identify strategies for future food safety education. One gap that has already been identified is the need for further research on the best way to communicate the key food safety principles in order to achieve behavior change. Research will take place on the barriers to safe food handling.

FDA and USDA are developing a National Food Safety Information Center. This center will build on the agencies' existing information dissemination systems by, among other things, enhancing the data base capabilities of the FDA/USDA Foodborne Illness Education Information Center at the National Agriculture Library, establishing a new food safety 800 number, developing the joint

foodsafety.gov web page, and enhancing publications distribution and electronic publications dissemination systems.

In terms of retail education, FDA has worked with USDA to make the HACCP manual for the school lunch program consistent with FDA's Food Code. FDA has also joined with government, academic, consumer, and industry representatives in establishing the "Food Safety Training and Education Alliance for Retail, Food Service, Vending, Institutions and Regulators." This group, FSTEA, is working to promote training of government and industry employees in retail food service. FSTEA has thus far developed an evaluation form to be used by the professional association members in evaluating training resources listed in the National Agriculture Library's Foodborne Illness Education Center database, and are developing recommended qualifications for persons who teach retail food safety training to industry employees as well as training curriculum for regulatory food inspectors.

FDA offers a considerable number of training courses for state and local retail food regulatory staff through its State Training Branch. A special four day Microbiology for Inspectors satellite course will be offered in August. A follow up course, Investigation of Foodborne Illness will be offered in September.

FDA has "Voluntary Retail Food Regulatory Program Standards" and "Managing Food Safety: A HACCP Principles Guide for Operators of Food Establishments at the Retail Level." We are conducting workshops regarding these with State officials and once the documents have been reviewed, the Agency will conduct pilot programs in the states of the program standards and the HACCP guide beginning in the fall of 1998. FDA is also conducting courses of epidemiology for State regulatory officials, and has conducted an investigator course on tracebacks of foodborne illness.

For producer education, FDA is working with USDA to develop an educational outreach program for the GAP/GMP guidance for fresh fruits and vegetables. An International Working Group consisting of representatives from the Office of U.S. Trade Representatives, the U.S. Department of State, FDA and USDA have been established to develop a system of outreach for assistance to foreign countries to meet guidelines required by the Produce Initiative. A conference will be held this summer with individuals and representatives from organizations involved in producer education to address outreach on the domestic and international levels.

FDA is also responsible for the Veterinary Practitioner education. Many initiatives already exist and more are being developed in collaboration with veterinary profession associations, such as the American Veterinary Medical Association and veterinary speciality practitioner groups. The target audience for these programs is practicing veterinarians and veterinary students. FDA is working with the veterinary academic community to develop programs dealing with food safety for use in continuing education programs and to encourage the adoption of these programs into veterinary school curricula. Further, practitioner education efforts will be conducted in conjunction with producer associations such as National Pork Producers Council, and National Cattlemen's Beef Association. The Agency will work with these associations to enhance producer quality programs and develop new quality assurance programs that will emphasize the relationship between good husbandry practices and achieving a safe food supply. FDA plans to work with producer associations, the Department of Agriculture, and the states to enhance safe food production practices.

FOOD SAFETY RESEARCH

Question. Can you be more specific as to what FDA plans to do with the research money requested as part of the food safety initiative? Please list specific research work/projects to be funded in each of fiscal years 1998 and proposed for fiscal year 1999, the cost of each project, and who will conduct the research.

Answer. An active research program is an integral component of FDA's ability to develop and implement scientifically-sound regulations and guidance designed to safeguard the U.S. food supply. The Food Safety Initiative recognized that solving the new food safety problems that will arise as we enter the next century requires a strong investment in science, the source of new solutions. This is reflected in the inclusion of two research components within the initiative, bioresearch and risk assessment, that are devoted to providing the needed food safety data, methods, and technologies.

The Food Safety Initiative, FSI, identified the following five broad goals as the focus of the initiative's research programs: Improved Detection Methods; Understanding Resistance to Traditional Preservation Technologies; Understanding Antibiotic Drug Resistance; Prevention Techniques: Pathogen Avoidance, Reduction, and Elimination; and Food Handling, Distribution, and Storage. FSI also identified the need for methods and scientific data that would enhance the ability of federal agen-

cies to assess microbial risk. This included two additional broad priority research areas that are critical for addressing this goal of the Food Safety Initiative: Develop and Validate Exposure Assessment Models Based on Probabilistic Methodology; and Develop and Validate Dose-Response Assessment Models for Use in Risk Assessment. These seven research goals, with an emphasis on microbiological problems associated with fresh or minimally processed produce, were reaffirmed under the Produce and Imported Foods Safety Initiative.

These research priorities were used by FDA to develop a three year research plan. The plan, which is in the final stages of development, details the projects that FDA is undertaking to meet the goals of the Food Safety Initiative and the regulatory mission of the Agency. I would be happy to provide, for the record, a table showing research projects, estimated FTE's associated with these projects, and whether these projects are planned intramurally and extramurally.

[The information follows:]

FOOD SAFETY INITIATIVE RESEARCH

[Dollars in thousands]

Research project	Fiscal year—				FDA-run or external
	1998 estimated FTE level	1998 cost	1999 estimated FTE level	1999 cost	
Sampling for Pathogens on Produce	11.5	$874	14.5	$1,157	FDA.
Molecular Characterization of Maverick Strains of Enterohemorrhagic E. Coli.	1.0	76	4.0	319	FDA.
Effects of Environmental Conditions, Pytochemicals, Modified Atmosphere Packaging and other Parameters for the Growth and Survival of Foodborne Pathogens on Produce, Particularly Sprouted Seeds.	8.2	623	10.2	813	FDA.
Molecular Mechanisms for Pathogen Emergence.	5.5	418	6.5	518	FDA.
Identification and Characterization of Virulence Determinants for Salmonella enteritidis and Vibrio vulnificus.	3.0	228	4.0	319	FDA.
Cyclospora Detection and Viability Assessment	2.5	190	4.5	359	FDA CDC USUHS Colleges.
Characterization of Pathogenic Aquatic Eucaryotes and their Toxins.	13.7	1,041	14.2	1,133	FDA.
Control of Viral and Bacterial Human Pathogens in Seafood.	5.5	418	6.5	518	FDA.
Assessment of Technologies for Pathogen Reduction or Elimination.	9.7	737	10.7	853	FDA DOD.
Mycotoxins	15.0	1,114	17.0	1,356	FDA.
Virulence Assessment and Molecular Pathogenisis of Salmonella typhimurium DT 104 and Shigella.	3.5	266	4.5	359	FDA.
Minimizing Biogenic Armine Formation in Seafood and Other Commodities.	2.6	1,976	4.6	367	FDA.
Quantification of Effects of processing on Foodborne Pathogens for minimally processed foods.	1.5	114	2.0	159	FDA.
Survival of Food Pathogens during the 60-day Aging Period of Hard Cheeses Made from Unpasteurized Milk.	.25	19	.5	39	FDA.
Pathway Analysis: Assessment of the Pathogen Transmission Capabilities of Disease-Carrying Insects.	1.0	76	1.5	119	FDA.
Effect of a Variety of Stress Factors on the Immune Systems of Poultry and Subsequent Infection of Shell Eggs by Salmonella enteritidis.	0.7	53	1.5	119	FDA JIFSAN.
Levels of Vibrio vulnificus and Vibrio parahaemolyticus in Retail Seafood.	1.75	133	2.5	199	FDA.

FOOD SAFETY INITIATIVE RESEARCH—Continued

[Dollars in thousands]

Research project	Fiscal year—				FDA-run or external
	1998 estimated FTE level	1998 cost	1999 estimated FTE level	1999 cost	
Development of gastroenteritis animal models and biomarkers for food-borne pathogens to serve as surrogate models for human disease.	6.0	456	6.0	478	FDA.
Developing Alternative Modeling Tools for Assessing Dose Response and Severity.	0.5	38	0.5	39	FDA.
Risk Assessment Coordination Group	3.5	266	3.5	279	FDA.
Intra- and Interagency Support of Risk Assessment.	0.8	61	0.8	63	FDA.
Development of Risk Assessment Clearinghouse.	1.5	114	4.5	359	FDA.
Scientific Support Group	5.2	395	6.2	49	FDA.
Screen animal feeds for the presence of microorganisms harboring the resistance determinants.	.....	.....	.....	28	FDA.
Screen other environmental sources for the presence of microorganisms harboring the resistance determinants.	.....	.....	.....	28	FDA.
Evaluate the effect of selection pressure on the frequency of resistance determinants found in zoonotic and indigenous microbial populations.	.....	.....	.....	83	FDA.
Monitoring quinolone resistance in Campylobacter spp., as it relates to increased use of fluoroquinolone in animal husbandry.	.....	.....	.....	78	FDA.
Elucidation of mechanisms by which competitive exclusion products prevent colonization in chicken intestine by Salmonella spp.	.....	.....	.....	93	FDA.
Evaluate Bacteriological Analysis Manual procedures for detection of pathogens in animal feeds and the environment.	.....	.....	.....	33	FDA.
Bioremediation of veterinary drug residues in environment as they relate to antibiotic resistance.	.....	.....	.....	15	FDA.
Screening animal feeds using molecular techniques for proteins derived from mammalian tissue to detect possible Bovine Spongiform Encephalopathy (BSE).	.....	.....	.....	42	FDA.
Risk assessors on dose-response modeling of pathogenic organisms.	.....	.....	.....	100	FDA.
Use of Human Flora-Associated Rodents to Study the Effect of Low Doses of Antimicrobials.	.....	130	.....	.....	Centre national D'Etudes Veterinaires et Alimentaires, Fougeres, France.

Question. How much is requested for FDA food safety research for fiscal year 1999?

Answer. The total amount for food safety research included in the fiscal year 1999 budget request is $9.2 million and 43 FTE. Of this total, $8.5 million is for the Foods program, $0.5 million for the National Center for Toxicological Research, and $0.2 million for Other Activities.

Question. How will the research at FDA be different from the research that is being done and is planned by USDA?

Answer. A series of interagency meetings was conducted in the fall of 1997 to assure that the resources provided by the Food Safety Initiative for research would be utilized optimally. Similarly, one of the major goals of the risk assessment activities called for by the Food Safety Initiative was the establishment of an interagency

risk assessment consortium. One of the first activities of the consortium has been to assist in the coordination microbial risk assessment research.

For research related to our work in the area of veterinary medicine, FDA is coordinating with the Department of Agriculture to minimize the duplication of work. FDA's focus will be on those aspects of foodborne pathogens related to products regulated by the Agency; specifically the development of pathogens detection procedures for animal feeds, feces, manure, and environmental samples, the contribution of animal feeds to the pathogen load in food producing animals, and the evolution of pathogens, including resistant pathogens, in animals being fed antibiotics.

As a result of these interagency exchanges, the Agency has identified eight research program areas that were consistent with its regulatory mission and could be effectively addressed with the expertise and facilities available at FDA. In addition, priority research needs in support of specific public health issues currently facing FDA were assessed. A total of ten issues associated with three broad regulatory issues related to the control of foodborne disease were identified as requiring research support. I would be happy to provide a list of these activities for the record.

[The information follows:]

Research

Development of Sampling and Detection Methods for the Identification of Pathogens that Occur Sporadically at Low Levels on Produce

Salmonella Typhimurium DT104

Cyclospora cayetenensis

Development of New Strategies and Technologies for the Prevention or Elimination of Pathogens from Foods, Particularly Fresh Produce

Molecular Mechanisms of Microbial Evolution that Lead to the Emergence of New Foodborne Threats to Public Health

Risk Assessment

Improved Exposure Assessments Through the Development of Product/Pathogen Pathway Analysis Models

Characterization of Dose-Response Relations for Selected Foodborne Pathogens

Identification of Alternative Modeling Techniques for Enhanced Microbial Risk Assessments

Control of Pathogens in Commodities that do not Receive a Terminal Inactivating Treatment Prior to Consumption

1. Contamination of shell eggs with Salmonella.

2. Contamination of sprouted seeds with pathogenic microorganisms, such as Escherichia coli O157, Salmonella spp., and Bacillus cereus.

3. Contamination of raw molluscan shellfish with pathogenic microorganisms, including Salmonellaspp., Vibrio spp., and Norwalk viruses.

4. Contamination of fresh or minimally processed produce with pathogenic microorganisms, such as Escherichia coli O157:H7, Salmonella spp., Listeria monocytogenes, and Cyclospora cayetenesis.

Adequacy of Food Processes and Implementation of HACCP

5. Validation that current guidelines for the aging of cheeses is adequate to assure the elimination of pathogenic microorganisms.

6. Control of pathogenic microorganisms in fresh fruit and vegetable juices, including Escherichia coli O157:H7, Salmonella spp., Listeria monocytogenes, and Cryptosporidium parvum.

7. Contamination of fresh seafood with marine toxins or parasites such as Anasakis simplex that can infect humans.

Assessment of Public Health Impact

8. Pfiesteria piscicida—assessment of risk to human health through consumption of contaminated seafood.

9. Contamination of grain-based products with mycotoxins, such as fumonisins, deoxynivalenol, aflatoxins, and ochratoxins.

10. Determination of levels of pathogenic microorganisms in specific commodities that would not pose a risk to specific high risk populations.

Question. What criteria are you using for what research FDA should do and what research should be conducted by USDA and other federal agencies?

Answer. FDA uses the three criteria for determining what research to conduct: (1) whether a particular issue or matter applies to FDA's regulatory mission; (2) whether the interagency committees of the Food Safety Initiative and the Produce Initiative assigned or placed responsibilities on FDA; and (3) whether current or

planned FDA personnel have the expertise to conduct research applicable to either of the two criteria stated above.

For veterinary medicine, FDA is coordinating with the Department of Agriculture to eliminate duplication of work. FDA's focus will be on those aspects of foodborne pathogens related to products regulated by the Agency, namely the development of pathogens detection procedures for animal feeds, feces, manure, and environmental samples, the contribution of animal feeds to the pathogen load in food producing animals, and the evolution of pathogens, including resistant pathogens, in animals being fed antibiotics.

Question. What criteria are you using to determine what government-funded research should be done?

Answer. The role of research within FDA is support of the Agency's regulatory mission. This includes acquiring scientific knowledge and principles needed to develop sound food safety policies and guidance, developing tools for implementing and assessing the effectiveness of its policies, and responding rapidly to newly emerging food safety threats to public health. Other criteria focus in a generic sense on the contributions of animal feeds and drugs to the development and transfer of foodborne pathogens, including resistant pathogens, in animal agriculture. An objective that is included is to minimize the contributions of animal feeds and antibiotics to the problem, recognizing the importance of both to the safety of food and health of animals.

Question. Will the requested increase for food safety research involve an increase in the scientific staff at the Center for Food Safety and Nutrition (CFSAN)?

Answer. Yes. CFSAN's scientific staff will increase to fill the deficiencies in expertise from a limited number of selected high-level scientists. In addition, some increase will be needed in support and temporary personnel to make research more cost efficient.

Question. How will the research be used once it is completed? Is all the new research planned targeted at providing the science base for better regulation and education for food safety?

Answer. The information acquired through Food Safety Initiative research projects will indeed be used to support the Agency's regulatory duties and responsibilities. These are: acquiring scientific knowledge and principles needed to develop sound food safety policies and guidance; developing tools for implementing and assessing the effectiveness of its policies; and responding rapidly to newly emerging food safety threats to public health.

The three-year research plan was developed in an incremental fashion. An inventory and review of current and planned research projects was conducted to fulfill the Fresh Produce Initiative directive to identify, accelerate, and coordinate with other food safety agencies research that will reduce microbial risks associated with fresh produce, and to prepare FDA's research program for external peer review. As this research focus developed, several additional factors were considered during the review process. Core research support functions, such as electron microscopy, mass spectrometry, flow cytometry, pulse field gel electrophoresis, ribotyping, and animal care and use, were identified. The needs to maintain and enhance specific cross-cutting scientific capabilities and expertise, to support the entire research program and the Agency's ability to respond to new food safety concerns, were strongly considered. Moreover, a balanced research program that addresses both the intermediate and long-term needs of FDA is required. Therefore, the majority of the research program is designed to address FDA's research needs during the next three to five years, but a portion of the effort is reserved for "exploratory research" that addresses potential food safety concerns that may occur during the next five to eight years.

Further, another objective of the research is to minimize the contribution of animal feeds and drugs to the development of pathogens—including antibiotic resistant—in food producing animals and the transfer of these pathogens to animal derived food. This research is expected to contribute to the reduction of pathogens in animal feeds and also food producing animals. The research is also expected to provide the basis for any changes in feed manufacturing, transportation and storage. New, fast detection methods for detecting pathogens in feeds, in animals and animal derived food are to be developed, evaluated and accepted for monitoring purposes. This research will provide the data to serve as the basis for the evaluation and monitoring of any new animal antibiotics which affect the development of foodborne pathogens in food producing animals. The research will also provide the foundation for assessing the human risk of using antibiotics in food producing animals. The ultimate goal is to reduce the occurrence foodborne pathogens in animal derived food.

TOBACCO ACTIVITIES

Question. FDA proposes that funding for its tobacco activities which received a $29 million increase for fiscal year 1998, be increased by an additional $100 million for fiscal year 1999. What is the justification for such a significant increase?

Answer. The proposed increase for tobacco will enable the Agency to enter into enforcement contracts with all 50 states to conduct a minimum of 500,000 inspections, fund an expanded outreach effort to include state by state advertising directed to retailers, and enable FDA to begin to implement regulatory controls for cigarettes and smokeless tobacco.

Question. FDA funding for the tobacco initiative for fiscal year 1998 and requested for fiscal year 1999 is broken into the following categories:

[In millions of dollars]

	Fiscal year—	
	1998	1999 request
Compliance outreach	10.0	35.0
Enforcement and evaluation	24.0	75.0
Product regulation	.....	24.0
Total	34.0	134.0

For both fiscal year 1998 and the fiscal year 1999 request, provide a detailed listing of the specific activities being funded or proposed to be funded under the above categories of the tobacco initiative, including the funds and full-time equivalent staff allocated to each activity.

Answer. We are happy to provide this information for the record.

[The information follows:]

FISCAL YEAR 1998

Staffing.—Twenty-five FTE are allocated to tobacco activity for fiscal year 1998. Most of the people work on all aspects of the program, however, 2 are dedicated exclusively to Outreach and 8 are dedicated to Enforcement.

Outreach.—In fiscal year 1998, FDA is focusing most of its efforts on retailer information, continuing its provision of brochures and Question and Answer pamphlets for retailers as well as maintaining a toll-free hotline telephone number for retailers to call to request materials and a WEBsite with similar information. Further, as each new state contracts with FDA to undertake compliance checks, the Agency sends mailing to all retailers in the state to alert them that compliance checks will soon begin in their state. The Agency has developed and has begun distribution of in-store materials to all retailers answering potential questions, and reminding them of their responsibilities under the rule, and assisting them in compliance. In addition, FDA has begun placing a modest level of advertising in a major market within states in which contracted compliance checks are being conducted.

Enforcement.—In fiscal year 1998, the Agency is attempting to establish contractual relationships with each state and territory to conduct compliance checks of retail outlets that sell tobacco products. FDA is asking each state to attempt to conduct a minimum of 375 inspections per month. The contracting process requires hours of effort by Agency staff reviewing proposals, providing technical assistance to states, and finally negotiating the final contract. FDA then trains the commissioned officials in each state and oversees the progress of the contract.

FISCAL YEAR 1999

Staffing.—Twenty-five additional FTE are sought for fiscal year 1999. This includes four scientific reviewers for product regulation; two attorneys, and six program analysts, primarily for enforcement; and seven administrative staff, three consumer safety officers, and three clerks to be involved in all the aspects of the program.

Outreach.—In fiscal year 1999, the Agency will design a multi-media advertising campaign including radio, print, and billboard advertisements and place these ads in major media markets in every state with which FDA contracts to conduct compliance checks. It will also develop a comprehensive retailer education program which includes a retailer kit containing in-store signs, tent cards, fact sheets, counter mats and other materials; a letter to retailers in each state updating them on the status

of compliance checks in their state; a series of reminder postcards that can be posted in the store for customers and clerks to see; trade advertisements in retailer publications; and a toll-free hotline that retailers can call to request additional materials and ask questions. It will continue to have exhibits at major conferences representing state and local health officials, public health organizations, and consumer and retailer organizations educating these audiences about the new tobacco rule.

Enforcement.—The Agency plans to commission state officials in all 50 states to perform unannounced inspections of over 500,000 retail establishments to determine if retailers are complying with the law. It will send warning letters to first violators and seek civil money penalties from those found violating the law multiple times. Finally, it will develop an enforcement strategy for national chains.

Product regulation.—The Agency will begin to review applications for new tobacco products that claim that they may or may not be less hazardous. In doing so, it will assess the products to determine what effects those products have on the health of current users, whether the products will create more demand by young people to initiate use, and whether the products will keep from quitting, those who might otherwise have quit. Other activities may include: classification of the product pursuant to Section 513 of the Act, establishment of quality system requirements, and review and analysis of ingredients and constituents of tobacco products.

Question. Provide a list, in priority order, of the tobacco initiative activities proposed to be funded for fiscal year 1999.

Answer. We believe it is imperative that we expand our activities in the tobacco program. All the activities we described earlier, when taken together, form a program, which if viewed as a whole, instead of as three separate parts, designed to move FDA towards its goal of reducing youth tobacco use by half.

Question. Does the FDA have the capability to spend the increased funds requested for its tobacco initiative during fiscal year 1999?

Answer. FDA does have the capability to spend the increased funds requested for the tobacco initiative during fiscal year 1999. The President's budget provides for a reasonable level of funding for each of the three programmatic areas of FDA's tobacco program. Activities in fiscal year 1997 and fiscal year 1998 have provided the institutional basis for the effective carrying out of the responsibilities planned for fiscal year 1999. A substantial amount of time, effort and planning has occurred and the Agency is in a good position to undertake the expansions envisioned for the program.

The majority of the funding for the tobacco program is dedicated to be used for contracts with the states to commission state officials to perform unannounced inspections of retail establishments.

Question. Will the $34 million for tobacco activities be obligated by the end of fiscal year 1998? What portion of these funds have already been obligated to date?

Answer. We will be happy to provide this information for the record.

[The information follows:]

TOBACCO FUNDING FISCAL YEAR 1998

[In millions of dollars]

	Fiscal year 1998—		
		Anticipated obligations—	
	Current obligations	Last half of fiscal year	Total
Salary & Benefits	.8	1.1	1.9
Enforcement	.9	21.4	22.3
Outreach	6.8	3.0	9.8
Total	8.5	25.5	34.0

The overwhelming majority of the money anticipated to be obligated during the second half of fiscal year 1998 is for enforcement contracts. Most of those contracts are in the process of being negotiated, with the time consuming process of bidding and drafting proposals having occurred during the first half of fiscal year 1998.

Question. What reduction in youth tobacco use will be achieved with the increased funds provided for fiscal year 1998? What is your projection if the $100 million increase requested in the fiscal year 1999 budget is provided?

Answer. The increased efforts in the arenas of outreach and enforcement activities, the proposed product regulation campaign, coordinated with the complimentary activities in the CDC, SAMHSA and NIH, will dramatically enhance the nations's ability to meet its objective of reducing young peoples use of tobacco by 50 percent over seven years. It is the combined effect of all these efforts that provides the greatest opportunity to reduce the death and disease associated with tobacco use.

Question. Why doesn't the President's budget propose that the costs of implementing and enforcing FDA's regulation of nicotine-containing tobacco products be covered by a tobacco settlement rather than be borne by the American taxpayer?

Answer. If Congress enacts comprehensive tobacco legislation, then funds will be available for the FDA program that would be generated by industry payments. The Administration is committed to working with the Congress to ensure the enactment of this important legislation.

Question. FDA is currently proceeding with the age and photo ID provisions of its final rule on tobacco since other provisions of its rule were not upheld or suspended by the federal district court. If the US Circuit Court of Appeals overturns the ruling and the FDA is able to proceed to implement all provisions of its rule, will this alter FDA's spending plans for fiscal year 1999? If so, how?

Answer. If FDA could proceed with enforcement of the entire tobacco rule, it would require the Agency to renegotiate state contracts to call for more and different enforcement tasks for state officials. In addition, enhanced outreach efforts would have to be designed and disseminated to explain the new provisions to affected industries. How much reassignment of funds would be necessary to cover these new activities is unclear, but FDA would expect to continue with its current plans to begin product regulation, to the extent possible.

Question. How much of the $34 million provided for fiscal year 1998 is for FDA contracts with states to conduct enforcement inspections of retail operations for compliance with FDA's regulations prohibiting the sale of tobacco products to minors? How much is included in the fiscal year 1999 request for contracts with states?

Answer. At least $20 million is allocated for FDA contracts with states for fiscal year 1998. The bulk of the $75 million for enforcement activities in fiscal year 1999 is intended for state enforcement contracts.

Question. If states do not elect to enter into contacts with FDA, what action, if any, will FDA take?

Answer. FDA is endeavoring to contract with every state and territory. Significant amounts of time are being spent trying to address each state's individual needs and requirements so that all states can participate. However, if we should be unable to contract with a state, FDA is prepared to perform compliance checks with FDA field personnel in those states.

Question. If the $34 million provided for fiscal year 1998 was intended to cover FDA contracts with all states and territories, why is an increase in funding for these contracts required for fiscal year 1999?

Answer. There are over 500,000 retailers in the U.S. who sell tobacco products (some estimate that it could be as high as 1,000,000). The funding provided to date will enable FDA to contract with each state to begin enforcement activities. But at current funding levels, less than half of all retailers will be inspected. With the increase funding for fiscal year 1999, FDA would anticipate being able to contract for 500,000 compliance checks.

Question. Please describe what costs and activities are covered by FDA's contracts with the states. What is the federal government paying for specifically?

Answer. The contracts are designed to obtain state assistance in the investigational coverage of retail establishments that sell tobacco products. We will be happy to provide specific objectives of these contracts, for the record.

[The information follows:]

SPECIFIC OBJECTIVES TOBACCO CONTRACTS

To enforce the Regulations, 21 CFR 897.14 (a) and (b).

To conduct a minimum of 375 unannounced investigations using children ages 15–17 in retail establishments that sell tobacco to determine compliance with the Regulations, 21 CFR 897.14 (a) and (b) (minimum age of purchase 18 and requirement that retailers request a photo identification for purchase).

To train one or more persons in the Contractor's state who in turn trains the individual commissioned officers to conduct investigations.

To document unannounced investigations and coordinate with FDA as necessary to achieve substantial compliance with the regulations, 21 CFR 897.14 (a) and (b).

The state is responsible for hiring the appropriate personnel, training the minors who will assist in the investigations, planning and conducting the investigations, fil-

ing reports with FDA of the outcome of each investigation and conducting follow-up investigations as warranted. FDA is responsible for sending out letters to each retailer informing him/her of the results of the investigation (compliance or violation). If a second or greater number of violations is reported, it is FDA's responsibility to bring legal action, specifically, to seek to impose civil money penalties.

Question. What is FDA's goal for the frequency of retailer compliance checks through State contracts?

Answer. A key influence on a retailer's decision to comply with the new legal requirement is the extent to which the individual perceives he or she is likely to be found in violation. The Agency has developed a general enforcement strategy aimed at conducting compliance checks in a significant percentage of the approximately 500,000 retail outlets that sell tobacco products. In fiscal year 1997, during the start up phase of the program, ten pilot states were asked to conduct a minimum of 300 compliance checks per month. Currently, all 50 states and several territories are being asked to submit proposals to conduct a minimum of 375 checks per month. In fiscal year 1999, FDA has committed to conducting a minimum of 500,000 unannounced compliance checks of retail establishments that sell tobacco. The goal of the program, when full implementation occurs, will be to check every facility at least once each year and to conduct follow up investigations on those found to violate the rule.

Question. Please provide a summary, by state, of each contract, including the total cost of the contract, its terms and length, etc.

Answer. All the contracts provide for the states to perform the same functions. We are happy to provide a detailed summary of each contract for the record. In addition to those contracts awarded for fiscal year 1998, we are nearing final contract award with five other states.

[The information follows:]

FISCAL YEAR 1997 TOBACCO COMPLIANCE CONTRACTS

State	Contract award date	Number of compliance checks	Total cost	Start date	End date
Florida	06/11/97	2,664	$194,589	06/20/97	05/20/98
Washington	06/24/97	2,640	167,517	07/01/97	03/01/98
Illinois	07/21/97	2,400	230,250	08/01/97	03/31/98
Texas	07/29/97	2,640	201,475	08/01/97	03/31/98
California	08/12/97	2,160	277,889	09/01/97	04/30/98
Massachusetts	08/13/97	2,640	124,662	09/15/97	05/14/98
Arkansas	09/25/97	2,400	204,364	09/30/97	05/31/98
Minnesota	09/15/97	1,600	171,522	09/15/97	05/14/98
Pennsylvania	09/24/97	2,640	177,959	09/30/97	05/31/98
Colorado	09/22/97	2,352	111,138	09/30/97	05/31/98
Total	.....	24,136	1,861,365	.....	.....

FISCAL YEAR 1998 TOBACCO COMPLIANCE CONTRACTS

State	Contract award date	Number of compliance checks	Total cost	Start date	End date
Washington	03/06/98	4,500	$283,978	03/09/98	03/01/99
Illinois	03/25/98	9,000	608,151	04/01/98	09/30/99
Texas	03/24/98	4,400	277,814	04/01/98	03/31/99
North Carolina	02/18/98	9,000	603,674	02/23/98	08/22/99
Nevada	03/06/98	3,300	234,182	07/01/98	06/30/99
Florida	02/04/98	n/a	72,000	05/21/98	08/20/98
Total	.....	30,200	2,079,799	.....	.....

Question. Please explain the differences between state contracts, if any, and the reasons for those differences.

Answer. The main differences between FDA's contracts with the states are the cost and proposed number of checks. There could be several reasons for these and other differences. For example, some states may choose to subcontract with county and local government to conduct the unannounced investigations. The size of each state varies, therefore travel costs and the number of investigators may differ. Some states may have more experience conducting tobacco compliance checks. Other reasons may include the variance in the number of retailers in each state, and the difference in the lengths of the contracts.

Question. As I understand it, all the states had laws prohibiting the sale of tobacco products to minors at the time FDA issued its final regulation. To the extent that states were already implementing enforcement and compliance activities with respect to those laws, do the contracts include maintenance of effort requirements?

Answer. FDA's enforcement activities are not intended to supplant state enforcement, but to supplement them. Efforts are made during negotiations to ensure that state enforcement continues and that federal funds be expended only on federal enforcement.

Question. First-time funding of $24 million is requested for fiscal year 1999 for FDA tobacco production regulation. Please explain in detail how this funding will be used and why it is required for fiscal year 1999?

Answer. The product regulation activities anticipated for fiscal year 1999 are all essential functions under the Food Drug and Cosmetics Act and provide the industry with a framework in which to properly conduct business.

The activities planned for fiscal year 1999 in this area include the review of applications for new tobacco products that may claim to be less hazardous than those currently on the market; the assessment of these products to determine what effects they may have on the health of current users; whether the products will create more demand by young people to initiate their use and whether the products will keep those who might otherwise have quit using tobacco products from doing so. Other activities may include initiation of classification of the product pursuant to Section 513 of the Act, establishment of quality system requirements, and review and analysis of the ingredients and constituents of tobacco products.

PROPOSED USER FEES

Question. Please provide the Committee with a copy of the Administration's legislative proposal to authorize the new user fees proposed in the President's fiscal year 1999 budget.

Answer. I will provide for the record a copy of the March 31, 1998, letter from Secretary Donna Shalala to Albert Gore, Jr., President of the Senate, transmitting the Administration's draft bill, the "Food and Drug Administration User Fee Act of 1998." The same letter was sent to Newt Gingrich, Speaker of the House of Representatives.

[The information follows:]

LETTER FROM DONNA E. SHALALA

THE SECRETARY OF HEALTH AND HUMAN SERVICES,
Washington, DC, March 13, 1998.

Hon. ALBERT GORE, JR.,
President of the Senate,
Washington, DC.

DEAR MR. PRESIDENT: Enclosed for the consideration of the Congress is the Administration's draft bill, the "Food and Drug Administration User Fee Act of 1998".

The bill provides authority for the assessment of user fees for regulatory activities of the Food and Drug Administration (FDA), achieving savings indicated in the Presidents Budget for fiscal year 1999.

FDA has had great success in employing user fees to finance important Agency activities, such as the review of new human drug applications and the inspection of mammography facilities. The Prescription Drug User Fee Act program, in particular, has been a model for reinventing government and has benefited both consumers and industry.

Industry derives a direct commercial benefit from consumers' confidence in FDA's review process and product surveillance, which provides a substantial guarantee of safety. Given the benefits to the industry, and given that workloads are growing far faster than government resources, FDA believes it is reasonable to share some of the cost with the industry. In order to finance specific discretionary activities in an era of fixed, disciplined resource allocation under the balanced budget agreement, the FDA is proposing user fees to help support the whole range of its activities.

Fees would be assessed for applications for marketing approval for food additives, generic human drugs, animal drugs, and medical devices, and for licensing of establishments manufacturing medicated animal feed. Fees would also be assessed for import inspections of, and issuance of export certificates for, human and animal drugs, medical devices, and foods. Finally, fees would be assessed for monitoring and inspections of establishments involved in interstate commerce in FDA-related products, including foods, human and animal drugs, devices, and cosmetics.

Fees charged under authorities added by this bill would not duplicate fees under the Prescription Drug User Fee authority; they could be waived in exceptional circumstances in the public interest. Fees could be set at up to the full amount required to recover all associated FDA costs. Fee revenues could be used only for the regulatory activity for which collected, and would remain available without fiscal year limitation (but subject to appropriation).

We recommend that the Congress give the draft bill its prompt and favorable consideration and look forward to working with Congress to secure enactment of this important proposal.

The Office of Management and Budget has advised that there is no objection to the transmittal of this draft legislation to the Congress, and that its enactment would be in accord with the program of the President.

Sincerely,

DONNA E. SHALALA.

Enclosure.

A BILL

To provide for user fees for approval, importation, and postmarket surveillance of products regulated under the Federal Food, Drug, and Cosmetic Act.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; REFERENCES IN ACT.

(a) SHORT TITLE.—This Act may be cited as the "Food and Drug Administration User Fee Act of 1998".

(b) REFERENCES IN ACT.—Except as otherwise specified, references in this Act to "the Act" are to the Federal Food, Drug, and Cosmetic Act, and amendments made by this Act to a section or other provision of law are amendments to such section or other provision of that Act.

SEC. 2. CONTENTS.

This Act contains the following provisions:

SEC. 1. Short title; references in Act.
SEC. 2. Contents.

PART A—USER FEES

SEC. 11. Fees related to food additive petitions.
SEC. 12. Fees related to generic drugs.
SEC. 13. Fees related to animal drugs.
SEC. 14. Fees related to medical devices.
SEC. 15. Fees related to import inspections and export certificates.
SEC. 16. Fees related to entities under FDA's oversight.

PART B—GENERAL PROVISIONS

SEC. 21. General provisions related to user fees.
SEC. 22. Agency plan and annual reporting requirements.

PART A—USER FEES

SEC. 11. FEES RELATED TO FOOD ADDITIVE PETITIONS.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with:

(1) petitions for food additives submitted pursuant to section 409(b) of the Act;

(2) notifications to the Secretary for food contact substances submitted pursuant to section 409(h) of the Act;

(3) petitions for color additives submitted pursuant to section 721 of the Act;

(4) petitions, submitted pursuant to sections 201(s) and 701(a) of the Act and regulations thereunder, for affirmation that a substance that becomes, or may

reasonably be expected to become, a component of food is generally recognized as safe; and

(5) notifications to the Secretary, submitted pursuant to sections 201(s) and 701(a) of the Act and regulations thereunder asserting that a substance that becomes, or may reasonably be expected to become, a component of food is generally recognized as safe.

The fees shall be payable at the time the petition or notification is submitted to the Secretary.

(b) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set for each fiscal year at amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $10,335,000 for each of fiscal years 1999 through 2003, and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

SEC. 12. FEES RELATED TO GENERIC DRUGS.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with applications for approval for new drugs submitted pursuant to section 505(j) of the Act. The fees shall be payable at the time the application for approval is submitted to the Secretary.

(b) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set for each fiscal year at amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $12,377,000 for each of fiscal years 1999 through 2003, and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

SEC. 13. FEES RELATED TO ANIMAL DRUGS.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with:

(1) applications, including supplements, for new animal drugs submitted pursuant to section 512(b)(1) of the Act, including application and other submissions for import tolerances, as described in section 512(a)(6) of the Act;

(2) abbreviated applications, including supplements, for new animal drugs submitted pursuant to section 512(b)(2) of the Act; and

(3) applications for licenses to manufacture animal feeds bearing or containing new animal drugs, submitted pursuant to section 512(m) of the Act.

The fees shall be payable at the time the application for approval is submitted to the Secretary.

(b) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set for each fiscal year at amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $10,100,000 for each of fiscal years 1999 through 2003, and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

SEC. 14. FEES RELATED TO MEDICAL DEVICES.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with applications for—

(1) premarket approval of devices (including proposed product development protocols) submitted under section 515 of the Act,

(2) supplements to approved premarket approval applications for which clinical data are required,

(3) supplements to approved premarket approval applications for which clinical data are not required, and

(4) device premarket notification submissions under section 510(k) of the Act.

The fees shall be payable at the time the application is submitted to the Secretary.

(b) FEE AMOUNTS.—The fees required under subsection (a) shall be as follows:

(1) $175,000 for applications described in subsection (a)(1);

(2) $100,000 for supplements described in subsection (a)(2);

(3) $6,000 for supplements described in subsection (a)(3);

(4) $4,500 for submissions described in subsection (a)(4).

(c) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set each fiscal year in accordance with section 21 to amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $25,000,000 for each of fiscal years 1999 through 2003,

and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

SEC. 15. FEES RELATED TO IMPORT INSPECTIONS AND EXPORT CERTIFICATES.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with the review of imported human and animal drugs, medical devices, and food subject to regulation under the Act (including activities relating to admission or detention of, refusal of entry to, and the issuance of export certificates for such items). The fees shall be payable at the time of each import entry or request for export certificates for shipment of the item.

(b) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set for each fiscal year at amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $12,000,000 for each of fiscal years 1999 through 2003, and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

(c) COLLECTIONS.—The fees authorized by this section shall be collected on behalf of the Secretary by the United States Customs Service.

SEC. 16. FEES RELATED TO ENTITIES UNDER FDA'S OVERSIGHT.

(a) TYPES OF FEES.—Beginning in fiscal year 1999, the Secretary shall establish, in accordance with section 21, fees to cover activities of the Food and Drug Administration in connection with regulatory activities with respect to regulated products approved for marketing. The Secretary shall assess fees for monitoring establishments that are subject to regulation (including inspections conducted pursuant to section 704 of the Act, and other regulatory activities), as follows:

(1) FOOD ESTABLISHMENTS.—An establishment subject to inspection under section 704 of the Act because it manufactures, processes, packs, or holds food for (or after) shipment in interstate commerce, is subject to assessment of annual fees under this section. The Secretary may impose an annual registration requirement on such an establishment to facilitate assessment and collection of the fees.

(2) DRUG AND DEVICE ESTABLISHMENTS.—An establishment subject to the annual registration requirement under section 510 of the Act (with respect to products other than those for which such an establishment is subject to section 736 of the Act) is subject to assessment of annual fees under this section at the time of registration.

(3) COSMETICS ESTABLISHMENTS.—An establishment subject to inspection under section 704 of the Act because it manufactures, processes, packs, or holds cosmetics for (or after) shipment in interstate commerce is subject to assessment of annual fees under this section. The Secretary may impose an annual registration requirement on such an establishment to facilitate assessment and collection of the fees.

This section does not affect any other statutory or regulator' requirements imposed on these entities.

(b) FEE AMOUNTS AND AVAILABILITY.—Subject to section 21(a)(1)(A), fees for the activities specified in subsection (a) shall be set for each fiscal year at amounts that the Secretary reasonably estimates to be sufficient to generate revenues totaling $57,905,000 for each of fiscal years 1999 through 2003, and shall remain available until expended, to the extent provided in appropriations acts, for the costs of carrying out such activities.

PART B—GENERAL PROVISIONS

SEC. 21. GENERAL PROVISIONS RELATED TO USER FEES.

(a) ASSESSMENT OF FEES.—

(1) FEE AMOUNTS.—

(A) COLLECTIONS SUBJECT TO APPROPRIATIONS.—The fees authorized by this Act shall be collected in each fiscal year as provided in appropriation acts for such fiscal year.

(B) RELATION TO COSTS.—Fees assessed and collected under part A shall not exceed amounts which the Secretary estimates to be sufficient to cover costs of the Food and Drug Administration associated with the activities for which the fees are collected (including costs of assessments and collection of the fees).

(C) VARIATION FACTORS.—The amount of fees established may vary to reflect the cost of those activities with respect to different entities or groups of entities, including the type and size of entity, volume of business, and other factors the Secretary may find appropriate.

(2) FEE DETERMINATION AND PUBLICATION.—The Secretary shall annually establish fee amounts under part A, and shall publish schedules of such fees in the Federal Register as an interim final rule. The establishment and publication of such fees shall be solely in the discretion of the Secretary and shall not be subject to the requirements of sections 553 and 801 of title 5 of the United States Code and shall not be reviewable.

(3) REDUCTION OR WAIVER OF FEES.—The Secretary may provide for reduction or waiver of the fees under part A in exceptional circumstances in the public interest.

(b) CREDITING AND AVAILABILITY OF FEES.—

(1) IN GENERAL.—Fees collected pursuant to part A shall be credited to a special fund in the Treasury for user fees collected by the Food and Drug Administration. The fees shall be available in the amounts specified in appropriations acts, for salaries and expenses necessary to carry out the responsibilities of the Food and Drug Administration in connection with the activities for which such fees were collected, including the conduct of scientific research; development of methods of analysis; purchase of chemicals, fixtures, furniture, and scientific equipment and apparatus; development and acquisition of information technology and information management systems; acquisition, maintenance, and repair of real property; and expenses of advisory committees.

(2) FEES AVAILABLE ONLY FOR THE CATEGORY OF ACTIVITY FOR WHICH ASSESSED.—Fees collected for each category of activities specified in part A shall be separately accounted for, and shall be used only to finance the costs related to carrying out responsibilities in connection with the same category of activities for which the fees were collected.

(c) COLLECTION OF UNPAID FEES.—If the Secretary does not receive payment of a fee assessed under subsection (a) within 30 days after it is due, that fee shall be treated as a claim of the United States Government subject to the provisions of subchapter II of chapter 37 of title 31 of the United States Code.

SEC. 22. AGENCY PLAN AND ANNUAL REPORTING REQUIREMENTS.

The Agency plan for the Food and Drug Administration required under section 903(f) of the Act shall include objectives with respect to the assessment, collection, and use of the fees authorized under part A, and the annual report required by section 903(g) of the Act shall describe the performance of the Secretary with respect to such objectives.

Question. The budget justification indicates that the FDA intends to work with the Congress, industry, and other affected parties to achieve the goal of collecting the total $280 million in existing and new user fees assumed in the budget in fiscal year 1999. Has FDA discussed the new user fees it proposes with the House and Senate authorizing Committees of jurisdiction, and with affected industries and other parties? Would you please summarize the status or outcome of those discussions.

Answer. FDA, in concert with HHS and OMB, prepared user fee legislation for the new fees proposed in the fiscal year 1999 President's Budget, which was submitted to the President of the Senate and Speaker of the House on March 13, 1998. To date, there have been no hearings with the authorizing committees or with affected industries on this specific proposal. We do look forward to working with Congress to authorize the fees. In order for FDA to maintain its current level of consumers' health protection, it is important that the full program level in the President's budget be appropriated.

Question. The fiscal year 1999 budget uses the collections from unauthorized user fees to pay for FDA's regulation of foods, drugs, biologics, animal drugs, and medical devices. If the proposed user fees are not authorized, what impact would the lack of these resources have on FDA's ability to carry out its responsibilities in each of these areas?

Answer. The Administration is proposing new user fees of $127.7 million which would support 1,183 staff years. If the proposed user fees are not authorized and the base resources replaced by these user fees are not restored, the cuts will be felt across every program area of FDA. The review times and backlogs of all FDA-regulated products would increase substantially. FDA's ability to meet its statutory deadlines and fulfill its mission of protecting and promoting the health of the American public would be seriously undermined.

Question. What is meant by "postmarket surveillance" as part of the user fee proposal?

Answer. Postmarket surveillance activities include not only traditional domestic postmarketing activities, but also emerging strategies, which include partnering with state, local, professional and industry groups, and individuals to enhance the quality and safety of products. By increasing information sharing and technical assistance, establishments can operate with stronger quality assurance systems. As a result, the Agency anticipates that less formal regulatory intervention may be required. User fees would be collected for traditional domestic postmarketing activities such as inspections, investigations, sample analyses, regulatory analytical methods development, field exams, and recall effectiveness checks.

Question. How many additives will fall under mandatory "postmarket surveillance"?

Answer. Food additive and color additive petitions are considered as part of the Agency's premarket activities, and as such, none would fall under mandatory postmarket surveillance.

Question. What mechanisms are proposed to ensure that user fees for food additives will not be used for increased inspections?

Answer. In the draft bill the "Food and Drug Administration User Fee Act of 1998" submitted to Congress by the Secretary on March 13, the Department explicitly proposes that fees collected for each category of activity be separately accounted for and be used only to fund the costs related to carrying out responsibilities in connection with that category of activities. Thus, fees related to food additive petitions could not be used to fund activities, including inspections, other than those specified in the bill.

Question. What reductions would you propose in FDA's fiscal year 1999 budget request if the $128 million in collections from proposed new user fees are not available and the appropriations request is approved?

Answer. If the $128 million in collections from proposed new user fees are not available and the base level of appropriations is not restored by this amount, the magnitude of the reduction would have a very serious impact on our activities. It is difficult to say what the specific reductions would be in each program area; however, I am certain that there would be adverse consequences on all of our activities, and our ability to act in a timely and complete manner would be seriously compromised.

RENTAL PAYMENTS

Question. For fiscal year 1999, FDA is requesting $88.3 million for rental payments to the General Services Administration, an increase of $42 million from the fiscal year 1998 level. The budget justification indicates that since 1995, there has been a widening gap between payments paid and owed by the FDA for leased space and services provided by GSA. This Committee has been appropriating the full amount requested in the President's budget for FDA rental payments to the GSA. Why hasn't the President's budget in past years reflected the full amount FDA owed to the GSA?

Answer. Competition for increases in scarce Federal funding dollars has provided higher priority to public health program improvements. Again in fiscal year 1998, the President's budget request is for an amount less than the actual GSA rent bill. If FDA's rent payments to GSA had not been limited as they have been in recent years, FDA would have had to divert further critical program resources to pay the rental charges.

Question. I understand Dr. Friedman, that you were notified by GSA last year of the arrearage in FDA's rent payments to the General Services Administration for space and services received and the need to remedy this situation. GSA indicated that it would not be able to expand space and services to the FDA as it has been doing over the past couple of years without proper reimbursement. Does the fiscal year 1999 request reflect the full rent due to GSA for all FDA occupied and planned space provided by the GSA?

Answer. Yes, based on the information FDA has currently available and that of GSA, FDA believes the fiscal year 1999 Congressional Justification reflects the full rent due to GSA for all of FDA's occupied and planned space.

Question. What will be the consequences of not appropriating the full amount requested in the budget for fiscal year 1999 for rent payments FDA owes to the GSA?

Answer. If FDA's rent payments to GSA are not fully appropriated or if rent payments to GSA are not limited as they have been recent years, FDA will have to divert further critical program resources to pay the rental charges therefore reducing resources currently applied to important public health initiatives.

Question. Of the $88.3 million requested for fiscal year 1999 to fully finance FDA rental payments due to the GSA, the budget requests that $5.428 million be financed from Prescription Drug User Fee Act (PDUFA) collections. PDUFA user fee collections have not been drawn on in the past to defray FDA leased space in support of the user fee portion of the process for the review of human drug applications. Does the FDA reform bill enacted into law at the end of last year authorize the use of PDUFA collections for this purpose?

Answer. The original legislation, the Prescription Drug User Fee Act of 1992, defined expenses associated with the process for the review of human drug applications to include leasing, maintenance, renovation, and repair of facilities. This section was left intact under the provisions of the FDA reform bill enacted into law at the end of last year. The FDA Modernization Act however, authorizes the transfer of fees from an account without fiscal year limitation to the appropriation account for salaries and expenses with such fiscal year limitation. The Agency has also received clarification recently from FDA attorneys that rent costs could be included in the costs financed from PDUFA collections. FDA has requested specific changes in the fiscal year 1999 appropriation language to allow the transfer of up to $5,428,000 from fees to the Rental Payments to GSA appropriation.

Question. Please provide the provision of law which specifically authorizes the use of PDUFA collections for rental of space payments to the GSA. Please include the legal citation.

Answer. Section 735 (7)(C) of the Prescription Drug User Fee Act of 1992, Public Law 102–571 defines expenses associated with the process for the review of human drug applications to include leasing, maintenance, renovation, and repair of facilities, (See 21 USC 379g (7)(C)). The Food and Drug Administration Modernization Act of 1997, Public Law 105–115 amended Section 736 (g) of the FD&C Act to authorize the transfer of fees to an annual appropriation account. (See 21 USC 379h (g)(1)). Additional appropriations language would be necessary to transfer sums in excess of the 5 percent cap that appears on such transfers for rental payments in the fiscal year 1998 appropriation.

Question. Please tell us how the $5.428 million was calculated as the estimated amount of the payment for space representing the user fee portion of the process for the review of human drug applications. Please indicate how many square feet of GSA-provided space, out of the total occupied by FDA, is devoted to the human drug applications' review process, and how many occupiable square feet the user fee portion of this space represents.

Answer. The calculation of $5.428 million is based on identifying the percentage of fiscal year 1998 process FTE's times the FTE's applicable to fees (41 percent).

In fiscal year 1998 an estimated 454,000 square fee of GSA space was identified for the process and of this approximately 188,000 square feet or 41 percent of the process space was estimated to be applicable to the fee. The estimated GSA rent cost that could be chargeable to fees in fiscal year 1998 was estimated to be $5.220 million.

The 1999 budget request of $5.428 million for GSA rent chargeable to fees only includes an additional $208,000 above our fiscal year 1998 estimate. The increase is to cover the costs due to anticipated inflation for our existing GSA space.

Question. How many total occupiable square feet of GSA-provided space does FDA's fiscal year 1999 request for rental payments to the GSA cover? Please provide a breakdown of this total by the following categories: (1) the amount of occupiable square feet of currently occupied, GSA-provided space; (2) the total occupiable square feet of space being undertaken by GSA on FDA's behalf; and (3) the amount of occupiable square feet of GSA-provided space projected for occupancy during fiscal year 1999.

Answer. By the end of fiscal year 1998 FDA will occupy 4.05 million occupiable square feet of space that is provided by GSA. This will reflect an increase of approximately 51,000 occupiable square feet that will have occurred during the course of 1998. The additional 51,000 occupiable square feet resulted from the occupancy of 318,761 occupiable square feet and the vacating of 268,129 occupiable square feet. GSA is undertaking these additions and the vacating of space for FDA at a number of sites. In fiscal year 1999 FDA is expecting to vacate a total of 15,000 occupiable square feet which would reduce the total FDA occupancy to 4.03 million occupiable square feet of space provided by GSA.

Question. Are the FDA estimates provided in response to the above question the same as the GSA estimates? If not, please give GSA estimates and explain the differences between the FDA and GSA estimates.

Answer. GSA has estimated that by the end of fiscal year 1998 FDA will occupy 3.98 million occupiable square feet of space that is provided to FDA by GSA. The difference between GSA's estimate and FDA's estimate is approximately 70,000 oc-

cupiable square feet. This difference can be attributed to minor discrepancies between GSA's records and FDA's. When evaluated these individual discrepancies typically affect less than 5,000 square feet of space each, but when aggregated accumulate to 70,000 occupiable square feet. This, however, represents less than two percent of FDA's total inventory of space which is dispersed in over 225 buildings. FDA is working to reconcile its records with GSA's.

This reflects an increase of approximately 53,000 occupiable square feet that will occur over the course of 1997 and 1998. There is a 2,000 occupiable square foot variation in the amount of space projected by GSA when compared to FDA's projection. This is primarily due to the fact that GSA's estimates date back to 1997 and include actions that may have already been reflected in FDA's 1998 projection.

In fiscal year 1999 GSA is expecting FDA to occupy a total of 100,000 occupiable square feet of space which would increase the GSA estimated FDA occupancy to 4.08 million occupiable square feet of space provided by GSA. GSA's estimate includes 50,000 occupiable square feet of unspecified growth in FDA's inventory and 50,000 occupiable square feet attributable to occupancy of space at the White Oak site in Maryland. At this time there is no funding available to construct space at White Oak Maryland. Therefore, FDA has not included this space in its projected 1999 occupancy. If the GSA projection is reduced by 50,000 which was assigned to the White Oak site, FDA's and GSA's projected occupancy for 1999 are identical at 4.03 million occupiable square feet.

Question. How much is included in the fiscal year 1999 request for rental payments to the GSA for operating costs associated with GSA-provided space or for the refurbishment of space? Please indicate what increases are projected for these costs for fiscal year 1999. Do the FDA estimates differ with GSA's. If yes, please explain the differences in detail.

Answer. Of the $88.294 million for GSA rent in fiscal year 1999, $4.9 million is expected to be for FDA's building delegation operations. This is $0.1 million more than the estimated fiscal year 1998 amount. FDA estimates its operating cost to be $13.4 million, a total of $8.5 million greater that the amount proposed to be provided by GSA. The funds provided to FDA, by GSA, are a building delegation allowance for buildings that are primarily occupied for special use laboratories. However, the funds are provided at a standard level based on office operations, not the higher costs associated with the operation of a special use laboratory.

Laboratory space is delegated to FDA because it requires an increased level of operational expertise that GSA is not accustomed to providing. While GSA charges almost 77 percent more for the occupancy of laboratories than for offices they only provide an operating allowance that is adequate for office space. Office space operating costs are based on a general rule of 10 hours of operation for 5 days a week. This results in substantially less operating time than laboratories which must operate on a 24-hour basis 7 days a week due to the scientific activities that must occur within controlled environments.

Question. In addition to GSA-provided space and services, the FDA is funding additional housing costs through its salaries and expenses account. For fiscal year 1998, $25.855 million is being allocated for these costs. For fiscal year 1999, $27.505 million is requested, an increase of $1.650 million. Please provide specific explanation of the expenses funded through the "rent and related activities" category of the salaries and expenses account.

Answer. We are happy to provide the Committee with information on our Rent and Rent Related Activities.

[The information follows:]

FOOD AND DRUG ADMINISTRATION—RENT AND RENT RELATED ACTIVITIES

	Fiscal year—		Increase/ decrease
	1998 current estimate	1999 request	
Other rent and rent related activities	$25,855,000	$27,505,000	+$1,650,000

Other Rent and Rent Related Activities:

EXPLANATION OF EXPENSES

FDA incurs rent and rent-related costs for facilities within the Salaries and Expenses (S&E) appropriation that are not part of the Rental Payments to GSA, which is a separate appropriation. These costs are identified in three accounts: Commercial

Rent & Related Services, GSA Rent-Related Services and GSA Building Delegation Services. Below is a description of each of the accounts within Other Rent and Rent-related Activities:

The Commercial Rent and Related Services account consists of recurring activities that FDA pays directly to non-Federal sources under the delegation of direct lease and service authority. (Note: This also includes recurring services for FDA-owned facilities.) Services include rental of space, and all recurring services for building operation; i.e., utilities; and services such as janitorial, guard, grounds maintenance; and operation and maintenance of heating, ventilation, and air-conditioning (HVAC) systems.

The GSA Rent-Related Services account includes recurring reimbursable services provided by GSA that are over and above the normal eight hours that GSA covers in its rent charges. Services included are security systems, guard services, and HVAC beyond the standard level funded by GSA.

The GSA Building Delegation account provides recurring services and one-time repairs to operate and maintain buildings delegated to FDA by GSA for management of day-to-day operations above GSA's standard level. Services include utilities and all recurring services for building operation, such as janitorial, guard, grounds maintenance, and operation and maintenance of HVAC systems.

INCREASES

Other rent and rent related costs—+$1.65 million

For fiscal year 1999, FDA is requesting an increase of $1.65 million for rent related costs. The fiscal year 1998 to fiscal year 1999 increase represents a full year of rent and utilities for new space at the Christopher Columbus Center in Baltimore, MD. as well as other increased costs for full year utilities and service contracts including operation and maintenance, janitorial, guards service, and grounds maintenance of FDA facilities.

Question. Please provide a detailed listing of the specific expenses included in the $27.505 million requested for rent and related activities for fiscal year 1999, by account (i.e., commercial rent and related services, GSA rent-related services, and GSA building delegation services), as compared to fiscal year 1998.

Answer. We are happy to provide the Committee with the information detailing the specific expenses included in the $27.505 million for the rent and related activities for fiscal year 1999 compared to fiscal year 1998.

[The information follows:]

RENT AND RELATED SERVICES FISCAL YEARS 1998 and 1999 PLANS

[In thousands of dollars]

Account/type of service	Estimates	
	Fiscal year 1998	Fiscal year 1999
COMMERCIAL R&R		
Commercial rent:		
Chicago (IITRI)	556	.....
Dallas (Bryan Street)	300	325
Los Angeles (Pico Blvd.)	930	950
Lenex, KS (OCI)	126	140
San Diego (OCI)	217	225
Jersey City NJ (OCI)	350	370
Calverton MD (OCI)	165	180
Bethesda (NLRC)	2,245	2,327
Rockville (Wilkins Ave.)	416	([1])
Baltimore (Columbus Center)	.....	420
Subtotal, Commercial Rent	5,305	4,937
Subtotal, related services for above buildings [2]	1,188	1,933
FDA-owned facilities: [2]		
MOD I	3,950	4,500

RENT AND RELATED SERVICES FISCAL YEARS 1998 and 1999 PLANS—Continued

[In thousands of dollars]

Account/type of service	Estimates	
	Fiscal year 1998	Fiscal year 1999
Beltsville Research Facility	65	70
San Juan	425	600
WEAC	25	30
Subtotal, FDA-owned facilities	4,465	5,200
Total, Commercial R&R	10,958	12,070
GSA RENT-RELATED [3]		
Headquarters	5,424	5,586
Field	2,521	2,597
Total, GSA rent-related	7,945	8,183
GSA BUILDING DELEGATION [4]		
Atlanta (Annexes I and II)	[5] 510	[6] 562
FB–8	3,880	4,051
12709 Twinbrook	60	63
12720 Twinbrook	85	90
12721 Twinbrook	82	86
1901 Chapman	35	([7])
MOD II	2,300	2,400
Total, GSA building delegation	6,952	7,252
Total, FDA rent and related services	25,855	27,505

[1] Space vacated during fiscal year 1997; fiscal year 1998 costs are thru the decommissioning period.
[2] Utilities and service contracts (i.e., O&M, grounds, guards, janitorial services).
[3] Overtime, utilities, guard and cleaning services not covered in GSA lease.
[4] Utilities and service contracts (i.e., O&M, grounds, guards, and janitorial services above GSA-funded standard level).
[5] Includes FDA funds for Atlanta Annex II for above-standard level for three-fourths of fiscal year.
[6] Includes FDA funds for Atlanta Annex II for above-standard level for full fiscal year.
[7] Space will be vacated in fiscal year 1998.

FISCAL YEAR 1998 OPERATING PLAN REDUCTIONS

Question. For fiscal year 1998, FDA is reducing funding for "low priority" foods program work, including activities related to cosmetic products, applied research on the full range of potentially hazardous substances which may be found in foods, and compliance monitoring of domestic food processors and imported food products. In addition, FDA will not be able to devote additional staff to work on food and color additive petitions. What impact will the reduction in resources devoted to the chemical safety of foods have on food safety?

Answer. As stated in FDA's fiscal year 1998 Operating Plan submitted to Congress, the Agency is reducing funding for lower priority work. Within the Foods Program, the Chemical Safety of Foods area absorbed part of the Agency's reduction in base resources. The following three projects under Chemical Safety of Foods received those resource reductions: (1) Chemotherapeutic Agents in Domestic and Import Aquaculture Products; (2) Domestic and Import Pesticide Programs; and (3) Food and Color Additive Petition Reviews.

Chemotherapeutic Agents in Domestic and Import Aquaculture Products is a program aimed at detecting unapproved drug compounds in aquaculture or farm-raised fish. In 1994, FDA detected several samples with banned drugs but fortunately has failed to detect the drugs within the past three years. While FDA's Center for Veterinary Medicine will continue its research on new detection methods, for the Foods Program, this activity will be reevaluated in fiscal year 1999 to determine any nega-

tive impacts from the resource reduction. As for the Domestic and Import Pesticide Program, FDA projects a 12 percent decrease in the number of pesticide samples as a result of reduced resources. For Food and Color Additive Petition Reviews, the reassignment of additional staff to work on food and color additive petition review has contributed significantly to gains made in fiscal years 1996 and 1997 to reduce the inventory of pending petitions. While the inability to continue to devote additional staff to this effort will make it harder to maintain this level of progress and it may take longer than originally planned to entirely eliminate petition backlogs, we have instituted procedures to increase efficiency and are still making gains. We have attempted to make these reductions in such a way as to minimize the impact on food safety.

Question. What will the reduction of additional staffing devoted to work on food and color additive petitions have on the progress FDA has made in reducing the backlog of work in this area? What impact will this have on the time for reviews?

Answer. The reassignment of additional staff to work on food and color additive petition review contributed significantly to the gains made in fiscal years 1996 and 1997 in reducing the inventory of pending petitions. For example, at the end of fiscal year 1997, the inventory stood at 214 versus 242 at the end of fiscal year 1996 and 295 at mid-fiscal year 1995). While the inability to continue to devote additional staff to this effort will make it harder to maintain this progress and it may take longer than originally planned to entirely eliminate petition backlogs, we have instituted procedures to increase efficiency and are still making gains. For example, in fiscal year 1999, FDA intends to meet its goal of reviewing 30 percent of its food additive petitions within one year.

Question. Slower device review times below the fiscal year 1997 baselines was one of the impacts cited by FDA to result from the reductions made in its operating plan. What are the fiscal year 1997 baseline levels, and what reductions do you anticipate will result in fiscal year 1998?

Answer. The improvements and changes resulting from the implementation of the FDA Modernization Act and ongoing reengineering efforts have significantly improved FDA's level of productivity in the device review area in fiscal year 1997. During fiscal year 1998, FDA's Device program is facing the challenge of implementing the requirements of the FDA Modernization Act with reduced program resources. We hope to maintain our productivity at the fiscal year 1997 level but we realize that some decline in performance may occur during this transition period. Our strategy is to concentrate resources on higher risk, higher impact products or work areas where they are likely to have the greatest effect on the public health. I will be happy to provide for the record the fiscal year 1997 baseline levels for 510(k) applications, PMA applications, and PMA supplements. The baseline levels for PMA's and PMA supplements are estimates since insufficient time has elapsed to calculate actual measurements.

[The information follows:]

Fiscal year 1997 baseline estimates for PMA's and PMA supplements: Complete 50 percent of PMA first actions within 180 days; and complete 78 percent of PMA supplement first actions within 180 days.

Fiscal year 1997 baseline for 510(k) applications: Complete 98 percent of 510(k) first action within 90 days; and complete 64 percent of 510(k) final action within 90 days.

BUILDINGS AND FACILITIES

Question. FDA recently reprogrammed $10.4 million of its buildings and facilities funding from lower priority projects to complete construction of Phase II of the Arkansas Regional Laboratory. The fiscal year 1999 request does not include funds for Phase III of the project. When will this funding be required and what is the projected requirement for Phase III of the project?

Answer. $13.35 million would be needed in fiscal year 1999 to construct Phase III and complete the Arkansas Regional Laboratory. Due to competing issues with a higher priority to the FDA mission, within both the Salaries and Expenses and the Buildings and Facilities Appropriations, the request was not included in the President's Budget. The $13.35 million is the firm figure based on the exercise of a fixed price contract option to include Phase III in the current ARL construction contract to the current construction contractor by December 31, 1998. If this unfunded option is not exercised in fiscal year 1999, Phase III may have to be repriced which may affect the cost and may affect the schedule. It will likely escalate the price due to the contractor having to re-mobilize the appropriate crafts, or a new contractor having to mobilize altogether. If this unfunded option is exercised in fiscal year 1999, there may be the opportunity to realize some savings. In addition, Phase III could

be completed on the original schedule of December 1999, which is the same time as Phase II.

Question. What requirements of FDA's field laboratory consolidation plan have been accomplished, and what future requirements remain? Please give project, cost and year scheduled.

Answer. I would be happy to provide that information for the record.

[The information follows:]

STATUS OF ORA FIELD LABORATORY CONSOLIDATION—MARCH 1998

Location/action type	Construction cost	Year completed	Year planned
Seattle, Expansion	N/A—GSA Lease	1996	
Buffalo, Lab closure	N/A	1996	
Chicago, Lab closure	N/A	1996	
Philadelphia, Expansion	N/A—GSA Owned	1997	
WEAC, Restructure	N/A	1997	
Cincinnati, Restructure	N/A	1997	
New Orleans, Lab closure	N/A	1998	
Atlanta, Expansion	N/A—GSA Lease	1998	
San Juan, Lab renovation	$1.6 M		1998
New York, New facility	N/A—GSA Lease		1999
Arkansas, New facility	$37.9 M [1]		1999
Los Angeles, New facility	$38.5 M		2000
Baltimore, Lab closure	N/A		1999
Detroit, Lab closure	N/A		2000
Dallas, Lab closure	N/A		2000
Minneapolis, Lab closure	N/A		2000
Denver, Lab closure	N/A		2010
Kansas City, Lab closure	N/A		2014
San Francisco, Lab closure	N/A		2014

Note.—Facilities provided by GSA are funded through Agency annual rent payments to GSA. The costs identified above only reflect construction expenses funded under the FDA Buildings and Facilities appropriation, and not related cost (i.e. employee and equipment transfers) which are funded via FDA's Salaries and Expenses appropriation.

[1] Phase III of the project is unfunded, estimated cost is $13.4 M.

THE FDA MODERNIZATION ACT OF 1997

Question. Are any additional resources included in the fiscal year 1999 budget request, aside from increased PDUFA collections, to fulfill requirements the FDA Modernization Act enacted into law at the end of last year?

Answer. No additional resources have been requested in the fiscal year 1999 budget request. Currently FDA is developing more than 40 regulations and guidance documents specified in the FDA Modernization Act within our current resources. After the issuance of these documents, additional resources to implement and fulfill requirements of the FDA Modernization Act will be addressed in future budget requests.

Question. Please list the activities, and resources, both in dollars and staff years, required by FDA to carry out its new responsibilities under the FDA Modernization Act of 1997. In addition, indicate the fiscal year the Committee can expect these additional resources to be requested.

Answer. The Agency is currently preparing over 40 regulations, federal register and guidance documents which are included in the FDA Modernization Act. This effort is being undertaken within current resources and is expected to cost more than $10 million. Several additional provisions of the FDA Modernization Act require FDA to submit reports to Congress which evaluate the costs of certain provisions. After completing the implementing regulations and federal register documents, FDA will prepare the reports and cost estimates as specified in the Act. We hope that the fiscal year 2000 budget will address any additional resources the Agency will need to undertake new responsibilities under the FDA Modernization Act.

Question. The Pre-Market Notification provisions of the FDA Modernization Act of 1997 will expedite introduction of advanced food packaging materials while assuring protection of public health. The Act conditions this new pre-market notification system on an appropriation of $1.5 million for the six months the system will oper-

ate in fiscal year 1999 and at least $3 million annually thereafter. Is the $1.5 million for this system to operate included in FDA's fiscal year 1999 request? If not, why?

Answer. No increase was included in the fiscal year 1999 request, as we were still reviewing the impact of this program. We are in the process of completing our report, as required by the FDA Modernization Act, which will provide our estimate as to the costs of this program.

Question. What is the fiscal year 1998 base level of resources in dollars and staff years in each of the Human Drugs and Biologics programs required to sustain the base level of resources required for FDA to utilize PDUFA fees? What are these levels for fiscal years 1999, 2000, and 2001?

Answer. The Agency devoted resources of $232,249,000 in fiscal year 1997 to the Process for the Review of Human Drug Applications, of which, $84,289,000 came from fees and $147,960,000 from appropriated dollars. The FDA Modernization Act mandates that the amount that came from appropriations in fiscal year 1997 be the base level that must come from FDA appropriations in each of the subsequent years. It does not specify how much must be spent in either the Human Drugs or Biologics programs.

The amount of base resources for the subsequent years are adjusted for inflation based on the lower of either the Consumer Price Index or the total of discretionary budget provided for programs in the domestic category. Therefore, the amounts for fiscal years' 1999, 2000, and 2001 cannot be projected at this time.

ANIMAL DRUG APPROVALS

Question. Dr. Friedman, you indicate the prepared statement you submitted to the Committee that the Center for Veterinary Medicine is "reengineering the drug approval process." Would you please explain how the process is being revised or changed.

Answer. FDA is in the process of implementing the Animal Drug Availability Act of 1996—ADAA—and policies that will enable faster approval of new animal drugs. The Center for Veterinary Medicine at FDA has been working closely with animal drug manufacturers, producers and veterinarians to design a new and more flexible animal drug approval process that reduces the time and cost necessary for meeting the requirements. Congress enacted the ADAA on October 9, 1996. The purpose of the ADAA is to facilitate the approval and marketing of new animal drugs and medicated feeds. In furtherance of this purpose, the ADAA redefined substantial evidence, i.e., the standard by which a new animal drug is determined to be effective. FDA was directed to, and has, proposed a further definition of substantial evidence (62 FR 59830). The proposed changes would give FDA greater flexibility to make case-specific determinations regarding the number and types of studies that will provide, in an efficient manner, substantial evidence that a new animal drug is effective. Additionally, in response to the President's reinventing government initiatives announced in the President's National Performance Review, "Reinventing the Regulation of Animal Drugs," May 1996, FDA announced its intent to implement policies that will enable the faster approval of new animal drugs. FDA has found that direct review of new animal drug submissions by reviewers with specialized technical expertise and phased review of technical sections of new animal drug applications enable faster approval of new animal drugs because technical sections are submitted and reviewed as they are completed rather then the sponsor waiting until all sections are completed and submitting them together. FDA has implemented policies to allow for the direct and phased review of applications and intends to modify the regulations governing investigational use new animal drugs and new animal drugs to describe direct and phased review. FDA also intends to issue a proposed regulation to describe how new animal drug applicants may request a presubmission conference to discuss investigational or new animal drug application requirements. While the ADAA added a statutory entitlement to a presubmission conference, FDA's Center for Veterinary Medicine had already been encouraging sponsors of NADA's to participate in conferences with FDA to discuss in detail what studies are necessary to demonstrate the safety and effectiveness of a new animal drug. In its experience with these informal conferences, FDA and industry found that, as a result of direct communication during the development and review of new animal drugs, industry conducted fewer unnecessary studies and there were fewer delays in the review process.

OFFICE OF GENERIC DRUGS

Question. In response to language included in the Statement of the Managers accompanying the Conference Report on H.R. 2160, the fiscal year 1998 Agriculture,

Rural Development, and Related Agencies Appropriations Act, the FDA operating plan includes an increase from the fiscal year 1998 level for the Office of Generic Drugs. Funding for the Office of Generic Drugs for fiscal year 1998 will be $9,693,000, as compared to the fiscal year 1997 level of $8,991,000, an increase of $702,0000. Is this correct?

Answer. Yes, the Office of Generic Drugs was given an increase of $702,000 for fiscal year 1998, over the fiscal year 1997 level, as reflected in FDA's fiscal year 1998 Operating Plan.

Question. How is FDA allocating the additional funds provided for the Office of Generic Drugs for fiscal year 1998?

Answer. The Office of Generic Drugs will spend most of the fiscal year 1998 funding increase on payroll expenses for additional review activities. The remaining funds will be expended on operating expenses. These expenses include spending for things such as laboratory and computer equipment, travel, training, and day-to-day operating costs.

Question. What was the staffing level (FTE's) for the Office of Generic Drugs for fiscal year 1997? What will the staffing (FTE) level for the Office be for fiscal year 1998? What is the fiscal year 1999 budget request level?

Answer. The ceiling for the Office of Generic Drugs was 127 FTE's in fiscal year 1997 and is at 132 FTE's for fiscal year 1998. No decision has been made to date on the staffing level for fiscal year 1999, but the current estimate for fiscal year 1999 is the same as fiscal year 1998.

Question. How many full-time equivalent (FTE) positions would have to be added to the Office of Generic Drugs fiscal year 1998 staffing level to enable the Office to meet FDA's statutory requirement to take final action on Abbreviated New Drug Applications (ANDA's) within six months?

Answer. The Office of Generic Drugs estimates that it would need approximately 75 additional FTE to review the majority of applications within 180 days. There will always be a few applications that cannot be reviewed within 180 days due to complicated scientific issues or other barriers outside the direct control of the Office of Generic Drugs. In addition, other parts of the Food and Drug Administration that support the generic drug review program will need additional FTE, such as the Office of Regulatory Affairs and Office of Compliance. Furthermore, the Office of Generic Drugs' and possibly other supporting FDA components' budgets would need to be proportionately increased to support the extra FTE, with increases to cover costs associated with support costs such as computers and training. The projection of approximately 75 additional FTE is based on a November 1996 report entitled: "Generic Drug User Fee Proposal Questions & Answers," but updated to reflect the increase in submissions of ANDA's.

Question. What was the backlog of generic drug applications as of the end of fiscal year 1997 and as of January 1, 1998? Please provide the total number of ANDA's pending before the FDA as well as the number pending for more than six months?

Answer. At the end of fiscal year 1997, there were 515 pending ANDA's, including 106 pending for more than six months. On December 31, 1997, there were 588 pending ANDA's, including 100 pending for more than six months.

Question. What were the mean and median review times for new drug applications (NDA's), ANDA's and ANDA supplements in fiscal year 1997? What have they been in fiscal year 1998 to date?

Answer. It is important to note that review time is different from approval time. Review time is the time that the agency takes to review, that is, to take a final action on, an application. The time for approval is the sum of the time for FDA review plus the time for the sponsor to respond to any deficiencies noted in the review if the application is not approved the first time it is submitted.

Either an approval or disapproval of an ANDA is considered by FDA to be a final action. The Agency makes every attempt to meet the requirement to approve or disapprove an application within 180 days; however, for a number of reasons it is not always possible to do so. After receiving a disapproval action, manufacturers frequently resubmit applications that address the deficiencies indicated in the disapproval action.

As we mentioned earlier, approval times reflect both time with the agency reviewing applications as well as time with the sponsor or applicant responding to deficiencies noted by FDA reviewers. The time spent in FDA on an ANDA is measured by "review cycles". A cycle starts when an application is filed by FDA and ends when the agency issues an "action letter". Generally these letters communicate to the sponsor that their application is approved or not. If not approved, the sponsor is provided with the reasons why and has an opportunity to submit information needed to address these deficiencies. When this information is received a new cycle begins.

The Office of Generic Drugs does not calculate yearly review cycle times, but can provide monthly calculations. Traditionally, the month of September has been used to report review times. Regarding the NDA information we will provide, the data reported include all approvals during the fiscal year 1997 and 1998, pre-PDUFA as well as any applications submitted in a PDUFA cohort.

[The information follows:]

FISCAL YEAR 1997 REVIEW TIMES (SEPTEMBER 1997)

[Time in months]

	Mean	Median
ANDA's	5.9	5.4
ANDA supplements [1]	n/a	5.2
NDA's (124 drugs)	16.0	15.0
Fiscal Year 1998 Year to Date Review times (February 1998)		
ANDA's	6.2	6.1
ANDA supplements [1]	n/a	4.4
NDA's (55 drugs, through 2/28/98)	14.3	12.0

[1] Original and major amendments to supplements.

BLOOD SAFETY

Question. How does FDA collaborate with the Centers for Disease Control (CDC) in investigating CDC-reported incidents of possible transmission of an infectious disease in its efforts to identify problems with blood products?

Answer. The FDA has extensive interactions with its sister agencies of the Public Health Service or PHS, the CDC and NIH, on blood safety issues at all levels of the agencies. The FDA collaborates with the CDC to ensure a rapid response to any possible transmission of infectious disease. The CDC participates in product investigations by conducting epidemiologic studies or assisting with scientific analysis.

Recent examples include Centeon Albuminar in which CDC provided epidemiologic assistance in determining cases of individuals affected by bacterially contaminated product. Another example concerned Alpha Factor VIII and Factor IX in which the CDC provided epidemiologic and laboratory assistance in investigating the transmission of Hepatitis A virus from these clotting factors. CDC is currently assisting the FDA in an investigation of allergic reactions associated with specially filtered (leukoreduced) blood products.

The NIH and CDC routinely share information from large scale surveillance studies on blood safety issues such as the Retroviruses Epidemiology in Donors Study (REDS), the Transfusion Safety Study (TSS), and the Transfusion Transmitted Viruses Study (TTV).

The Department has raised blood safety to the highest level. As you are aware, Dr. Satcher has been appointed as the Assistant Secretary for Health, as well as serving as the Surgeon General, and also serves as the Blood Safety Director. Coordination of the response of the PHS agencies occurs at the level of the Blood Safety Committee chaired by the Blood Safety Director and consisting of the Director of the NIH, the CDC, and the Commissioner of Food and Drugs.

The NIH, CDC and FDA also serve as ex-officio members of the Advisory Committee on Blood Safety and Availability. The Advisory Committee has considered Hepatitis C virus (HCV) lookback notification and policy related to risk of Creutzfeldt-Jakob Disease (CJD), since its first meeting in April 1997. In August 1997, the Committee issued recommendations for the implementation of HCV lookback notification. The Secretary accepted these recommendations in January 1998, and the Department is in the process of implementing HCV lookback measures.

CDC and NIH representatives now serve as voting members of the Blood Products Advisory Committee which provides scientific advise to the FDA on a variety of issues including product approvals. NIH and CDC employees also serve on the Transmissible Spongiform Encephalopathies—TSE—Advisory Committee which advises FDA on TSE issues including their possible impact on blood and blood products. NIH and CDC representatives participate in the Interagency Working Group on Blood Safety and Availability which hold monthly teleconferences to discuss issues affecting blood safety.

The CDC has also created a position of Assistant Director for Blood Safety to facilitate interactions on these issues. Together, these efforts ensure that CDC and NIH have input at the highest levels of the FDA and the Department.

Question. Does the investigation process differ if an adverse event is discovered by FDA or by CDC? Are FDA's decision steps related to product withdrawal or recall the same?

Answer. The FDA and CDC may become aware of adverse events by many different mechanisms because the FDA focuses on regulated products while CDC focuses on surveillance and epidemiological investigations. Adverse events may be reported through either the FDA's Medwatch system, the CDC surveillance systems or as reports from consumers. Once an adverse event is discovered, the FDA and CDC work together to safeguard the public by rapidly investigating the cause of the adverse event, alerting the manufacturer and the public. FDA and CDC have reciprocal arrangements regarding emergency contacts and utilize standing cooperative procedures for sharing information and managing investigations.

The FDA may initiate an investigation at both the administering facility and the manufacturer of the product. CDC may be called upon to assist the FDA in epidemiologic and scientific investigations.

FDA's decision steps related to product withdrawal or recall are the same regardless of whether the event is discovered by the FDA or by the CDC. FDA's decision steps in the classification of these types of situations is similar. The end points may, however, be different. For example, a manufacturer may voluntarily withdraw product from the market at any time. If the presence of the product in the market place represents a violation of the Federal Food, Drug, and Cosmetic Act or the Public Health Service Act and the FDA would pursue legal action (e.g. seizure), the withdrawal may be formally classified by the FDA as a "recall". If the FDA does not believe that the underlying violations or deficiencies relating to the product are actionable violations, the withdrawal action may be formally classified by the FDA as a "Market withdrawal". For recall classifications, a health hazard evaluation is performed and the recall is classified as Class I, II, or III based on the potential risks and hazards, if any, associated with use or exposure to the product.

Investigation processes for FDA and CDC differ in that FDA has a focus on regulated products and the public health associated with the use of those products while CDC is principally concerned with epidemiological investigations and surveillance relating to transmission or suspected transmission of diseases which also contribute to public health decisions. FDA and CDC work closely together when investigations focus on broad public health issues involving the potential spread of infectious agents.

Investigational processes and directions may differ based upon the source of the information concerning an adverse event. For example, if a regulated product is suspected as having caused an unexpected or serious adverse event, FDA may initiate an inspection at both the administering facility and the manufacturer of the product in question. Since CDC has extensive epidemiological investigational experience, FDA would conduct a joint review in situations where the facts surrounding a disease transmission do not clearly implicate a specific product and require an extensive epidemiological investigation.

Question. Last year, the Committee directed FDA to move forward in convening a working group to develop a system to notify patients of adverse events. As a result of this action, I understand that a voluntary patient notification system has been proposed by blood product manufacturers. What progress has been made in implementing this voluntary notification system?

Answer. The voluntary notification system came about following a PHS-sponsored meeting on notification of withdrawals and recalls that occurred in November 1996. Since that time, the FDA has met with consumer groups and industry representatives on numerous occasions to help formulate the elements of this voluntary system.

The International Plasma Products Industry Association, IPPIA, has formulated a proposal to implement a voluntary notification system, that will employ a single third-party to act as the repository and distributor of information. The IPPIA projects that the notification system will be operational in June 1998.

Question. What steps does FDA intend to take to ensure this system is appropriately implemented?

Answer. FDA is considering drafting a regulation that will require adequate record keeping and an effective mechanism to identify and notify product custodians in the event there is a potential for the exposure to a communicable disease. Delivery system participants will be required to establish and maintain mechanisms for notification of the product custodian, which in some cases, may include the patient or the patient's legal guardian.

FDA continues to support better notification of consumers about withdrawals and recalls through a number of means, including improved labeling of products. Proposed improvements include the use of lot-number tear-offs to make it easier to track lot numbers, and the printing of the third-party telephone number on the product to permit easy access to enrollment in the notification system. The FDA continues to meet with consumer groups and industry to discuss these issues.

Question. Once established, is there a mechanism for FDA oversight of the patient notification system?

Answer. FDA regards the notification system as a component of the recall plan of a manufacturer, and thus, the system would fall under FDA's regulatory purview. Any information a firm disseminates through the national notification system will be part of its recall procedures, and will be reviewed by the FDA on that basis. Importantly, while FDA does have a policy of reviewing the recall strategy of manufacturers, recalls are reviewed at different levels depending on several factors. The depth of review has resource implications, especially if multiple systems are in place. FDA prioritizes its resources by the level of health risk. Any auditing for effectiveness during a recall would be governed by FDA's existing procedures for effectiveness checks.

Question. How will manufacturers be held accountable for notifying patients of possible contamination of blood products?

Answer. FDA agrees that the voluntary national notification proposal by a third party is a good idea, but not in lieu of patient notification by the product consignees. During a recall, the FDA is also concerned with product retrieval, which is not a primary objective of the voluntary plan. The proposal addresses patient notification but not product withdrawal or retrieval. A manufacturer's participation in the voluntary patient notification system will not fulfill all of a manufacturer's responsibility regarding product recall. FDA is considering a regulation requiring a notification mechanism of a manufacturer's failure to follow the regulation which could result in regulatory action. FDA would conduct inspections to oversee the implementation of the regulation.

Question. What FDA resource commitments has FDA made to this voluntary notification system?

Answer. The voluntary notification system came about following a PHS-sponsored meeting on notification of withdrawals and recalls that occurred in November 1996. Since that time, the FDA has met with consumer groups and industry representatives on numerous occasions to help formulate the elements of this voluntary system. The FDA continues to meet with consumer groups and industry to discuss these issues. FDA continues to support better consumer notification about withdrawals and recalls through a number of means. CBER posts notices of plasma-derivative product recalls and withdrawals on its WebPage. FDA is considering publication of a proposed regulation which would require adequate record keeping and an effective mechanism to identify and notify product custodians in the event there is a potential for the exposure to a communicable disease. This proposed regulation would be disseminated for notice and comment before becoming final. Resources for these activities have been identified within a larger plan to address current concerns related to blood safety.

The International Plasma Products Industry Association (IPPIA) has formulated a proposal to implement a voluntary notification system, that will employ a single third-party to act as the repository and distributor of information. The IPPIA projects that the notification system will be operational in June 1998.

MEDICAL GLOVE PROTEIN AND/OR POWDER

Question. FDA reportedly has under consideration a rule setting a protein limit of 1200 micrograms per medical glove, and a powder limit of 120 milligrams per glove. Is there a scientific basis upon which to determine these standards? If so, what is that basis? Or, are these standards simply based on FDA's evaluation that medical glove manufacturers will be able to achieve them?

Answer. These limits are based on the scientific principle of dose-response, i.e., less protein and less powder will reduce adverse effects, and they are also based on FDA evaluation that medical glove manufacturers will be able to achieve these limits.

Question. The implementation of any standard for glove protein and/or powder would seem to depend heavily on the methods used to measure protein or powder. What methods are available to measure these things, and what if anything needs to be done to improve, refine, or standardize these methods? Has the FDA worked with ASTM or other voluntary standards organization to arrive at reliable measurement techniques?

Answer. The method recommended for measuring protein levels is the American Society for Testing and Materials (ASTM) D 5712 Standard. FDA's Center for Devices and Radiological Health is currently evaluating the use of the ASTM D 6124 Standard for measuring glove powder levels.

Question. In setting protein and/or powder limits for medical gloves, what measures has FDA taken, or does it intend to take, to ensure that its regulations do not cause shortages of medical gloves?

Answer. FDA has requested ASTM to develop a standard for the maximum level of water-soluble protein on natural rubber latex medical gloves, and the maximum allowable level of glove powder on medical gloves. This effort is ongoing and FDA is actively participating. This effort in cooperation with the manufacturer members of ASTM was undertaken to ensure that the proposed regulation will not cause shortages of medical gloves.

FDA STUDY OF THE THIRD NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) SAMPLES

Question. In its September 1997 Medical Glove Powder report, FDA indicated that its CDRH Epidemiology Team was conducting a study of the seroprevalence of natural latex-specific IgE antibodies among participants in the Third National Health & Nutrition Examination Survey (NHANES III). What is the status of FDA's study? Over what time period were blood samples in this study collected?

Answer. FDA's CDRH, in conjunction with FDA's Center for Biologics Evaluation and Research, CBER, sponsored testing of blood samples from the Phase II , 1991–1994, of the National Health and Nutrition Examination Survey III for seroprevalence of natural latex-specific IgE antibodies. The CDRH Epidemiology Branch is awaiting the results of this testing, which is still in progress. Upon receipt of the complete testing results, the CDRH Epidemiology Branch will analyze the data, using the demographic information and population weights supplied by the National Center for Health Statistics, the agency conducting NHANES III.

Question. In studying IgE seroprevalence among NHANES III participants, what assay(s) did the CDRH Epidemiology team use? Also, what method or cutoff level(s) did the Epidemiology Team use to classify individual results as reflecting or not reflecting latex sensitivity? (For example, did the Epidemiology Team use a result of 0.35 International Units per milliliter (0.35 IU/ml) on the AlaSTAT Latex-Specific IgE Allergen assay as a cutoff point for latex sensitivity?) And what was the reason for using this cutoff?

Answer. The AlaSTAT Assay is being used to test the NHANES III Phase II blood samples. The Epidemiology Team will receive the results expressed in International Units per milliliter (IU/ml), rather than as "positive" or "negative." Therefore, the CDRH Epidemiology Branch will be able to examine the data using a variety of cut points, and determine which, if any, correlate with other variables available in the NHANES III data set.

GOVERNMENT PERFORMANCE AND RESULTS ACT

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The Agency's annual performance goals are aligned with FDA-wide strategic goals and strategies, which in turn, support the Agency's mission. The basic elements of FDA's mission are to promote the public health by timely review of regulated products prior to marketing; protecting the public health by ensuring the safety and effectiveness of products on the market; and coordinating agency efforts with external partners and stakeholders. FDA's strategic goals and strategies directly support each element of the mission statement. Each performance goal in the Performance Plan, in turn, is tied to an Agency strategy. Those connections are identified in the descriptive material supporting the performance goal statements.

The performance goals in the plan are also organized by FDA's major program activities in the budget, for example foods, drugs, biologics, or one of the other major program areas. Within each program activity, performance goals are grouped into clusters, with program resources broken out for each cluster.

Question. Could you describe the process used to link your performance goals to your budget activities? What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The process used to link performance goals to budget activities involved program managers, planners and budget representatives from each Agency center, their field counterparts, and non-center headquarters analysts. The process contained several steps. First, program managers and planners in each center identified clusters of performance goals that supported each major strategic direction for

the center. FDA identified resource totals for each budget activity. We are defining a budget activity as a program identified in the budget, for example human drugs, foods, and so forth. Resources associated with a program consist of the resources allocated to a product center, such as human drugs, plus the resources assigned to regulate that product area in FDA's field organization. Center officials then apportioned the resource total for each budget activity, or program, to each cluster of performance goals within the program, based on an estimate of expenditures necessary to achieve the performance goals. We then reconciled program resources identified in the budget with those identified in the performance plan.

The challenge associated with this new way of organizing resources, by strategic direction, was that it was different from the traditional "project" classification. FDA's current accounting system keeps track of resources below the program level by these projects. Thus, resources were crosswalked from an input-oriented project and accounting system to a results-oriented performance system. These crosswalks were accomplished by developing reasonable estimates rather than through empirical record-keeping.

The major lesson learned was that performance goals could still be linked to the existing budget structure while being arrayed differently for strategic and performance purposes. We are still in the process of determining the extent to which budget and performance systems should be integrated. The degree of integration depends, at least in part, on the preferences expressed by HHS, OMB, and Congress.

Question. Does the agency's Performance Plan link performance measures to its budget? Does each account have performance measures?

Answer. Yes, the performance goals in the performance plan are directly linked to the budget. There are goals for each program area in the budget and the clusters of goals within program areas are tied to the resources requested for that program. The budget justification uses performance goals in justifying the budget request. With respect to the second part of your question, if by "account" you mean the FDA appropriation, the answer is yes. The appropriation is a more aggregate category than the program, or budget activity. Thus, performance measures for the FDA account, or appropriation, would be the sum of performance measures for all of FDA's programs.

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The performance planning structure uses the same programs as the budget, for example Foods, Human Drugs, Biologics, Animal Drugs and Feeds, Devices, National Center for Toxicological Research, and Tobacco. Earlier we discussed how the performance planning and budget structure differ below the program level.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. We are currently in the process of evaluating whether to change portions of our account structure, to provide the most helpful information to the Committee. We would be happy to keep the Committee apprised of any proposed changes as they are developed.

Question. How were performance measures chosen?

Answer. First, we would like to clarify how FDA uses the term performance measure. FDA identifies a performance measure as one element of a performance goal. The performance measure is the yardstick that is used to identify levels of desired and actual performance. The performance goal is a statement that includes the performance measure plus the target level and time frame that the manager selects as an intended result, and by which he/she manages. To illustrate, "percentage of priority drugs reviewed within one year of receipt" would be a performance measure. The total performance goal would read: "Complete review on 90 percent of all high priority drugs received in fiscal year 1999, within one year of receipt."

FDA used a process to choose performance goals, which includes the selection of both measure, target level and time frame.

FDA initiated this process by issuing guidance on the development of performance goals and supporting documentation. This guidance was based on directives issued by OMB and the Department of Health and Human Services. Each line component of the Agency submitted performance goal candidates. Over 250 performance goals were submitted by the Centers. The goals were screened based on specific criteria, condensing the initial list of goals to the 64 performance goals contained in the Agency Performance Plan. We are happy to provide this criteria for the record.

[The information follows:]

FDA PERFORMANCE GOAL CRITERIA

Did the goal address a high public health priority?

Was there substantial stakeholder concern and interest—for example, the Administration, Congress, consumers, industry?

Did the goal address a specific legislative mandate—for example, the Prescription Drug User Fee Act?

Was the goal either outcome-oriented or would it position the agency to measure and produce outcomes in the future?

Was the goal associated with a program area in which substantial budget increases were being requested?

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. FDA used the primary criterion of significant potential public health risk to determine in which areas it was justifiable to expend and request resources for collection and validation of important data. Two notable illustrations are in the area of food safety and imports. Both areas are of major concern to the public. The Agency has devoted considerable resources in the import area to establish an import monitoring system, in cooperation with the U.S. Customs Service. As a result of this effort, the Agency now has in place an automated screening system which permits the rapid approval of imports from sources that historically have "clean bills of health." This system also allows the Agency to quickly target suspected shipments for closer laboratory examination. FDA's performance plan contains a goal that will ensure that at least 55 percent of safe import entries are released for entry within 15 minutes.

Food safety is a second illustration of a high public health priority for which large expenditures for establishing of effective data collection systems is warranted. FDA performance goals for fiscal year 1999 address the need to work cooperatively with other federal agencies in developing baseline surveillance data on food borne illnesses; and on adverse events associated with dietary supplements, infant formulas, and medical foods.

In other instances, the establishment of valid and reliable data systems in the premarket review areas has been supported by stakeholders, such as the regulated drugs and biologics industry in the form of user fees. Industry is willing to contribute funding for these systems because they are dependent upon accurate data to gauge FDA's progress in prompt review decisions.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. Our goal is to have reliable data available for all performance goals, performance measures, target levels and time frames, by March 2000. The performance goals that are at greatest risk for not having reliable data are those areas in which the Agency is partnering with other agencies and are taking new approaches to protecting the public health. For areas such as seafood HACCP, where the industry is still in the process of adapting this new hazard control approach, some time may be needed to develop baselines that are sufficiently stable to use as a basis for predicting future performance. Also, some programs will need to focus on process improvement goals. These are goals that lay the foundation for systems to collect data and/or develop appropriate measures. Once these systems are operating, then the program will have data and the appropriate metrics to measure performance that is more closely related to outcomes.

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. All of the goals in FDA's fiscal year 1999 Performance Plan represent Agency commitments that FDA will strive for. The Committee may be particularly interested in tracking specifically identified goals that lend themselves to quantification, and are associated with program areas of particular current Congressional interest. We will be happy to provide a listing of these goals for the record.

[The information follows:]

SELECTED FDA PERFORMANCE GOALS FISCAL YEAR 1999

PDUFA (Prescription Drug User Fee Act)

Review and act on 90 percent of standard new drug applications (NDA's) filed within 12 months after receipt (30 percent within 10 months of receipt); and priority applications within six months.

Review and act on 90 percent of complete NDA applications resubmitted following receipt of a non-approval letter, within six months after resubmission date.

Review and act upon 60 percent of fileable original generic drug applications within six months after submission date.

Review and act upon 90 percent of standard efficacy supplements within 12 months (30 percent within 10 months of receipt) and priority efficacy supplements filed within six months of receipt.

Review and act upon 90 percent of manufacturing supplements within six months and act on 30 percent of manufacturing supplements requiring prior approval within four months.

Food safety

By 12/30/99, 50 percent of the seafood industry will be operating preventive controls for safety as evidenced by functioning, appropriate HACCP systems.

By the end of fiscal year 1999, enhance the safety of the nation's food supply by achieving adoption of the Food Code by 25 percent of the states.

Tobacco

Enter into contracts with all 50 states (depending on their willingness) to conduct an average of 42,000 unannounced compliance checks each month of retail establishments that sell tobacco products.

Imports

Increase the percentage of safe imports screened within 15 minutes to 55 percent.

Mammography

Have at least 97 percent of mammography centers meet key inspection standards, with less than 3 percent of facilities with Level 1 (serious) inspection problems.

Important new medical devices

Complete 50 percent of Premarket Approval applications (PMA's) within 180 days.

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. FDA used several approaches to focus on outcome-oriented performance goals. In anticipation of preparing the fiscal year 1999 Annual Performance Plan, we trained over 600 of our managers, planners and field staff in GPRA and performance management principles. FDA's GPRA training and the fiscal year 1999 Performance Plan guidance described the differences between input goals, activity goals, output goals and outcome goals. We are also encouraging the use of 'process improvement' performance goals, such as establishing important data systems, or developing appropriate partnering arrangements. These goals are important as transition mechanisms which position our agency to be more effective in both measuring and producing outcomes in cooperation with external partners. FDA is also encouraging system analyses of agency programs and their relationships with their environment to explain and predict outcomes more effectively. These analyses help to explain the relationships among components of the system. To illustrate, in the food safety area, we are examining linkages among research, surveillance efforts, educational interventions and enforcement actions. These relationships are first understood in conceptual terms. As systems understanding develops further, hopefully empirical relationships can be established among these components to aid in predicting and then committing to outcomes.

During the development of the Annual Performance Plan, FDA used its network of program liaisons to provide technical assistance and support to organizational components in developing outcome-oriented performance goals. This assistance ranged from reinforcing performance planning principles; discussing performance measurement issues; establishing rational linkages between process improvement goals, output goals and desired outcomes; and providing feedback on performance information developed. Through an iterative process, the Agency program managers and planners selected the most important and most outcome-oriented performance goals for inclusion in the Annual Performance Plan.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes. As a result of extensive GPRA training and application of performance management principles, FDA's program managers are shifting their emphasis away from managing activities and toward managing results. For example, the primary objective of the President's Food Safety Initiative is to reduce foodborne illness. FDA managers are collaborating with USDA, CDC and EPA and state and local health and agricultural agencies in this effort.

The use of the Compliance Achievement Reward System (CARS) provides another example of how the development of a performance-based personal reward system has been used to foster change toward an outcome-oriented culture in the Agency's

compliance program. This results-oriented computer data system captures efficient and effective compliance achievements that focus on impacts and outcomes. This reporting system is helping to create a change in FDA's mind set from only "policing" the industry to a willingness to openly communicate and work with those industries willing to work with FDA. Credit is given to employees who achieve compliance efficiently with regulated industry. Employees used to be rewarded for the number of enforcement and administrative actions taken. Now they are interacting with industry more through individual meetings, training, workshops, and grassroots meetings to listen to concerns.

Nevertheless, we continue to face several challenges that limit our ability to establish measurable outcome oriented performance goals. First, a major barrier to establishing outcome-oriented performance goals is that most desirable health outcomes of FDA action, reduced morbidity and mortality, results from the efforts of multiple actors, including the regulated industry, other federal agencies, health professionals and consumers. As we approach ultimate outcomes, FDA's singular influence increasingly wanes and it becomes increasingly difficult to establish a clear connection between FDA's action and some ultimate health outcomes. Moreover, we are necessarily dependent on purchasing or obtaining data from external partners who are responsible for collecting and guaranteeing the quality of health outcomes data. In many cases, outcome data are not only expensive, they are simply not available.

Second, many of our existing data systems were designed to measure activities but provide neither relevant baselines required to develop results-oriented performance goals that are within our control nor to track the progress made toward achieving such performance goals. Third, although we have addressed this issue by including process improvement goals aimed at developing the appropriate measurement systems, their development often requires a substantial investment of resources and, in some cases, performance data will not be immediately available.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. FDA is concerned about customer satisfaction for all of our varied customer groups. We recently completed a survey of customers including consumers, health professionals, state governments and industry. Survey results were analyzed and incorporated into goal setting for FDA programs. Since the Performance Plan is concise and focused externally, only a fraction of the customer service goals FDA has adopted were included in the fiscal year 1999 Performance Plan. FDA is working to incorporate more input from customers in its program management and the Agency has worked with OMB to develop a "generic" customer service survey initiative that will expedite FDA's conduct of customer surveys in the future. We are happy to provide some examples of customer-focused goals for the record.

[The information follows:]

SELECTED EXAMPLES OF FDA CUSTOMER-FOCUSED GOALS

By the end of fiscal year 1999, complete reviews of 30 percent of food and color additive petitions within 30 days.

By the end of fiscal year 1999, increase to at least 77 percent the proportion of people aged 18 and over who use food labels to make nutritious food selections.

Review and act on 90 percent of standard new drug applications and Product License Applications/Biologics License Applications filed within 12 months after receipt—30 percent within 10 months of receipt—and priority applications within six months.

FDA will continue to improve the legibility and clarity of over the counter (OTC) drug labels, and improve the consumer's ability to read and understand important warnings and usage directions.

At least 97 percent of mammography centers meet key inspection standards, with less than 3 percent of facilities with Level I serious inspection problems.

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. The Agency's measurable goals, performance goals, provided a basis for estimating resources required to fulfill the Agency's performance obligations. For example, in the area of prescription drugs, FDA negotiated performance goals with industry stakeholders. The budget was derived from the specific performance commitments negotiated. Similarly, for Seafood HACCP, a goal was set to bring the seafood industry into compliance. FDA determined the number of inspections and the technical assistance required to achieve the desired level of compliance, and these estimates served as a basis for requesting additional funds to hire new staff for the seafood inspection program.

In other instances, such as the President's Food Safety Initiative and the Tobacco Initiative, the public health rationale and pressing need for a change in strategic emphasis was sufficiently strong to result in the development of a new initiative and the appropriation of additional resources. The strategic intent of these important initiatives set the directional context that guided the development of annual performance goals.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes, as we gain experience in implementing GPRA, we continue to improve our ability to evaluate the impact of changes in funding level on our programs and our ability to achieve the performance commitments outlined in the Annual Performance Plan. In some instances, changes in funding level may require an increase or decrease in program efforts and target level of performance or the development of new performance goals to fulfill new performance expectations. In other instances, reductions in funding level and performance expectations may require us to re-evaluate our priorities and program expectations.

Over the past few years, FDA has practiced several strategies for operating with reduced resources in spite of an increasing workload. These strategies, which have sometimes been used in combination, have included reducing program efforts without significantly changing the program approach, refocusing program efforts to target the highest priority health risks and to implement interventions that yield the greatest potential health benefits, and maximizing our limited resources by re-examining and redefining the role we play in protecting public health vis à vis other federal, state and local and international government agencies, third parties, industry, and other nongovernmental institutions. Some of those strategic changes have led us to modify some of our activity measures. However, changes in approach will not change the agency's desire to improve health outcomes.

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. Yes, the agency has a variety of data systems which can provide information on program performance needed by management. The agency plans to monitor performance on the fiscal year 1999 performance goals on a regular basis. As part of the required GPRA verification and validation process, the agency has initiated a system to ensure that performance data provided by its programs are accurate. This program has three basic components, (1) training workshops for program managers to learn the essential aspects of performance measurement; (2) a comprehensive checklist for verifying and validating performance information used to establish and monitor progress toward each goal; and (3) assistance in applying performance data as an effective management reporting tool. This process will ensure that the necessary data is both available and reliable to report on each fiscal year 1999 performance goal and will progressively enhance the Agency's ability to achieve and measure meaningful results.

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. The present budget account structure has not made it difficult to link dollars to results. In the performance plan, we linked dollars to our major program categories and more specifically, to groups of related performance goals, which we call performance goal clusters. The program dollars required to carry out the strategic intent of our programs were linked to the goal clusters.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. We do not know the answer to your question at this time, but we are studying the situation. Specifically, we are examining ways of improving alignment of the traditional budget account structure to which Congressional Appropriations Committees are accustomed and a structure required by the Government Performance and Results Act (GPRA) that links resources with results-oriented performance goals. The first step in this process is to develop a crosswalk between our budget account structure and the results-oriented performance goal clusters. Once we better understand the linkages between these two structures, we will be in a better position to evaluate the budget account structure to determine if it should be changed to better reflect performance as required by GPRA. Whether Congress and our other stakeholders want us to eliminate the existing budget structure which is recogniz-

able remains unclear. We will continue to keep the Committee informed of any changes.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. We are currently exploring possible changes in our account structure, but are not far enough along to have a meaningful dialogue with the Committee. We fully intend to work with the Committee as we move forward in developing any proposed changes.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. We are not yet sure that modification of the budget structure is the most appropriate answer to strengthening accountability for program performance. However, any mechanism which establishes a stronger link between budgeted dollars and planned performance will allow program managers and resource allocators to gain a better understanding of their return on investments. It is entirely possible that such mechanisms could be informative crosswalks between budget and performance structures. It should be noted that budget structures, performance structures, and integrating mechanisms are only as effective as the validity and reliability of the information contained in those structures. It does little good to show which dollars are 'chasing' which performance goals if a solid relationship between resources and performance hasn't yet been established.

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Our Performance Plan does briefly address some of the external factors that effect both goal achievement and the choice of strategies necessary to respond to the external factors. Prior to developing performance goals for fiscal year 1999, each program identified key environmental factors that affect their ability to carry out the strategic intent of their program. Because each of our programs are so diverse, each had to address the individual factors affecting their particular programs as they developed performance goals.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. The Foods program, for example, has identified changes in physiological microorganisms, changes in the food supply and distribution, hazardous dietary supplements as some of the external factors to which they must respond. They respond by developing appropriate strategies and leveraging resources to address these factors. One of the external factors that is common to several of FDA programs is an increased workload. This factor has lead to the increased participation in Federal, state, international, and industry partnerships to develop the most efficient and effective ways to protect the public health. Partnerships in themselves are an external factor because without full and continued participation in agreements, the desired outcome of the partnership is compromised.

Question. What impact might external factors have on your resource estimates?

Answer. Unexpected shifts or developments of new factors could ultimately affect resource estimates. For example, response to emergency situations; changes in consumer consumption; and incomplete partnerships agreements would require FDA to reprogram resources to respond to meet the need.

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication? If so, does the Performance Plan identify the overlap or duplication?

Answer. Through the development of the performance plan FDA has taken steps toward identifying areas of overlap and coordination with other federal agencies and nongovernmental institutions. This in turn, has led to significant coordination to avoid duplication of effort.

The Food Safety Initiatives provides a good illustration of how a total network can create synergies to produce system outcomes. We have included in the performance plans descriptions of how each of these initiatives is being implemented through partnerships and close coordination among multiple federal agencies, international, state and local governments, industry and consumer groups. FDA is working closely and cooperatively with its partners to reduce the incidence of food borne illnesses.

In developing the President's Food Safety Initiative, the functions of all the participating agencies were examined and great care was taken to avoid duplication, both among and within the participating federal agencies, and to ensure that the activities of the participating agencies were coordinated. FDA is closely coordinating with other agencies in the area of Food Safety education, research and risk assessment. For example, FDA and USDA's Agricultural Research Service have coordi-

nated their research efforts and have jointly developed research strategies. A risk assessment consortium has been formed at the Joint Institute for Food Safety and Nutrition (JIFSAN) which allows members to learn from the work of other agencies and build on each others efforts. Coordination of agency efforts in the area of food safety education is expected to encourage the communication of common messages and thus improve the ability of all cooperating agencies to achieve the shared goal of reduce the risk of microbial contamination in food and reducing the occurrence of food borne illnesses.

During the development of the fiscal year 1999 Performance Plan, we used a combination of data from FDA's Field Data System and data from USDA's National Agricultural Statistics surveys to develop a performance goal of increasing the percentage of fruit and vegetables produced using good agricultural practices guidance for reducing microbial contamination. FDA and USDA are currently collaborating in the development of follow up surveys that will allow both FDA and USDA to measure the effect of their joint efforts. FDA is engaged in similar data sharing partnerships with other agencies involved in the Food Safety Initiative, including the CDC and Food Safety Inspection Service (FSIS), and other USDA agencies.

FDA will continue to examine the relationships between its own efforts and those of cooperating organizations. The interactions among institutions is essential in order to address complex health challenges in areas such as tobacco, imported products and mammography. The current climate of outcome-oriented performance management reinforces the need to identify synergies as well as areas of overlap so that we can launch cost-effective consumer protection initiatives.

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: To what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. In some cases, our performance measures are sufficiently mature for use as a basis for funding decisions. An example of a "mature" indicator is provided by the PDUFA goals that measure the timeliness of FDA application review, such as "review and act on 90 percent of standard new drug applications within 12 months of receipt." However, the fiscal year 1999 planning process revealed a need for certain new performance measures. In some of those cases, FDA is developing or refining data systems, such as the adverse event reporting system, to collect the necessary information. A goal for fiscal year 1999 is to implement the Adverse Event Reporting System for the electronic receipt and review of adverse drug event reports. FDA has a similar goal in the device adverse event reporting area. In other cases, FDA has decided to partner with other state or Federal agencies to share data. FDA is sharing data for goals such as to increase the percentage of domestic produce produced consistent with Good Agricultural Practices to reduce microbial contamination. We will be determining the baseline and using data from USDA's compliance data systems and their Fruit and Vegetable Chemical Use Surveys. In other areas, including seafood HACCP compliance, FDA coordinates its inspection efforts with states, so we must also integrate compliance data between FDA and all contracted states. FDA continues to explore potential partnerships with other institutions and creative solutions to address the issue of data compatibility.

FDA is firmly committed to developing credible data for our performance measures, not only for Congressional use, but for our own priority setting, internal management, and budgeting decisions. We are emphasizing verification and validation of performance data in our planning and budgeting activities, and managers are enforcing this focus by using performance measure data in analysis and decision making.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data, that might affect the accuracy of resource estimates?

Answer. Several factors affect accuracy of resource estimates. First, would be lack of empirical data in areas where new strategies have been formulated. If the approach is new, no baseline exists to determine the relationship between resource expenditures and either activities or results. Another major factor is the great expense in collecting data in areas where we are trying to estimate resources necessary to achieve outcome-oriented performance goals. In many cases, outcome data bases simply don't yet exist. A third factor is the expense associated with conducting studies that will allow us to establish a valid and reliable relationship between resources and results. The Agency would have to overcome each of these barriers in order to accurately estimate resources necessary to achieve specific outcome-oriented performance goals.

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. The Department submitted a department-wide strategic plan in lieu of having each operational division do so in order to meet the requirements of GPRA.

QUESTIONS SUBMITTED BY SENATOR SPECTER

Question. I understand that FDA officials recently toured mushroom growing and processing facilities in the People's Republic of China. I would appreciate a full report of the findings of this trip. Does FDA have any plans to change the automatic detention and lot-by-lot release program currently operating for mushroom products imported from China?

Answer. FDA recently completed a series of evaluation trips to the People's Republic of China (PRC). The purpose of the trips was to evaluate the progress made by the PRC mushroom industry, in conjunction with their government authorities and private consultants, in addressing the problem of Staph enterotoxin in canned mushrooms. The evaluation trips were designed to look at mushroom processing from the grower through post-processing handling.

FDA is currently in the process of reviewing the trip reports and will prepare an evaluation of the findings. FDA intends to use the findings from our recent evaluation trips to determine if the current lot-by-lot release program for canned mushrooms should be maintained as it is currently, amended or discontinued. No decision on this question has yet been made and will not be until the evaluation of the trips is completed. We will share our evaluation with your office when it is available.

Question. Please provide my office with any monthly statistics the FDA has for the past year regarding the number of lots of processed mushrooms and kilograms represented by those lots from the People's Republic of China that have requested clearance and/or been cleared for import into the United States under the lot by lot program.

Answer. The results of our record review regarding imported canned mushrooms from the People's Republic of China under the Lot-By-Lot Release Program for the past year as of March 31, 1998, are 3,527 lots and 38,837,561 kilograms. FDA did not make any seizures of mushrooms from the Chinese factories due to contamination by Staphylococcus aureus enterotoxin. Monthly statistics are not currently available, but we would be glad to work with you on obtaining that information.

PHARMACEUTICAL BENEFIT MANAGEMENT COMPANIES

Question. Pharmaceutical Benefit Companies are engaged by health plans to interact with pharmaceutical manufacturers and health care providers in order to find safe and effective therapies, ensure consumer safety, and coordinate information services.

What prompted the FDA to issue the January 5 draft guideline on "Medical Product Promotion by Healthcare Organizations or Pharmacy Benefit Management Companies"? What agency analyses were undertaken to prompt formal action on the issues addressed by the guidance? What were the methodologies used in those analyses?

Answer. FDA has been considering issues related to the promotion of medical products in a managed care environment since 1994. In 1994, the Agency met individually with four medical product sponsors to discuss regulatory issues in light of their newly established relationships with Pharmacy Benefit Management Companies, PBM's. Since that time, the Agency has continued its information gathering efforts. These efforts have included our participation in programs, meetings and workshops. These activities permitted FDA to work with many managed care experts to review several studies and to comment on reports from other government agencies. In addition, we have participated in meetings with many of our stakeholders, including members of the pharmaceutical industry, health professional groups and consumer organizations.

On October 19 and 20, 1995, FDA held a public hearing on "Pharmaceutical Marketing and Information Exchange in Managed Care Environments." The purpose of the hearing was to solicit information and views concerning the potential impact of changing organizational structures and information dissemination channels in the managed care setting on the Agency's responsibilities to regulate drug marketing and promotion. FDA heard testimony from 26 individuals and received an additional 38 comments to the hearing docket.

Since the hearing, the agency has continued its dialogue with representatives from the public and private sectors, including representatives from the pharmaceutical industry. The pharmaceutical industry representatives have asked that FDA maintain "a level playing field" for all medical product sponsors with respect to the regulation of their promotional activities. Since one concern that has been raised about this issue is drug switching, FDA has, in addition, sent a letter to its "MedWatch partners" asking that they disseminate a letter describing FDA's concerns about possible risks that may be associated with the switching of a patient from one product to another, usually within the same therapeutic class and asking

that reports of any adverse events be submitted to FDA. The Agency has evaluated these reports and has placed its findings in the docket for the January 5, 1998 draft guidance. In light of FDA's concern about promotional activities that may create a public health risk, and consistent with the information that had been gathered over the years, the Agency determined that the issuance of a draft guidance would be the appropriate next step.

Question. What is the role and jurisdiction of the FDA in connection with health care actors outside the realm of the drug companies it currently regulates? What is the specific jurisdiction of the FDA in issuing this guidance?

Answer. Under the Food, Drug and Cosmetic Act, FDA has responsibility for regulating the labeling and, in many cases, the advertising of medical products. FDA's determination that medical product sponsors are responsible, under certain circumstances, for promotional activities performed by health care organizations/PBM's on their behalf is consistent with long standing agency policy and finds support in the Act, regulations and legal precedent. The introductory phrase of section 301 of the Act provides that the "causing" of a prohibited act, as well as the act itself, is prohibited. In addition, 21 C.F.R. § 1.1(a) provides that the provisions of regulations promulgated under the Act, "with respect to the doing of any act shall be applicable also to the causing of such act to be done." FDA is simply saying that medical product sponsors, that is, the holders of new drug applications, must be accountable for their promotional activities whether these activities are undertaken as direct marketing or indirectly through a PBM.

This broad theory of liability, which is based on FDA's responsibility to protect the public health, has been upheld in several FDA enforcement actions. Additional support is found in the law of agency, doctrine of respondent superior.

Question. Why did the FDA proceed on this issue through a guidance as opposed to a rulemaking?

Answer. FDA determined that a guidance was appropriate because the agency was not creating new requirements, but was, instead, providing an interpretation of existing statutes and regulations. Consistent with the Agency's Good Guidance Practices, this Level One guidance document was issued in draft with a request for public input.

OFFICE OF GENERIC DRUGS

Question. Last year, the Senate Appropriations Committee inserted report language making it clear that the FDA has a statutory obligation to take final agency action within 6 months in regard to generic drug approvals. In the fiscal year 1999 Budget Justification submitted to Congress in February, the FDA states "an action letter is issued for approximately 50 percent of the applications within the 180-day statutory period." Does the FDA consider an action letter final agency action?

Answer. Yes, unless the applicant requests an opportunity for a hearing on the question of whether there are grounds for denying approval of the ANDA. Generally, an action letter communicates to a sponsor that its abbreviated new drug application, ANDA, is approved or not approved. If not approved, the sponsor is provided with the reasons/deficiencies. However, the sponsor can pursue approval by responding to the deficiencies by providing the necessary information. This response is called an amendment and restarts the statutory obligation for an agency action within 180 days. The 180 day median value is calculated for original submissions and major amendments only. For "minor" deficiencies, the median review time is approximately 60 days. Many of our letters are for minor deficiencies.

Question. As you may know, last year I expressed support for increased funding for the Office of Generic Drugs. In preparation for the conference to reconcile the Senate and House fiscal year 1998 Agriculture Appropriations Bill, I wrote Senator Cochran in support of the additional $1 million contained in the House Bill. The Conference Report (Public Law 105–86) included a fiscal year 1998 Operating Plan to Congress. The Operating Plan submitted to Congress at the start of the year provided the Office of Generic Drugs with a funding increase of at least $400,000. Please explain why the FDA decided against allocating the Office of Generic Drugs the additional $1 million and how the $400,000 figure was determined.

Answer. In developing an fiscal year 1998 operating plan for the Agency, FDA took into account the direction in the Conference Report on FDA's fiscal year 1998 Appropriation, which stated "The conference agreement includes an increase for the Office of Generic Drugs". Using fiscal year 1997 operating and payroll obligations of $8.9 million in the Office of Generic Drugs as a starting point, the full cost of the fiscal year 1998 pay raise was added along with an increase to the operating budget, for an increase of $702,000 for the Office. The increase in funding will assist the Office of Generic Drugs' efforts towards accelerated approval times.

The Office of Generic Drugs is an integral part of the generic drug review process and represents a portion of the total resources for the generic drug program. The total obligations for the generic drug review process are shown in the Congressional Budgets on the "Distribution of Resources" table, in the Human Drugs program line "Generic Drug Evaluation," page 122 of the fiscal year 1999 Justification of Estimates for Appropriations Committees.

We will be happy to provide funding information for the total generic drug program.

[The information follows:]

GENERIC DRUG PROGRAM FUNDING LEVELS

	Fiscal year 1997 actual		Fiscal year 1998 estimate		Fiscal year 1999 estimate	
	Amount	FTE	Amount	FTE	Amount	FTE
Generic drug evaluation	$34,183,000	351	$34,883,000	351	$34,883,000	351

Question. I have been contacted by a constituent who has Hereditary Angioedema, a rare blood disease. I understand that the medication C1-Inhibitor has shown promise in stopping acute attacks of this disease. What is the testing status of this drug and when is it expected to be approved for use?

Answer. The FDA may neither confirm nor deny the receipt of applications for unapproved products.

The following information is taken from a National Institute on Allergy and Infectious Diseases, NIAID, release dated September 1996. Hereditary angioedema, HAE, is caused by a defect in the gene that encodes the C1 inhibitor protein, an important regulator of a group of immune system enzymes known collectively as complement. Affected individuals produce either insufficient or dysfunctional C1 inhibitor. The resulting deregulation of complement in these individuals leads to episodes of swelling, typically in the extremities, face, larynx, and abdomen.

Many people with HAE currently use androgens, compounds derived from male sex hormones, to reduce the frequency and severity of swelling attacks. These drugs, however, are ineffective in some patients, and unsafe for children and pregnant women. More than a decade ago, researchers led by Michael M. Frank, M.D., then chief of the NIAID's Laboratory of Clinical Investigation, LCI, showed that C1 inhibitor protein extracted from donated human blood could ease patient's swelling during acute episodes of HAE. This experimental treatment, however, was associated with a risk for transmission of viral blood contaminants such as HIV and hepatitis. Other researchers subsequently showed that prolonged exposure to heat and high pressure could inactivate blood-borne viruses. In a current study, Dr. Frank and his colleagues in the LCI and at Children's Hospital in Boston used C1 inhibitor that had been sterilized through these procedures.

In the treatment study, the researchers gave either C1 inhibitor or placebo to HAE patients after episodes of swelling had begun. On average, patients receiving C1 inhibitor felt relief of their symptoms 55 minutes after infusion, more than 10 times sooner than patients in the placebo group. The treatment was particularly effective for reducing swelling of the larynx and abdomen. The researchers reported that C1 inhibitor caused no immediate or short-term harmful side effects. In addition, after four years of follow-up, no evidence of HIV or hepatitis infection was found in any of the study participants.

QUESTIONS SUBMITTED BY SENATOR BOND

ST. LOUIS FDA DRUG ANALYSIS LAB

Question. The fiscal year 1998 Agriculture appropriations bill specifically stated that "none of the funds made available to the Food and Drug Administration by this Act shall be used to close or relocate the Food and Drug Administration Division of Drug Analysis in St. Louis, Missouri."

Is the FDA following the intent of this law? How do you explain the fact that since Dr. Janet Woodcock became Director of the Center for Drug Evaluation and Research (CDER), the St. Louis lab has not been allowed to hire replacements for individuals who leave, and that if any new person is hired, he or she would be hired for the Laurel, MD laboratory?

Is the FDA circumventing the intent of the law?

Answer. Per the appropriations bill language, no fiscal year 1998 funds are being used by FDA to close or relocate the Division of Testing and Applied Analytical Development. FDA will maintain its analytical operations at the DTAAD laboratory in St. Louis.

In order to meet the challenges of budget reductions and to direct limited resources to priority objectives and goals, the FDA has reviewed its various programs to determine where streamlining is feasible. The entire Office of Testing and Research, OTR, of which the Division of Testing and Applied Analytical Development is a part, has absorbed resource reductions, both in dollars and numbers of employees, FTE, over the last several years. The reductions in FTE have limited the entire OTR's ability to replace employees, and limited dollars have dictated the need to evaluate programs further.

In addition, work demands have changed significantly with regard to testing requirements. Many requirements for testing drugs have been reduced or eliminated in the last few years. Under the Food and Drug Administration Modernization Act of 1997, FDA has reduced testing requirements for antibiotics and eliminated testing requirements for insulin. FDA is currently evaluating duplicative testing requirements in other areas. All of these resource-saving initiatives are being done in an effort to meet streamlining needs and direct FDA resources to the highest priority needs.

Question. The St. Louis FDA lab has been in St. Louis since 1909 and is the premier laboratory in CDER and is recognized world-wide for its outstanding capabilities and collaborative efforts. If the FDA continues in weakening the St. Louis lab by refusing to allow it to maintain its ability to function as a viable laboratory, isn't the FDA defiantly contradicting the fiscal year 1998 appropriations language?

Answer. It is our intent to comply not only with the letter of your direction, but with the intent. We will not use any fiscal year 1998 funds to close or relocate the Division of Testing and Applied Analytical Development. FDA will continue to maintain its analytical operations at the DTAAD laboratory in St. Louis.

Laboratory testing requirements have changed significantly in the last few years. The Food and Drug Administration Modernization Act of 1997 eliminated the requirement to test insulin and reduced antibiotic testing requirements. These changes, coupled with streamlining initiatives agency-wide, have required a redirection of our research and testing programs, wherever the location. All the resource saving initiatives are being done to support the need to streamline the Agency, while maintaining our core scientific capability.

FDA REGULATION OF HEALTH CARE ORGANIZATIONS

Question. What was the impetus for the FDA in developing a draft guidance on "Medical Product Promotion by Healthcare Organizations or Pharmacy Benefit Management Companies" which was published earlier this year?

Answer. As the health care environment has changed in recent years, there have also been changes in the marketing and promotion of drug products. On January 5, 1998, the FDA published a Federal Register notice announcing the availability of a draft guidance concerning promotional practices by pharmacy benefits management companies (PBM) and similar enterprises that are owned or influenced by the sponsors of medical products. Concerns about drug switching and other potentially harmful promotional practices have come to light as a result of several in-depth analyses of PBM involvement in medical decision making conducted by the FDA, the Health Care Finance Administration, and the Department of Health and Human Service's Office of Inspector General.

Question. Why did the agency opt to undertake this initiative as a guidance, which has no public comment period, instead of the rule making process?

Answer. FDA published a document entitled "Good Guidance Practices," which was announced in the Federal Register on February 27, 1997, in a notice entitled "The Food and Drug Administration's Development, Issuance, and Use of Guidance Documents." This document explains that the purposes of guidance documents are to first provide assistance to the regulated industry by clarifying requirements that have been imposed by Congress or issued in regulations by FDA and by explaining how industry may comply with those statutory and regulatory requirements. The second purpose of guidance documents is to provide specific review and enforcement approaches to help ensure that FDA's employees implement the agency's mandate in an effective, fair, and consistent manner. The document entitled "Guidance for Industry: Promoting Medical Products in a Changing Healthcare Environment; I. Medical Product Promotion by Healthcare Organizations or Pharmacy Benefits Management Companies, PBM's," draft was posted on the FDA website on January 5, 1998. There was a 90-day comment period on the draft guidance, which ended

on April 6, 1998. We received approximately 200 comments. We are reviewing and considering these comments carefully as we prepare to write final guidance.

QUESTIONS SUBMITTED BY SENATOR GORTON

Question. Could you expand on FDA's plan to inspect growing conditions (farms) overseas in order to further the President's Food Safety Initiative? Does the FDA expect that foreign countries would like to establish a similar program to inspect U.S. farms?

Answer. We do not anticipate regular inspections. FDA will become involved in visiting growers only when there is an identified outbreak of foodborne illness that is traced back to a specific farm.

Foreign governments, regulatory agencies, and industry currently send inspectors to the U.S. to inspect a variety of manufacturers, including many drug, device, and food processing facilities, for a variety of regulatory and trade reasons. Many other countries currently send inspectors to the U.S. to confirm compliance with fresh fruit and produce requirement involving grades, size, chemical usage, among others. With or without a U.S. program of inspection of farms in foreign countries, we expect that our trading partners may wish to, and will, visit U.S. farms and food production facilities.

Question. What does FDA intend to do with the additional $100 million requested for the youth and tobacco project?

Answer. The $100 million increase will be apportioned as follows—$51 million for increased enforcement activities; $25 million for increased outreach activities; and $24 million for new product regulation activities.

QUESTIONS SUBMITTED BY SENATOR MCCONNELL

TOBACCO

Question. The FDA has requested $134 million for tobacco in fiscal year 1999. The money for this increased funding would come from the proposed tobacco settlement, which may not pass Congress this year. If it is not passed, where will FDA get money for tobacco? What programs within the agency will be cut to provide money for the tobacco initiative?

Answer. Reducing the availability and appeal of tobacco products to children and teenagers is an enormous undertaking with the potential for immense public health benefits. As a result, the Agency's activities in this regard are a high priority for FDA and are a central component of the Administration's Youth Tobacco Prevention Initiative. If the funds are not fully appropriated for the tobacco initiative, the Agency will have to make some difficult choices with respect to this and other important programs it administers. Funding reductions in other programs would seriously impair FDA's ability to carry out all of its significant functions.

Question. How much money do you propose be spent in FDA on tobacco-education activities? How much money will be spent in all of HHS on tobacco education activities? What will the education entail?

Answer. The overall budget for FDA's tobacco education activities for fiscal year 1999 is $35 million. However, HHS does not separately track tobacco education activities for each of the agencies. In fiscal year 1999, the Agency will design a multimedia advertising campaign including radio, print, and billboard advertisements and place these ads in major media markets in every state with which FDA contracts to conduct compliance checks. We will also develop a comprehensive retailer education program which includes a retailer kit containing in-store signs, tent cards, fact sheets, counter mats and other materials; a letter to retailers in each state updating them on the status of compliance checks in their state; a series of reminder postcards that can be posted in the store for customers and clerks to see; trade advertisements in retailer publications; and a toll-free hotline that retailers can call to request additional materials and ask questions. FDA will continue to have exhibits at major conferences representing state and local health officials, public health organizations, and consumer and retailer organizations educating these audiences about the new tobacco rule.

Question. How much money is spent in both FDA and HHS on education activities for encouraging breast examinations and yearly pap smears?

Answer. Because FDA has responsibility for implementation of the Mammography Quality Standards Act (MQSA), our educational efforts for breast health have been mainly in promoting the use of mammography. While many of the agency outreach efforts involve educating health professionals about MQSA, FDA has conducted

some activities to encourage breast health among consumers. The agency's accomplishments are listed below.

[The information follows:]

Entered into an Interagency Agreement for $25,000 with the Agency for Health Care Policy and Research to produce the consumer brochure "Things to Know about Quality Mammograms";

—Spent $5,000 for buttons stating "Quality Mammography Saves Lives!";

—Spent $129,000 to initiate and implement a hotline so that any woman in the country could find an FDA-certified mammography facility. The hotline was promoted through the media and a campaign by the First Lady to promote mammography;

—Spent $11,000 to develop speakers kits on MQSA;

—Developed a Breast Implant Update packet for consumers; and

—Sent a letter to Ann Landers about the importance of mammography in early detection of breast cancer.

In addition to these accomplishments, FDA routinely conducts the following activities which require little funding:

—exhibit and present at meetings for consumers;

—share the database of certified facilities with the National Cancer Institute;

—conduct voluntary patient notification activities when facilities practice poor quality mammography. This involves focus testing notification letters to patients and physicians, developing patient notification packages to help facilities develop the letters, and a follow-up study to evaluate the effectiveness of the notification;

—distribute the "Mammography Matters" publication to consumers as well as health professionals;

—distribute letters to approximately 500 breast cancer advocacy and national health organizations on issues such as the consumer aspects of the final MQSA regulations; and

—develop a reprint on mammography and the final regulations which will be distributed throughout FDA and by the Consumer Information Center in Pueblo, CO.

Question. How much money is spent in both FDA and HHS on education activities for encouraging the consumption of folic acid for women in their child-bearing years?

Answer. Over the past several years, FDA has been instrumental in providing education about the association between folic acid and reduced risk of neural tube defect-affected births to the audiences most in need of up-to-date, accurate information: consumers, healthcare professionals, and industry. This is accomplished through contacts with these groups, providing educational materials, and working with professional organizations to assure that the latest science is translated into information easily used by consumers. The Agency has ongoing, direct contact with individuals from these groups to answer their questions. It routinely provides them materials such as press releases, the Backgrounder, an issue of FDA Consumer magazine featuring folic acid articles, copies of regulations, and the FDA Folate Poster. The Agency also participates in cooperative work to communicate the health message. The Agency uses an internet outreach and education program to make information more easily accessible. Other folic acid outreach and education activities are conducted through the FDA Consumer Education Staff, Public Affairs Specialists located in District Offices around the country, and both the FDA and HHS Offices of Women's Health. Those activities include presentations to consumer groups including adolescents and adults, and to health professionals and nutrition education and food safety groups. FDA, in collaboration with CDC and the March of Dimes Birth Defects Foundation held a public meeting on August 6, 1997, focused on partnering with outside groups in an effort to disseminate the folic acid health message as widely as possible. I would be happy to provide, for the record, a list of the specific activities the Agency has produced and disseminated. Because these activities have occurred over a number of years and are a part of larger day-to-day program activities, such as consumer information, or dietary supplement work, it is not possible to identify specific funding devoted to each of these education efforts.

[The information follows:]

FDA MATERIALS RELATED TO FOLIC ACID EDUCATION

—FDA Consumer magazine featuring folic acid:

Inside back cover, "Think Folate Now"

Folic acid article "How Folate can Help Prevent Birth Defects"

Birth defects article

—Article for FDA Medical Bulletin

—Article on folic acid for North American Precis—wire service to 10,000 newspapers nationwide
—Consumer group contacts: "Dear Consumer" letters and packets
—"Dear Editor" letters
—"Dear Health Professional" letters and contacts with professional associations.

Question. How much money is spent in both FDA and HHS on education activities for identifying the signs of diabetes and treating the disease?

Answer. FDA currently has no ongoing educational activities regarding diabetes.

I support focusing food regulatory activities on matters of food safety. This focus, however, has the effect of placing economic and quality regulatory issues as relatively lower priorities. Nevertheless, I am concerned that if there are regulatory requirements that FDA will not enforce, then those requirements should be repealed. Otherwise, unscrupulous operators can violate those requirements with impunity to the competitive disadvantage of law abiding businesses.

I understand that there are industry self policing efforts with attempt to address these economic and quality regulatory issues in an informal manner. For example, the olive oil association has a program that identifies economic adulteration of olive oil, such as substituting other edible oils or misrepresenting the quality of the olive oil.

Question. Does FDA policy support active cooperation with industry self policing programs? Using the olive oil program, as well as other examples that you feel are appropriate, please report on apparent violations referred to you agency and what action was taken by FDA.

Answer. FDA has long encouraged industry self compliance activities that promote adherence to legal requirements. Activities such as the American Institute of Baking food labeling seminars; the container integrity program of the National Food Processors Association and the defects in spice program of the American Spice Trade Association are important programs that promote industry awareness and compliance with food safety and other requirements. FDA also has partnership agreements with industry and trade associations such as the California Dried Fruit Association.

In 1995, as part of the Administration's "Reinventing Government" initiative, FDA conducted a page-by-page review of agency regulations. As a result, a number of regulations were revoked and proposals were made to revoke others. On August 12, 1997, a final rule was published to revoke certain regulations relating to food and cosmetic labeling.

The activities of concerned consumers, industry and associations have long been an important part of our surveillance activities. However, some of the information we received from these sources is not current and may not be suitable for regulatory consideration, i.e., analytical data may not reflect adequate sample sizes, utilize official analytical methods or the chain of custody is inadequate. Nevertheless, these reports are evaluated with appropriate follow-up assigned based on timing, strength of the evidence, available resources and competing priorities. During the past year, we have not taken regulatory action based on these sources of information. However, during the past few years we have successfully taken action against adulterated orange juice, honey and syrup products based on part on information from industry, consumer or state officials.

QUESTION SUBMITTED BY SENATOR BURNS

MEDICAL PRODUCT PROMOTION

Question. The Food and Drug Administration recently published a "Draft Guidance for Industry: Medical Product Promotion by Healthcare Organizations of Pharmacy Benefits Management Companies (PBM's)." As I understand the draft guidance, it seeks to clarify the FDA's position on promotional activities of pharmaceuticals by PBM's which are subsidiaries of product sponsors or promote products on behalf of the sponsors. I certainly support the FDA's goal of ensuring that promotional activities follow applicable laws and regulations. It has been brought to my attention, however, that the guidance could inadvertently restrict the dissemination of comparative information about pharmaceuticals to consumers in Montana. I look forward to a written response from FDA addressing this concern. I note that it is not addressed in the draft guidance notice published in the Federal Register on January 5, 1998.

Answer. Because the document is a draft and comments are still being reviewed, I cannot say what will be in the finalized guidance, but we do appreciate your concern. The final guidance will be developed after careful consideration of these com-

ments, including the concerns regarding comparative information about pharmaceuticals that were mentioned by your constituents in Montana.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FOOD SAFETY INITIATIVE—HACCP/SOUND SCIENCE

Question. In late 1997, FDA began implementation of HACCP for seafood and you have now stated your intention to develop HACCP rules for fresh fruit and vegetable juices. In January of this year, FSIS began implementing HACCP for meat and poultry operations and already, the industry is finding parts of the HACCP rules problematic. For example, I have been recently told that an FSIS HACCP rule is going to require an additional use of two gallons of water per bird for poultry processing which will result in tremendously burdensome challenges for many rural community water discharge facilities. Since implementation of HACCP for seafood, have you encountered any special problems in working with industry? If so, what?

Answer. HACCP is a system of preventive controls for safety that involve, for each processor, developing an understanding of both the food safety hazards that are reasonably likely to occur for the products being processed and the controls that are available to the processor to minimize or eliminate the hazards. On a day-to-day basis, a processor's core HACCP activities are monitoring key processing points to ensure that they are operating in a manner that produces a safe product and recording the results of that monitoring.

To help processors understand these concepts and activities, FDA participated in the development of low-cost training for industry in HACCP principles and their application to seafood. This course has been attended by several thousand individuals nationwide. The Agency also developed guidance for processors, the "Fish and Fishery Products Hazards and Controls Guide," which provides advice on hazards that are reasonably likely to occur in various situations and on controls that are known to exist for those hazards. This Guide also includes a simple, fill-in-the-blank HACCP plan and instructions on how to complete it.

Even with the training and the guidelines, the Agency has long recognized that the development of HACCP systems in many processing plants will involve trial and error. Thus, it has always been the agency's expectation that the first round of inspections after the December, 1998, effective date of the HACCP program would uncover numerous systems in need of improvement. This is turning out to be the case, but is not regarded as a special problem at this stage of implementation. As planned, FDA's inspections are focusing on evaluating HACCP systems and providing feedback to the firms on aspects of their systems that need improvement. During the first round, regulatory action is only to be initiated when, in addition to HACCP system deficiencies, the products themselves contain contaminants or are in imminent danger of becoming contaminated. If the feedback from the first inspections does not result in significant, industry-wide improvements during the second round of inspections, FDA would likely regard such a situation as a special problem.

Question. Do you have current authority to expand HACCP to fruit and vegetable juice processing?

Answer. Yes. The legal basis for mandating HACCP systems for juice processing is the same as that for seafood. Thus, the Food and Drug Administration proposed to issue HACCP regulations for fruit and vegetable juice processing under various sections of the Federal Food, Drug and Cosmetic Act, including, most significantly, sections 402(a)(1) and (a)(4) and 701(a) of the act (21 U.S.C. 342(a)(1) and (a)(4) and 371(a)). Section 402(a)(1) of the act states that a food is adulterated if it bears or contains any poisonous or deleterious substance that may render the food injurious to health. Section 402(a)(4) states that a food is adulterated if it has been prepared, packed, or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health. Section 701(a) of the act authorizes the agency to adopt regulations for the efficient enforcement of the act.

As noted in the final rule mandating HACCP for fish and fishery products (60 Federal Register 65096), the Act provides a broad statutory framework for Federal regulation to ensure human food will not be injurious to health and to prevent commerce in adulterated foods. Recent outbreaks of foodborne illness as a result of consumption of contaminated juice have raised concerns about the safety of juice. Given these concerns and its responsibility under the act, FDA has determined that it is appropriate to propose to require that processors incorporate certain basic food safety control measures into juice production.

Question. Please explain in detail the manner in which FDA incorporates the best science available in developing HACCP rules?

Answer. In developing HACCP regulations, FDA relies on advice from the National Advisory Committee on Microbiological Criteria for Foods—NACMCF—as well as data and information from the food industry, FDA scientists, and scientists in other fields from academia, government and trade associations. Because HACCP rules are established through notice/comment rulemaking, all interested persons have the opportunity to submit relevant information, including high quality scientific information, to the agency in comments on the proposed rule. FDA also reviews the most up-to-date scientific documents from the peer-reviewed literature in identifying hazards, control measures, and critical limits, and uses advice from the NACMCF as the basis for developing HACCP rules.

The NACMCF, an advisory committee of peer-acknowledged leading scientists to advise on specific health-related science-based issues, has published three documents on HACCP. The latest revision provides better clarity, science, and harmonization with international HACCP guidance, and was released in August, 1997. The USDA and FDA HACCP rules are based on the seven principles of HACCP, as defined by the NACMCF, and are fundamentally the same. The proposed HACCP juice rule is also consistent with these existing HACCP regulations and the underlying science upon which HACCP is based.

In developing the proposed rule for juice, FDA held public scientific meetings to address science and health related issues relevant to the production, processing and consumption of juice. Top scientists from academia, government, the food industry and trade organizations; public health officials from the Centers for Disease Control and Prevention and states; and interested members of the public attended, providing the latest evidence, concerns, and solutions, both at the meeting and in written comments. FDA scientists used these comments, as well as comments on the HACCP ANPR from August 1994, FDA research and surveillance data, pilot program experience, and information from the peer-reviewed scientific literature, in developing the proposed rule.

Question. How does FDA resolve disagreements within the scientific community regarding the development of what is proper under HACCP?

Answer. Hazard Analysis Critical Control Point—HACCP—is a preventative system for producing safe food. FDA's HACCP regulations are not proscriptive in that they do not identify specific hazards, or require specific control measures or critical limits that industry must apply. Rather, HACCP places responsibility on industry to determine the specific hazards that apply to their products and processes, and measures to control these hazards. It is the industry's responsibility to provide scientific data and principles to substantiate a HACCP plan.

During the developmental stages of HACCP rules, the Agency works with the scientific community and the industry to jointly determine what to include in a HACCP rule, such as through the voluntary HACCP Pilot Program, and through public scientific meetings. Through the HACCP Pilot Program, for example, FDA is working cooperatively with processors, trade associations, and state regulatory agencies. Where there are disagreements, such as in the results of hazard analysis or the determination of critical control points, scientific data are presented to resolve the problem.

FDA also comments on its HACCP proposals from the scientific community and others, through the rule-making process. FDA used the comments received on the ANPR, and those received on the proposed rule for seafood to develop the final seafood HACCP rule. The same process is planned for HACCP for juice. The proposed seafood HACCP rule was available for public and scientific comment during "Town Meetings." FDA held a public forum on juice in December of 1996, that was used in developing a proposed rule.

Question. What mechanisms are in place for industry to challenge a science-based rule relating to the implementation of HACCP for seafood or any similar regulation under your jurisdiction?

Answer. FDA recognizes, and has long advised the industry, that no two HACCP systems need be identical. HACCP systems can be unique to each processing operation. FDA does not dictate in advance what a HACCP system must look like for any given processor. Individual flexibility is one of the key aspects of HACCP and is essential to the success of the overall program. That is one reason why the seafood HACCP regulations are short and relatively general. The regulations essentially require that processors establish HACCP systems that honor seven internationally recognized principles of HACCP, such as hazard analysis, developing "critical control points," and monitoring those critical control points to make sure that they are operating as they should, but leave the details to processors.

To help processors determine how to apply those principles to their situations, FDA has issued guidelines, the "Fish and Fishery Products Hazards and Controls Guide," that provide advice on hazards and controls for those hazards. Processors are advised not to follow FDA's advice blindly, however, but to determine whether that advice is appropriate for them. While FDA's inspectors will initially compare each processor's HACCP system to the advice in the guidelines, processors are free to choose alternative approaches so long as their HACCP systems provide a level of safety that is equivalent to that provided in the guidelines' approach. Moreover, processors are free to challenge the scientific validity of the approach taken in the guidelines. The appeals process for guidance is set forth in the agency Good Guidance Practices at 62 Federal Register 89 69–70, February 27, 1997. FDA is always interested in learning about better ways to ensure safety and in making improvements in its own guidelines. In developing alternatives to the guidelines or challenging their validity, processors should be able to establish the scientific validity of their systems for the agency to evaluate.

PREMARKET NOTIFICATION PROGRAM

Question. The Food and Drug Modernization Act of 1997 created a new Pre-Market Notification Program which would accelerate the approval time of certain materials such as new food-contact packaging materials that are important to firms in my state. This program is supposed to take effect April 1, 1999, and I understand it is estimated to cost $1.5 million in fiscal year 1999 and $3 million in subsequent years. I also understand FDA is required by the Act to report to Congress by April 1, 1998 (tomorrow) on updated estimates for this program. When can we expect to receive the report that is due tomorrow?

Answer. We have a draft document that is now being circulated within the Agency for clearance. We plan to submit this report to the Department for their review shortly. With support from the Department, we are trying to expedite the process as much as possible. However, assembling this initial report and ensuring the soundness of the estimate did take longer than anticipated. We expect that the report will be submitted shortly.

Question. Can you provide information regarding the currently estimated costs of this program?

Answer. At this time, the report is still under development. Once the report is finalized we will be able to provide our estimate of the costs of the program.

Question. Do you believe it will be operational by April 1, 1999?

Answer. The section of the Food and Drug Modernization Act that established the premarket notification program for food contact substances provides that this program will operate only if, in a given year, certain conditions are met. That is, that an appropriation equal to or exceeding a defined amount is made for carrying out the premarket notification program, and that the Secretary certifies, in essence that the amount appropriated for the Center for Food Safety and Applied Nutrition is not less than that appropriated for fiscal year 1997, exclusive of new programs.

At this time, we cannot say whether the conditions specified in the statute for operation of the premarket notification program will be met. However, only if the statutory conditions are met, would the program be operational on April 1, 1999.

Question. Have you heard from the regulated industry regarding this program and if so, what is their response to it?

Answer. Prior to enactment of the FDA Modernization Act, agency personnel discussed the premarket notification system with industry representatives who strongly favored the establishment of such a system and even supported industry-funded user fees to ensure that the program would be adequately supported. It is our understanding that the regulated industry continues to favor an adequately supported premarket notification program for food contact substances.

IRRADIATION

Question. Last December, FDA approved irradiation of meat products including fresh and frozen beef, lamb, and pork. FDA had similarly approved irradiation for poultry products in 1992. What is your view on consumer confidence relating to irradiated foods?

Answer. A survey conducted for FDA in the 1980's showed a small proportion of the population very interested in obtaining irradiated foods, a similar proportion opposed, and the majority being willing to consider such products and deciding on the merits. The only real test, however, is to see whether consumers buy such products when available. At this time, very little product has been available to consumers but, where consumers had the opportunity to purchase such foods and had received educational materials allowing an informed decision, they have been receptive. With

greater awareness of the risks from foodborne organisms, we believe many consumers would be interested in irradiated foods depending on the price, taste, and perceived benefits.

Question. What percentage of poultry products have been subjected to irradiation since 1992?

Answer. As far as we are aware, only a very small percentage. USDA's Food Safety and Inspection Service would have better information of amount based on their management of the poultry inspection program.

Question. What indications are there that the meat industries will be using irradiation as a food safety procedure in the near-term?

Answer. While we know of interest, we have no information on who, if anyone, will actually use the process. Also, at this time, there is still a need for the Food Safety and Inspection Service to amend its regulations regarding meat processing before meat may be irradiated legally. As with poultry, FSIS may be in a better position to gauge industry interest because, in such cases, a meat irradiation facility would become a meat processing facility subject to FSIS regulation.

Question. Outside the United States, how is irradiation viewed by consumers?

Answer. We have no information on that question. We know that the amount of food irradiated outside the U.S. is generally small but have no information about consumer preferences.

Question. How much, if any, irradiated food product is imported into the United States?

Answer. Essentially none. There is very little irradiated food in commerce, in the U.S. or abroad.

PROTECTIONS FOR INDUSTRY

Question. No one questions the need to move forward with reliable food safety requirements. Industry and consumers alike know that the highest levels of food safety are in the interests of them both. However, sometimes in an effort to react quickly, government overreacts in ways later found more harmful than necessary. The effect of the Alar scare several years ago to the apple industry in the Pacific Northwest and the more recent forced sale of Hudson Foods are cases in point. What steps is FDA taking to ensure that while doing everything possible to protect consumers from unsafe food, governmental overreaching does not occur in ways overly harmful to industries or individual companies?

Answer. In these days of mass media coverage of news events, there may be little FDA can do to protect industry from adverse publicity. However, FDA has issued a complete guideline for industry to follow to be prepared for emergencies such as product recall. This guideline is published at 21 CFR Part 7. Basically this guideline explains how the industry can be prudent in making such emergencies as recalls as lest disruptive to the firms operations as possible. These are: (1) prepare and maintain a contingency plan for emergencies; (2) use sufficient coding of products to make possible lot identification and to facilitate effective recall of violative lots; and (3) maintain product distribution records necessary to facilitate location of the product being recalled.

Utilizing this system, the expeditious handling of a recall or other emergency can and does show to consumers that the firm takes its responsibilities to consumers seriously. This approach also allows the recall to be completed quickly and reduces media exposure.

INTERNATIONAL FOOD SAFETY

Question. Food markets have become global and various new strains of bacteria move more quickly from one region to another than ever before. In addition, the modernization of food processing itself poses special problems for food safety. Explain the role of FDA in investigating the rise in harmful bacteria, especially as it relates to food products.

Answer. FDA regulates food products except for meat, processed egg products, and poultry. FDA for many years has had a robust research and testing program geared to microbial contamination of food products, especially canned foods and seafoods. With the recent increase in reported outbreaks associated with fresh produce and other foods, FDA and USDA contacted CDC to initiate a nationwide active surveillance program, now called FoodNet, to actively collect foodborne outbreak information from physicians and hospital surveys. These FoodNet sentinel sites, which will number eight in 1998, cover nearly the entire USA and provide statistical foodborne illness information for FDA and USDA to monitor and institute intervention strategies to limit the scope of an outbreak. Likewise, FDA or USDA would then conduct traceback investigations to determine the exact food source or microorganism. FDA

and USDA have recently linked with CDC's DNA fingerprint network in order to specifically link/de-link geographically diverse outbreaks.

FDA, in cooperation with other federal and academic institutions, conducts microbial and risk assessment research on the microbial ecology, intervention strategies, method development, risk assessment models, and sampling strategies, to provide the scientific data and information necessary to successfully prevent, minimize or intervene microbial contamination. This scientific research is critically important to develop food safety systems and guidance for emerging and evolving microbial pathogens.

FDA is a leader in the scientific investigation of foodborne pathogens and this expertise proves essential in crafting sound public policy to ensuring the safety of the food supply. With ever-increasing and global food supply, we must devote greater attention and efforts, however, to new strains and new pathogen commodity combinations. Likewise, pathogens are evolving so that traditional prevention techniques are less effective, such as acid environment, hence we must understand those mechanisms so that new intervention strategies may be developed, such as ozone and irradiation.

Question. Explain your view on the influence of modernization of the food system as a contributor of food-borne illness.

Answer. The modernization of the food system influences both the development and spread of foodborne illness. Only a few years ago most food available to consumers was produced and sold locally. Today, the food industry has evolved from many, small local producers and manufacturers into a few large producers that ship products across the country and around the world. This means that a single contaminated product has the potential to be distributed thousands of miles and to cause contamination. Moreover, food products may become contaminated at any point in the lengthy journey between producer and grocery.

Consumers are demanding products with convenience and that have organoleptic properties closer to "fresh." This requires the use of minimal processing and packaging technologies and more complex processes to assure the same level of protection that traditional thermal methods, such as canning and pasteurization, deliver. Further, there are several other causes. Among these are consumer preferences for undercooked products and convenience foods, increased dining out, and more on-site food processing. Also the population particularly vulnerable to foodborne disease has been growing in size; today more than 30 million people are at high risk from foodborne infection. These include the elderly, the very young, pregnant women, and the immunocompromised by diseases such as HIV/AIDS or by drugs such as those used by organ transplant recipients and cancer patients.

The modernization of the food supply also applies to animal production practices. The use of antimicrobial agents in animal production has facilitated confinement housing and allowed higher densities of animals to be maintained. Unless properly managed, food animals being reared in crowded conditions have ample opportunities to transmit infections. The resulting poor performance or disease increases the use of therapeutic, prophylactic and growth-promotant antimicrobial agents. Even if well managed, the increased density of livestock or poultry with similar risk profiles in intensive rearing operations requires an aggressive approach to disease control, which can lead to heavy prophylactic and therapeutic antimicrobial use. If such operations are not well managed, heavy antimicrobial use may become a management crutch.

For these reasons, the use of preventive systems, such as Hazard Analysis and Critical Control Point procedures, during food production and distribution becomes imperative in reducing the risk of contaminated products reaching consumers.

Question. Describe the manner in which FDA is working with foreign countries to help ensure food safety for all consumers.

Answer. FDA has a long history of international leadership and cooperation on food safety through direct contacts with foreign governments and industry as well as through international organizations such as the World Health Organization, Panamerican Health Organization, and the Codex Alimentarius Commission, which establishes international standards.

Through these numerous avenues, FDA has promoted or established standards which are consistent with the U.S. level of protection. With the President's Food Safety Initiative we have convened an international working group comprised of the State Department, U.S. Trade Representative and USDA/Foreign Agriculture Service to map out a technical assistance program to reach foreign countries and producers. Furthermore, we have made numerous speeches and presentations at scientific, intergovernmental meetings to discuss FSI and, more specifically, the Fresh Produce Initiative goals and objectives. We established a website to further disseminate information, regulations such as HACCP, and guidelines generated to ensure im-

proved food safety. Currently, we have proposed, "Draft Guidelines to Minimize Microbial Contaminations for Fresh Fruits and Vegetables," and proposed Juice HACCP regulations. The internet is a powerful tool in sharing information and informing foreign countries and enterprises.

With the funding included in the President's fiscal year 1999 Budget request, we plan to hire additional staff to conduct foreign country visits to provide scientific and technical assistance in cooperation with our USDA/FAS and APHIS colleagues to actively promote good agricultural practices and food safety regulations.

TOBACCO

Question. In 1997, FDA's regulation on youth tobacco became effective and ten states, including Arkansas, were chosen for a pilot project to determine the level of enforcement of rules prohibiting the sale of tobacco products to anyone younger that 18 years of age. Additional funds for this purpose were included in the fiscal year 1998 appropriations bill to extend this activity to any state wishing to participate. How many states have chosen to participate?

Answer. Thus far, 28 states have submitted proposals for funding in fiscal year 1998. Of these, 4 are for extensions of the original 10 contracts signed last year. There are 7 contracts with new states that have been signed or will shortly be signed. Seventeen additional proposals are currently being negotiated.

Question. If any states declined, what were the reasons?

Answer. No states have formally declined to submit a proposal. The agency expects the remaining proposals to be submitted over the next two to three months.

Question. In what ways were these federal funds not simply replacement of state funds that would have been otherwise available for enforcement?

Answer. Funds available to the states to enforce the FDA rule cannot be used to enforce state laws. They can only be used to enforce the FDA regulation. Thus, the federal funds cannot be used to replace any existing state funds that would have otherwise been available for enforcement.

Question. The fiscal year 1999 budget request includes an increase of $100 million for tobacco-related activities. What steps is the Administration taking to ensure that of any revenues available through a "tobacco settlement", enough will be made available to this subcommittee to fund the FDA activities related to tobacco?

Answer. The Administration will work closely with Congress to ensure the appropriate distribution of any funds that are generated from the passage of comprehensive tobacco legislation.

Question. Please provide an outline of the extent to which specific activities will be included in the $100 million increase.

Answer. Of the requested $100 million increase, $51 million will be used to increase enforcement activities; $25 million will be used to increase outreach activities; and $24 million will be used for new product regulation activities.

Question. Since the fiscal year 1999 budget contains several proposed user fees, why were user fees not proposed to fund the FDA tobacco activities?

Answer. The Administration's budget request for fiscal year 1999 includes funding for FDA's tobacco program, and other domestic policy priorities, that would be generated from the passage of comprehensive tobacco legislation. A key element of this legislation is raising the cost of cigarettes. The revenues raised are essentially indirect user fees.

Question. A large part of the $100 million increase is for education, media, directed mailings, and other activities designed to dissuade young Americans from using tobacco products. What levels of funding are currently being used for this purpose by other governmental entities (including state and local governments) and various non-profits such as the American Cancer Society?

Answer. The overall objective of FDA's tobacco program is to reduce the number of young people who use tobacco. Nevertheless, that is not the primary objective of the outreach activities the Agency will conduct with increased funding in fiscal year 1999. The goal of FDA's outreach efforts is to increase retailer compliance with the regulations that went into effect in February 1997 that prohibit the sale of cigarettes and smokeless tobacco products to minors. The Agency is unaware of the precise level of funding currently being used by private and public organizations to dissuade young people from using tobacco products and whether any of that funding is directed to retailer compliance.

Question. What tangible evidence exists to document the effect of educational and communication efforts in reducing teen smoking?

Answer. The following evidence exists on the effect of educational and communication efforts to help reduce teen smoking.

[The information follows:]

DHHS, "Preventing Tobacco Use Among Young People: A Report of the Surgeon General," 1994, stated, based upon a review of the evidence, that "a nationwide well-funded antismoking campaign could effectively counter the effects of cigarette advertising in its currently permitted media forms." (see also, for a similar recommendation, Institute of Medicine, "Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths," 1994.)

From July 1, 1967 to December 31, 1970, the Federal Communications Commission, as part of the "Fairness Doctrine," required antismoking messages on television and radio to counter industry advertising. During that time, per capita cigarette consumption declined 7 percent, from 4,280 in 1967 to 3,985 in 1970 (6.2 percent was attributable to the messages). A study of adolescents found that their smoking rates declined during that period.

In an effort to reduce cigarette consumption, the Greek government launched an antismoking campaign including television and radio counter-advertising as well as a community-based print education campaign that lasted for two years of the government's effort. During this two year period, the annual increase in smoking rates dropped to zero. When the campaign ended, the annual increase rose to 6 percent.

Researchers, in Vermont, tested the effect of mass-media and school health education programs. Students exposed to both school and media interventions were 35 percent less likely to have smoked in the past week than students exposed only to the school program, and this preventive effect persisted for at least 2 years following the completion of the intervention program. The decrease occurred even in students who were considered to be at slightly higher risk of becoming smokers because of demographic considerations.

In California, the Department of Health Services conducted a $26 million multi-year media anti-smoking campaign. One evaluation found that the campaign directly influenced 7 percent (33,000) of Californians to quit smoking in 1990–1991, and contributed to the quitting of another 173,000. The program also resulted in high levels of awareness among young people and may have contributed to stopping the rise in teen smoking that had been occurring in California before the campaign.

MEDGUIDE

Question. Last year, FDA launched the MedGuide program as a way to give consumers better information about possible side effects of medications and other possible dangers from the misuse of medicine. Can you document any results of this program?

Answer. In 1995, the FDA proposed a regulation that was intended to encourage the development and distribution of patient-directed medication information that would be easily understood, comprehensive, specific, non-promotional in tone and content, and scientifically accurate. Following publication of this proposal, Congress directed the Secretary of DHHS to convene a committee of diverse private-sector interest groups to develop a voluntary, long-range, comprehensive action plan to fulfill the goals specified in the Congressional mandate. These goals are to ensure that useful written prescription medication information would be distributed to 75 percent of patients receiving new prescriptions by the year 2000, and 95 percent by the year 2006. The plan aimed to improve patients' understanding of the prescription drugs they take and reduce the misuse of such medications which FDA has estimated costs the public in excess of $20 billion annually. Assisted by The Keystone Center, a nationally recognized, non-profit public policy mediating organization, a 34-member steering committee representing the pharmaceutical industry, pharmacists, physicians, consumer and patient advocacy groups, patient drug information data base companies and other interested groups participated in developing the plan. On January 14, 1997, DHHS Secretary Donna E. Shalala accepted the action plan developed by the collaborative steering committee.

Public Law 104–180 called for an evaluation of the private sector's achievement of the goals of the plan in the year 2000. In addition, the action plan itself called for the development of mechanisms for periodic evaluation of the voluntary program. We are aware of at least one segment of the private sector that is conducting small-scale evaluations of patient medication information distributed by various information vendors for certain drug classes, and one specific information vendor's evaluation of certain of its leaflets. There may be other evaluations ongoing of which we are unaware.

In 2000, FDA plans to conduct an evaluation of both the distribution and quality, that is, "usefulness," of a sample of medication information sheets given to patients with their new prescriptions. In addition, FDA intends to conduct an interim assessment of the private sector's progress toward meeting the goals to allow for any necessary adjustments in time for the critical year 2000 evaluation. FDA has obtained

funding, and is in the process of obtaining OMB clearance, for one component of this evaluation: the general distribution of patient medication information. However, this study cannot evaluate the quality or usefulness of the information as defined by the action plan. FDA is seeking funding to conduct this critical component of a full interim evaluation. FDA has not yet collected any documented results because the action plan is only in its first year of implementation.

We believe we can best aid the ongoing private sector efforts to reach the congressionally-mandated goals by providing well-documented, objective, non-partisan evaluations of progress.

FDA is in the process of finalizing a rule to require FDA-approved labeling for patients, or "Medication Guides," only for a few rare products each year that are determined to pose a serious and significant public health concern requiring immediate distribution of FDA-approved patient labeling.

Question. Has there been a reduction in hospitalizations due to accidental misuse of medications?

Answer. As we discussed earlier, Public Law 104–180 called for an evaluation of the private sector's achievement of the goals of the plan in the year 2000. The action plan also called for the development of mechanisms for periodic evaluation of the voluntary program. FDA has not yet collected any documented results because the action plan is only in its first year of implementation.

Question. To what extent is MedGuide used in the marketing of medications?

Answer. FDA has not conducted a rigorous evaluation of the use of patient medication information in the marketing of medications. However, we have observed, again in a non-rigorous manner, an increase in the number of manufacturers who are submitting draft patient labeling for various new drug approvals. We believe that there are concerns on the part of the manufacturers about liability brought on by increased consumer-directed advertising. It appears there is a desire from industry to make more extensive use of information that is more easily understood by patients or consumers to fulfill the requirement that advertisements contain information "in brief summary" concerning the risks associated with the advertised product.

Question. Is there any way to document the extent to which consumers actually read and use the information available through MedGuide?

Answer. Protocols could perhaps be designed to assess the actual use by patients of patient-directed medication information, but these would be expensive to conduct.

USER FEES

Question. Again this year, FDA is proposing unauthorized user fees ($128 million) as part of the budget submission. As always, this puts extreme budgetary pressure on this subcommittee since authorization of user fees is not within our proper jurisdiction and can, in fact, be challenged by the House Ways and Means Committee. With limited, and often reduced, allocations to our subcommittee, the assumption of user fees serves only to place all programs under our jurisdiction at risk.

What steps has FDA or the Administration taken to work with the authorizing committees to enact these user fees?

Answer. FDA, in concert with HHS and OMB, prepared user fee legislation for the new fees proposed in the fiscal year 1999 President's Budget, which was submitted to the President of the Senate and Speaker of the House on March 13, 1998. To date, there have been no hearings with the authorizing committees or with affected industries on this specific proposal. We do look forward to working with Congress to authorize the fees. In order for FDA to maintain its current level of consumers' health protection, it is important that the full program level in the President's budget be appropriated.

Question. How soon could they be collected if enacted?

Answer. As the proposed legislation moves through Congress, the Administration will make every effort to expedite collections once enactment occur. This would include extensive negotiations with industry to ensure a palatable fee structure similar to that which occurred with PDUFA. At this time, it would be difficult to provide an exact timetable of events.

Question. If this subcommittee chose to make certain FDA activities conditioned on the authorization and collection of up to $128 million in new user fees, which FDA activities would you suggest we postpone until these fees are collected?

Answer. The authorization and collection of the new proposed user fees is intended to support FDA's traditional activities of premarket review and postmarket assurance for foods, drugs, biologics, animal drugs, and medical devices. Delays in collecting these user fees would prolong the review process, extend approval times, and seriously impede our ability to meet statutory deadlines in these program areas.

Under the Administration's plan, user fees would be in place at the start of the fiscal year so that no disruption of activities would occur.

FDA LAB CONSOLIDATION/NCTR

Question. In fiscal year 1998, funds were provided to complete Phase II of the Arkansas Regional Lab (ARL) at Jefferson, Arkansas on the campus of NCTR. The ARL is an important component of FDA's overall lab consolidation. In fact, consolidation should now be underway with certain FDA lab function being transferred to the ARL in the near future. I note that the fiscal year 1999 budget request does not include funding for Phase III of the ARL. Phase III is the final phase of construction for the ARL and I understand it is critical for the efficient execution of FDA's lab consolidation plan. Can you explain why Phase III was not included in the budget request?

Answer. Due to competing issues with a higher priority to the FDA mission, within both the Salaries and Expenses and the Buildings and Facilities Appropriations, the request was not included in the President's Budget.

Question. Was Phase III included in the fiscal year 1999 budget recommendations of FDA to HHS or to OMB?

Answer. FDA requested funding for the construction of Phase III of the Arkansas Regional Lab (ARL) in the Preliminary Budget Submission to DHHS but this request was not included in the Justification of Budget Estimates to OMB.

Question. Please provide an update on all FDA lab consolidation activities with special detail given to the consolidation of activities at ARL.

Answer. For the record, I would be happy to provide a listing of impacted field locations, with a description of the impact on that location under the FDA field laboratory consolidation. Laboratory personnel in each closing laboratory either have been or will be offered relocation expenses to move to the new site along with their work. Under the plan, other district office functions and staff would remain in place. This includes a complement of inspectors, consumer safety officers, consumer affairs officers, and administrative staff at each location where laboratories were to be phased out. Only the laboratory staffs would be affected by the plan.

[The information follows:]

STATUS OF FDA FIELD LABORATORY CONSOLIDATIONS—MARCH 1998

Arkansas Regional Laboratory (ARL) (NCTR at Jefferson, AR)—Planned as a multi-purpose laboratory. ARL assumed many of the laboratory/analytical functions performed by the Chicago District laboratory, which closed on July 1, 1997. ORA will occupy renovated, temporary space until completion of the ARL facility in 1999. The ARL will also assume the analytical and laboratory functions and personnel from the Dallas, Minneapolis, and Detroit laboratories when these facilities close in 2000, except for Detroit's human drug functions and the Medical Devices program work from Minneapolis.

Baltimore—The laboratory closes in 1999. The Human Drug functions will go to Philadelphia and Medical Devices program in-vitro diagnostics will go to WEAC. All other programs move to the Southeast Regional Laboratory (SRL) in Atlanta, except for the present DOD shelf life work which will move to Philadelphia and San Juan.

Buffalo—The laboratory closed in October 1996. All analytical laboratory functions were transferred to the Northeast Regional Laboratory (NERL), Brooklyn, New York.

Chicago—The laboratory closed on July 1, 1997. Most analytical/laboratory work was transferred to the ARL at NCTR. The remaining work moved to Minneapolis and the Kansas City laboratory.

Cincinnati—The analytical functions were terminated on June 30, 1997. The human drug functions were assigned to Philadelphia; all other work went to the SRL in Atlanta. The National Forensic Chemistry Center (NFCC) will remain in Cincinnati and the new facility is scheduled for completion and occupancy in the summer 1998.

Dallas—The laboratory will close in 2000. All analytical /laboratory functions will be transferred to the ARL.

Denver—The laboratory is scheduled to close in 2010. Analytical resource distribution will be reassessed annually. Functions will be transferred to the ARL.

Detroit—The laboratory will close in 2000. Human drug work will move to Philadelphia; DOD shelf life functions will be split between Philadelphia and San Juan laboratories. The remaining analytical and laboratory programs will be reassigned to the ARL.

Kansas City—Planned for closure in 2014. Analytical resource distribution will be reassessed yearly. Functions will be reassigned to the ARL.

Los Angeles—Planned as a multi-purpose facility. FDA has acquired 10 acres of land on the campus of the University of California at Irvine. Architectural and engineering design efforts are underway and receipt of the final design is scheduled for July 1998. Funding for construction has not been secured and the lease for the existing lab expires in March 2000. The new facility project is comprised of three construction phases. Phase I is the core and shell at an estimated cost of $16.5 M; the second phase is the fit-out of the laboratory at an estimated $16.5 M and phase III consists of the fit-out of the office space which is estimated at $5.5 M. The construction cost estimate is based on an fiscal year 1999 contract award. When the new lab is completed, Seattle's current drug functions are scheduled to move to Los Angeles and seafood functions would transfer to Seattle.

Minneapolis—The laboratory will close in 2000. All analytical functions will transfer to the ARL except for Medical Devices related work which will be transferred to WEAC.

New Orleans—The laboratory closed on February 28, 1998. The human drug program moved to the San Juan laboratory; all other analytical/laboratory programs were transferred to the SRL in Atlanta.

Northeast Regional Laboratory (NERL) (New York)—Planned as a multi-purpose laboratory. A site for replacement space for the present Northeast Region, District and Regional Laboratory has been negotiated and secured at the York College in Jamaica, Queens. A lease has been signed by GSA for FDA and construction is underway. FDA occupancy is scheduled between December 1999 and Spring 2000.

Philadelphia—Planned as a drug specialty laboratory. The current laboratory facility was renovated and expanded by 8,000 square feet to accommodate the additional drug functions inherited from other laboratories. The additional laboratory space was completed and occupied in September 1997.

San Francisco—The laboratory will close upon lease expiration in 2014. Analytical functions will be reassessed yearly.

San Juan—Planned as a drug specialty laboratory. All other analytical work has been reassigned to the SRL in Atlanta. Renovations are underway to convert the laboratory to specialty drug analysis space and are scheduled for completion by August 1998.

Seattle—One of five planned multi-purpose laboratories. FDA expanded the laboratory by 5,000 square feet in 1996. Analytical programs, including an animal facility, are now operational and Seattle will receive seafood analytical program work from Los Angeles and transfer their human drug programs when the new Los Angeles laboratory is completed.

Southeast Regional Laboratory (SRL) (Atlanta, GA)—Planned as a multi-purpose laboratory. A 42,000 net square feet laboratory expansion project was completed in December 1997 and the new space is occupied and in use.

Winchester Engineering & Analytical Center (WEAC) (Winchester, MA)—Planned as a specialty laboratory for radio nuclides/radio pharmaceuticals and engineering functions for medical devices. Human drug analytical and validation work was transferred to Philadelphia during 1997 and all other analytical functions were moved to the Northeast Regional Laboratory as of June 1997.

Question. What effect on FDA lab consolidation will the failure or delay in constructing Phase III have?

Answer. Phases I and II provide only laboratory space and offices for the analysts and management of the lab. There is no space for support personnel or functions in the first two phases. Phase III is an integral part of the Arkansas Regional Lab project. Phase III construction is comprised of finishing ARL exterior areas which will allow for a more complete integration of the ARL functions with the National Center for Toxicological Research or NCTR. The functions to be expanded and shared include such support as Financial Management, Procurement, General Administration, Computer Operations and related activities. All of the planned space for these functions is included in Phase III of the ARL project. Phase III calls for renovation of available space at NCTR to provide the administrative space necessary to support the ARL and NCTR science functions which is crucial for the maximum efficiency of the programs. If funding for Phase III is not available, makeshift space will have to be provided to accommodate the expanded service and support functions. Using makeshift space will reduce the effectiveness of the entire concept of field lab streamlining and severely hinder FDA's ability to provide adequate space to house the common support elements.

Question. What are the current cost and time estimates for completing Phase III?

Answer. The current estimated construction cost of the Phase III portion of the project is $13.35 million. The estimated cost is based on the exercise of a fixed price contract option to include Phase III in the current ARL construction contract to the current construction contractor by December 31, 1998. Based upon this option date,

Phase III would be completed, along with Phases I & II, in December 1999. If Phase III is not awarded by December 31, 1998, Phase III will have to be repriced which will affect the cost and may affect the schedule.

QUESTIONS SUBMITTED BY SENATOR HARKIN

BIOLOGICS EVALUATION AND RESEARCH

Question. The Administration's fiscal year 1999 budget for the Food and Drug Administration includes several new and expanded initiatives. However, it is my understanding that some of the basic FDA programs, such as the Center for Biologics Evaluation and Research (CBER) have recently experienced substantial program reductions—I am told 40–50 percent. Is this correct? Does the fiscal year 1999 budget address this shortfall, and how does it do so?

Answer. The Prescription Drug User Fee Act provides that fees are to be used to finance a portion of the costs associated with the premarket review of drug applications. Fees can only be collected and made available to cover increases in the costs for the process to review human drug applications. PDUFA is designed to assure that user fees collected under the Act are indeed additional resources for FDA to expedite the review of new drug applications.

Under the Prescription Drug User Fee Act of 1992, certain regulatory research activities were supported by user-fee funding. The Agency and the industry negotiated that user-fee funding will no longer support any regulatory research activities under the Prescription Drug User Fee reauthorization. The intent is to devote user-fee resources to application review and information systems. The CBER will phase out its user-fee research FTE by the year 2000. Although user fees will no longer be available to fund research, CBER will maintain a reduced, high quality research program.

The one-third reduction is to the CBER research staff, not total Center staff. The reduction will be phased over three years. At the end of this phase out, CBER will have 79 fewer FTE devoted to research, and no research FTE will be supported by user fees. About half of those 79 FTE will be redirected to application review.

FDA's budget request to Congress for fiscal year 1998 included $820 million for salaries and expenses for the agency's base level of activities in fiscal year 1997, as well as selected program increases. In final action on FDA's appropriations for fiscal year 1998, Congress included an allocation of $24 million for FDA's role in the President's Food Safety Initiative and an increase of $29 million for the Agency's initiative to reduce underage use of tobacco products. Since the final appropriation of $857 million for FDA's salaries and expenses represented additional funding of only $37 million for $53 million in new program activities, it required the Agency to absorb a $16 million reduction to base activities. FDA was required, therefore, to reevaluate the funding needs of its base programs.

FDA has conducted a thorough review of its major program areas to determine where and how reductions could be taken in the current fiscal year to fund new initiatives and pay increased salary and other increased costs. The Agency is determined to fully fund the Food Safety Initiative and the Tobacco Initiative at the program levels requested and appropriated. FDA's plans are described in the operating plan submitted to the Committee in January.

As shown in the operating plan, CBER's salaries and expenses resources for fiscal year 1998 are $96,279,000 and 875 FTE, compared to fiscal year 1997 actuals of $96,256,000 and 861 FTE. The CBER programs are not incurring a disproportionate share of the Agency's reductions. The impact of these reductions on CBER programs will primarily be in the following areas: FDA's work on two action steps of an adult vaccination plan focusing on the recommendations of a 1994 National Vaccine Advisory Committee Report on adult immunization and adult immunization goals and performance measures will be delayed; funding for information systems to track the progress of applications, specifically, the blood logging and tracking system will be reduced; and the review times for non-user-fee applications such as blood and source plasma applications may increase.

The fiscal year 1999 request will fund CBER activities at approximately the same level as in fiscal year 1998. It should also be noted that the fiscal year 1998 operating level reflects an increase of 10 FTE in the field biologics program for increased efforts aimed at ensuring the safety of the blood supply.

Question. Dr. Friedman, it is my understanding that some of the most exciting innovations in medical research and drug development will occur in the coming decade as we travel further into the age of molecular medicine we have now entered. I am informed that these innovative products are likely to need to be reviewed by

the Center for Biologics Evaluation and Research. What are the consequences for the future if we do not provide adequate resources to stabilize the Center for Biologics Evaluation and Research today?

Answer. In the area of biologics, examples of the vast new product types for which there is not prior history or base of knowledge to draw upon include the following: DNA vaccines, gene therapy vectors, manipulated tissues, xenotransplants, and non-red blood cell oxygen carriers. Meeting the tighter review time frames and performance benchmarks required under the Prescription Drug User Fee Act, or PDUFA, requires scientists at the cutting edge of their fields. This requirement is best achieved by having the researcher, who is currently practicing his or her specialty, directly involved in the review of product applications. Thus, there must be an environment which will attract and retain highly qualified researchers who are willing to commit some portion of their time to the regulatory process.

The ability to recognize and anticipate problems before they happen, as well as to respond quickly to crises, requires a cohort of scientists who have active laboratory programs and hands-on regulatory experience. Even with the reductions that have been necessary in fiscal year 1998 in CBER programs, we believe CBER retains a wide range of excellent scientists who can bring laboratory experience to bear on regulatory decisions.

FDA YOUTH TOBACCO INITIATIVE QUESTIONS

Question. I just want to make it clear for the record that the FDA tobacco initiative that is in the budget, the $134 million, is separate from the tobacco settlement and from comprehensive tobacco legislation. In other words, FDA intends to carry out this initiative and can do so even if Congress does not pass an omnibus tobacco bill—provided you have the funding. Is that correct?

Answer. The budget request for FDA's tobacco program for fiscal year 1999 is based upon $134 million being made available to FDA for these activities. These resources are needed to fully enforce the Agency's tobacco rule.

Question. There is a compelling need for a comprehensive approach to reduce teen smoking along the lines of the comprehensive regulation issued by FDA in August of 1996—to reduce both access to and demand for tobacco among youths. We do not yet have fully in place a comprehensive program: it is my understanding that FDA's advertising restrictions have not yet gone into effect. However, a crucial part of the FDA initiative is in effect—setting a national minimum age for sales of tobacco and requiring photo I.D. checks. What is the contribution to public health of expanded funding just for carrying out FDA's youth access restrictions, particularly the minimum age and photo I.D. rules?

Answer. The two access restrictions that are in place today, dealing with age and photo ID, are just one part of a comprehensive set of access and advertising provisions in FDA's final rule. It is the Administration's stated goal that a 50 percent reduction in youth smoking can be achieved when the Agency's final rule has been fully in effect for seven years. It is critical to expand the funding for enforcement of the age and photo ID provisions. In fiscal year 1998, compliance checks will be performed in less than half of the retail outlets that sell cigarettes and smokeless tobacco products in the United States. Expanded funding for these enforcement activities in fiscal year 1999 will help ensure that retailers do not sell tobacco products to minors. This is a vital first step towards accomplishing the objectives of the comprehensive program envisioned under FDA's final rule.

FDA'S ARRANGEMENTS WITH THE STATES

Question. Why is FDA entering contracts with the states instead of using its own personnel for the enforcement activities?

Answer. There are at least 500,000 tobacco retailers in the United States. FDA's limited field inspectional resources simply do not allow the Agency to enforce the tobacco rule by itself. Joint enforcement efforts with the states, using a training, commissioning, and contracting process similar to the tobacco program, have worked quite successfully for mammography, retail food, and dairy farm inspections.

Question. What type of arrangements does FDA have with the states and how is FDA working with the states?

Answer. FDA has established a close and collaborative working relationship with the states to jointly enforce the tobacco rule. For fiscal year 1998, states submit proposals to FDA to conduct compliance checks under contract to the Agency. Proposals are based upon a Statement of Work drafted by FDA and sent to each state last November. State and local officials are trained and commissioned to conduct the compliance checks after each contract is negotiated and awarded. Throughout the

entire process the FDA tobacco team works very closely with the Agency's state partners.

Question. What support does FDA provide to the states? Does enforcement of the FDA minimum age and photo I.D. check rules impose new burdens on the states?

Answer. FDA provides extensive support to its state partners. In addition to the training and commissioning that each state receives, any issue or question that arises is addressed by the tobacco team working in close contact with the state making the inquiry. There are no new burdens imposed on the states by virtue of their participation in the FDA tobacco effort because FDA reimburses the states for their expenses under the negotiated terms of the contract each state signs with the Agency.

Question. Please tell the Committee a little more about what FDA will be able to achieve with the additional funding requested for the tobacco initiative for fiscal year 1999. I assume the additional funding will allow additional compliance checks, but also more education of retailers and of the public. How many retail establishments are you expecting to reach? How many visits a year do you expect to conduct for an establishment? And what will the budget request fund in the way of education and outreach?

Answer. In fiscal year 1998, FDA is focusing most of its outreach efforts on retailer information, continuing its provision of brochures and Question and Answer pamphlets for retailers as well as maintaining a toll-free hotline telephone number for retailers to call to request materials and a WEBsite with similar information. Further, as each new state contracts with FDA to undertake compliance checks, the Agency sends mailing to all retailers in the state to alert them that compliance checks will soon begin in their state. In addition, the Agency has developed and has begun distribution of in-store materials to all retailers answering potential questions, and reminding them of their responsibilities under the rule, and assisting them in compliance; and has begun placing a modest level of advertising in a major market within states in which contracted compliance checks are being conducted.

In fiscal year 1999, the Agency will design a multi-media advertising campaign including radio, print, and billboard advertisements and place these ads in major media markets in every state with which FDA contracts to conduct compliance checks. It will also develop a comprehensive retailer education program which includes a retailer kit containing in-store signs, tent cards, fact sheets, counter mats and other materials; a letter to retailers in each state updating them on the status of compliance checks in their state; a series of reminder postcards that can be posted in the store for customers and clerks to see; trade advertisements in retailer publications; and a toll-free hotline that retailers can call to request additional materials and ask questions. It will continue to have exhibits at major conferences representing state and local health officials, public health organizations, and consumer and retailer organizations educating these audiences about the new tobacco rule.

On the enforcement side, in fiscal year 1998, the Agency is attempting to establish contractual relationships with each state and territory to conduct compliance checks of retail outlets that sell tobacco products. FDA is asking each state to attempt to conduct a minimum of 375 inspections per month. In fiscal year 1999, the Agency plans to commission state officials in all 50 states to perform unannounced inspections of over 500,000 retail establishments to determine if retailers are complying with the law. It will send warning letters to first violators and seek civil money penalties from those found violating the law multiple times. Finally, it will develop an enforcement strategy for national chains.

Question. I want to examine more closely questions about the impacts on retailers of enforcing the minimum age and photo I.D. rules. What are you doing to help retailers comply with the requirements so they do not get sanctioned by FDA?

Answer. The Agency has created an extensive program of outreach to tobacco retailers to ensure that they comply with the new tobacco rule. We fully described the details of this effort earlier. We will provide a full set of all the materials the Agency sends to retailers under separate cover.

Question. Can you walk us through the enforcement process? What happens for successive violations? What are the levels of penalties?

Answer. A retailer that sells a tobacco product to a minor during an FDA compliance check receives a written warning from FDA for a first violation. Escalating monetary penalties are imposed starting with a second violation. The fine for a second violation is $250; $1,500 for a third violation; $5,000 for a fourth violation; and $10,000 for a fifth violation. Retailers are provided an opportunity to contest the penalties FDA seeks to impose, including the right to request a hearing before an administrative law judge.

Question. How much time between compliance checks? Could a retailer be subjected to multiple penalties without having time to correct the problem in the store, for example, through multiple compliance checks and penalties in one day?

Answer. There is no fixed period of time between compliance checks. Typically, a follow-up compliance check in an outlet that previously sold to a minor will occur within three months of the prior inspection. Multiple FDA compliance checks in the same store on the same day will not occur.

Question. Can you describe for the Committee the difference between this FDA initiative and the Synar Amendment rules relating to the Substance Abuse and Mental Health Administration block grants? How are the programs different and why is FDA's initiative needed in addition to the Synar regulations?

Answer. The FDA and Synar programs complement each other. SAMHSA administers the Synar program, which conditions the receipt of substance abuse and mental health block grants on demonstrated tobacco control activities at the state level. The Synar program requires the states to monitor retailer sales to minors. By contrast, FDA has begun to enforce a mandatory federal regulation that prohibits the sale of cigarettes and smokeless tobacco products to minors.

The FDA access restrictions are just one part of a comprehensive agency regulation which, when fully in effect, will restrict the availability and the appeal of tobacco products to minors. The key difference is that SAMHSA measures compliance with tobacco control, and FDA enforces a comprehensive regulation.

QUESTIONS SUBMITTED BY SENATOR BYRD

SAFETY OF IMPORTED FOOD ACT

Question. Chairman Cochran, Senator Bumpers, members of the Subcommittee, and Lead Deputy Commissioner, Dr. Michael A. Friedman, I am pleased to be here today to review the Food and Drug Administration's (FDA) programs. The FDA is the responsible federal agency for carrying out policy that protects the health of the nation against impure and unsafe foods, drugs, and cosmetics, as well as other potential hazards. While the FDA's mission is broad in scope, I will limit my questions to the safety of imported food, the Office of Generic Drugs, and the Food Packaging Pre-Market Notification System.

One of the rewards that this nation enjoys as a result of its prosperity is the virtual smorgasbord of foods available to every consumer. However, this smorgasbord has the potential to become the literal poison pill, with outbreaks of foodborne illnesses raising alarming questions about the safety of the U.S. food supply. Not only are Americans getting sick from eating contaminated food, but an estimated 9,000 deaths occur annually in this country as a result of foodborne illnesses.

To ensure the safety of imported fruits and vegetables, and other imported food, I cosponsored S. 1707, the Safety of Imported Food Act. S. 1707 would provide the FDA with new authority that would allow the agency to prevent the importation of foreign goods grown and processed under conditions that do not meet U.S. food safety standards. These conditions include everyday production and processing practices, where microbial contamination can occur—and where it often begins. In brief, S. 1707 would greatly enhance the FDA's ability to identify potential food safety hazards before people get sick.

Would you please provide answers to the following questions: since the FDA already has the authority to detain products offered for import, why does the FDA need the authority provided under S. 1707?

Answer. Current law provides FDA with authority to refuse entry if, after inspection or testing of imported products at the border, or as a result of other information, the Agency finds that the food appears to be unsafe or otherwise violates U.S. law. Experience has shown, however, that inspection and testing of products at the border may not be sufficient in all cases to ensure the safety of food products. In addition, it may be necessary to identify and inspect the source of potential contamination to ensure that products offered for sale in the United States meet domestic food safety requirements or otherwise achieve the level of protection required. FDA currently has such authority but only with respect to domestic production.

This new provision adds to the Federal Food, Drug, and Cosmetic Act, FD&C Act, a principle that has been reaffirmed in the World Trade Organization, WTO, agreements on food safety. This agreement recognizes the right of signatory countries to set the level of protection each country deems appropriate for the health and safety of its citizens, and to exclude imported foods that do not meet their domestic food safety requirements or otherwise achieve the appropriate level of protection. The FD&C Act currently does not explicitly include this concept.

Question. What would be the effect of S. 1707 on FDA's existing authority over imported food?

Answer. Current law provides FDA with authority to refuse entry if, after inspection or testing of imported products at the border or as a result of other information, the Agency finds that the food appears to be unsafe or otherwise violates U.S. law. S. 1707 would give FDA the authority to evaluate the food safety systems, conditions, or measures in which an imported food was prepared, packed or held; if such conditions, systems, or measures do not meet U.S. requirements or otherwise achieve the U.S. level of protection, a food may be deemed adulterated and denied entry.

This new provision adds to the Federal Food, Drug, and Cosmetic Act (FD&C Act) a principle that has been reaffirmed in the World Trade Organization, WTO, agreements on food safety. This agreement recognizes the right of signatory countries to set the level of protection each country deems appropriate for the health and safety of its citizens, and to exclude imported foods that do not meet their domestic food safety requirements or otherwise achieve the appropriate level of protection. The FD&C Act currently does not explicitly include this concept. The effect of S. 1707 would be to provide the authority needed to ensure that all imported food products meet the U.S. level of protection and also is consistent with rights and obligations under international trade agreements, and would provide FDA with another effective enforcement tool.

Question. Does this legislation conflict with U.S. obligations as a member of the World Trade Organization (WTO)?

Answer. S. 1707 is consistent and will not conflict in any way with U.S. obligations as a member of the World Trade Organization, WTO. Rather, S. 1707 is consistent with the right recognized in one of the WTO agreements, the Agreement on Sanitary and Phytoganitary Measures, that each member nation has the right to maintain its appropriate level of protection. The purpose of S. 1707 is not to restrict trade but to assure that U.S. consumers are as protected from harmful imports as they are from harmful domestic products. Current law provides FDA with authority to refuse entry if, after inspection or testing of imported products at the border or as a result of other information, the Agency finds that the food appears to be unsafe or otherwise violates U.S. law. Experience has shown, however, that inspection and testing of products at the border may not be sufficient in all cases to ensure the safety of food products.

Question. I note that the President's budget proposes the inclusion of approximately $25 million in the FDA's fiscal year 1999 budget to provide the necessary resources to implement the goals of S. 1707. If these funds are provided in the fiscal year 1999 Agriculture Appropriations Bill, what progress will the agency be able to make in implementing the authority provided under S. 1707 in fiscal year 1999?

Answer. The funding included in the fiscal year 1999 budget request would provide, among other things, better assurances that domestic and imported fresh fruits and vegetables are safe. However, this funding is not dependent upon passage of the legislation. The funding and the legislation are inter-related but not interdependent. Passage of the legislation would provide FDA with a powerful tool toward improving the safety of imports, but the activities planned with the proposed funding can move forward even without enactment, as the legislation is budget neutral.

OFFICE OF GENERIC DRUGS

Question. Mr. Chairman, I am also interested in the FDA's Office of Generic Drugs (OGD). The generic drug industry, including Mylan Laboratories, Inc., headquartered in West Virginia, has alerted me that consumers and all purchasers of pharmaceutical products, including the federal government, could realize substantial savings if the FDA adhered to its statutory deadline for the OGD to review generic drug applications, known as Abbreviated New Drug Applications (ANDA), within 180 days.

I understand that a backlog of pending generic drug applications continues in the OGD. Why is the FDA exceeding the statutory requirement that ANDA's receive final agency action in six months?

Answer. The agency makes every attempt to meet the 180 day generic drug application review requirement; however, for a number of reasons it is not always possible to do so.

FDA considers either an approval or disapproval be a final action on any Abbreviated New Drug Application (ANDA). After receiving a disapproval action, manufacturers frequently resubmit applications that address the deficiencies indicated in the disapproval action.

Approval times reflect both time with the agency reviewing applications as well as time with the sponsor or applicant responding to deficiencies noted by FDA reviewers. The time spent in FDA is measured by "review cycles". A cycle starts when an application is filed by FDA and ends when the agency issues an "action letter." Generally these letters communicate to the sponsor that their application is approved or not. If not approved, the sponsor is provided with the reasons why and has an opportunity to submit information needed to address these deficiencies. When this information is received a new cycle begins.

Generally, approval time is comprised of multiple "review cycles," as well as time between cycles when the applicant is responding to FDA's comments. However, there have been applications approved after the first "review cycle." However, we believe there are some primary factors that impact our ability to review ANDA's within 180 days.

First of all, the number of employees assigned to the Office of Generic Drugs has remained fairly constant while the number of original ANDA submissions has increased over 40 percent since 1994.

Secondly, the activities of the Office of Generic Drugs (OGD) are entirely funded through appropriated funds. This means that OGD receives no additional funding from industry under the Prescription Drug User Fee Act (PDUFA) to support the hiring of additional staff. Therefore, resources are based on traditional appropriations and cannot rely upon additional resources made available through PDUFA.

Lastly, included on the review clock are times that the Food and Drug Administration need to determine if the manufacturing site(s) are in compliance with current good manufacturing practices (cGMP's) and time for statistical and clinical consult.

Question. Please provide a list of ANDA's that are currently being delayed because of an outstanding scientific or regulatory bioequivalence issue.

Answer. The types of drug products that may take longer to review are nonsystemically absorbed drug products that require more extensive bioequivalence testing methodology and others that raise especially complex scientific issues. Information regarding whether an ANDA is undergoing review by the agency is proprietary information, and is generally not disclosable. FDA can only disclose this information to Congress in response to an authorized request from the Committee Chairman.

Question. Please provide the names, or the types of products, as well as the mean time of the applications pending before FDA.

Answer. As mentioned earlier, we may not disclose the specifics of the pending ANDA's without an authorized request from the Committee Chair. However, the types of drug products that may take longer to review are nonsystemically absorbed drug products that require more extensive bioequivalence testing methodology and others that raise especially complex scientific issues.

The Office of Generic Drugs does not routinely monitor the mean time of pending applications. However, at the end of fiscal year 1997, there were 515 pending ANDA's, including 106 pending for more than six months. Overdue applications are ANDA's that have been pending more than 180 days.

Question. How many of the outstanding issues on scientific or regulatory bioequivalence were raised by citizen petitions?

Answer. The Agency receives numerous Citizen Petitions and other challenges each year regarding scientific or regulatory bioequivalence issues. There are approximately a dozen of these Petitions and other challenges currently being evaluated by the Office of Generic Drugs (OGD). Each Petition and challenge is carefully reviewed and responded to, and any related ANDA's are carefully evaluated based on the issues raised in the Petition. However, as we discussed earlier, the Office of Generic Drugs (OGD) is not allowed to specifically discuss ANDA's pending before the Agency.

Question. The FDA reported to industry last year that a program was initiated in fiscal year 1996 to release bioequivalence protocols and protocol reviews to the public. Has this program reduced OGD's protocol workload and resulted in more time for work on reviews?

Answer. The inception of the initiative to publicly release bioequivalence protocol reviews resulted in OGD's issuance of 40 protocols to date, 34 of which were issued in fiscal year 1997. This initiative has reduced the total number of protocols received by the Office from 153 in fiscal year 1995 to 60 in fiscal year 1997. Consequently, OGD's bioequivalence reviewers and support staff now have more time to devote to the review of ANDA's.

PREMARKET NOTIFICATION SYSTEM

Question. With regard to the Premarket Notification (PMN) System, the PMN provisions of the FDA Modernization Act of 1997 are intended to expedite introduction of advance food packaging materials while assuring the protection of public health. PMN has a significant impact on the Kanawha Valley Union Carbide plant in West Virginia, and I have the following questions. The FDA reform legislation that Congress enacted last year included a streamlined regulatory process for approving food contact materials. It appears that this agreement was a substantial factor in securing passage of section 309 of the new law. Am I correct that industry and the FDA were in agreement on the basic concept of this pre-market notification plan for food contact substances?

Answer. Yes, prior to enactment of the FDA Modernization Act, agency personnel discussed the elements of a premarket notification system for food contact substances with industry representatives, and it is correct that the Agency is in agreement with the basic concept. However, FDA's agreement to the program was explicitly conditioned on its receiving adequate funding through user fees; however, that portion of the program was not enacted.

Question. The language of the new statute requires that the FDA report to Congress by April 1, 1998, on the estimated cost for carrying out the food contact substance notification program. How far along is the Agency in preparing this report?

Answer. We have a draft document that is now being circulated within the Agency for clearance. We plan to submit this report to the Department for their review shortly. With support from the Department, we are trying to expedite the process as much as possible. However, assembling this initial report and ensuring the soundness of the estimate took longer than anticipated.

Question. On the basis of this evaluation, do you believe the Agency will indeed need additional funding to implement the food-contact substances notification program as originally expected by the House and Senate Conference Committee Members for the FDA reform legislation?

Answer. No increase was included in the fiscal year 1999 request, as we were still reviewing the impact of this program. We are in the process of completing our report, as required by the FDA Modernization Act, which will provide our estimate as to the costs of this program.

This concludes my questions, Mr. Chairman, and I look forward to working with you, the Ranking Member, and other Subcommittee members in conjunction with the Lead Deputy Commissioner, on these important issues confronting the FDA.

QUESTIONS SUBMITTED BY SENATOR LEAHY

GENERIC DRUGS

Question. The Administration's fiscal year 1999 budget justification document indicates that $34,883,000 and 351 Full Time Equivalents (FTE's) were devoted to FDA's generic drug program in fiscal year 1998. I understand that approximately $8,500,000 and 127 FTE's were allocated specifically to the Office of Generic Drugs (OGD) for fiscal year 1998. Where do the other 224 FTE's work and how does the FDA spend the remaining $26,383,000? Please provide the specific FDA offices outside the OGD that will receive fiscal year 1998 generic drug program monies, detailing the dollar amount and FTE number for each recipient office.

Answer. Of the 351 FTE providing support to the Generic Drugs program, 127 are located within the Office of Generic Drugs; 105 are elsewhere within the Center for Drug Evaluation; and 119 are located in the Office of Regulatory Affairs. The cost of the support provided by these offices are spent on salaries and operating expenses. We are happy to provide the breakout of support for the Generic Drugs program within the Center for Drug Evaluation for the record.

[The information follows:]

Office	FTE	Estimated costs
Office of Center Director	7	$824,000
Office of Management	7	925,000
Office of Information Technology	8	942,000
Office of Training & Comm.	8	942,000
Office of Compliance	26	3,062,000
Office of Review Management	26	3,062,000

Office	FTE	Estimated costs
Office of Pharm. Science [1]	23	2,710,000
Total	105	12,367,000

[1] Excludes Office of Generic Drugs.

Dollars are rounded.

Since publication of the 1999 budget justification document, the Office of Generic Drugs staff has increased from 127 to 133 for fiscal year 1998. The FDA Operating Plan also estimates the funding level for the Office at $9,693,000.

Question. I am concerned about the backlog of pending applications for Abbreviated New Drug Approvals. According to the generic drug industry, about half of all drug prescriptions are filled with generic versions of the prescribed drug, and a generic typically enters the market 30 percent below the brand price. Within a couple of years, the generic industry predicts that the generic drug price may decline to 60 to 70 percent of the brand price. Long delays in an Abbreviated New Drug Application costs consumers and the government millions of dollars. I know that FDA has been trying to reduce the backlog of Abbreviated New Drug Applications. I would like to know what steps FDA is taking to continue making progress against the backlog.

Answer. The Office of Generic Drugs (OGD) defines backlog as being all applications pending review. This includes applications that are pending less than 180 days, and application pending greater than 180 days or called "overdue" applications. At the end of fiscal year 1997, there were 515 pending ANDA's, including 106 pending for more than six months. Either approval or disapproval of an ANDA is considered by FDA to be a final action. We make every attempt to meet this requirement; however, for a number of reasons it is not always possible to do so. After receiving a disapproval action, manufacturers frequently resubmit applications that address the deficiencies indicated in the disapproval action.

Of the 515 applications pending at the end of fiscal year 1997, 106 were overdue.

FDA has specific initiatives with the goal to reduce the backlog and decrease overall time to approval.

OGD has begun sending the review comments and/or deficiencies to applicants via facsimile. Prior to communicating via facsimile, all deficiencies were sent through the U.S. mail. Communicating deficiencies by facsimile can save several days in each review cycle. Additionally, for most minor issues, applicants are able to submit their responses via facsimile. If a fax response is received from an applicant within 30 days, the reviewer will then complete review of that application. Previously, responses to minor amendments were placed in a queue and reviewed within 60 days. Based on the reason for the deficiency, a small number of minor amendments continue to be placed in a queue for review. The Office believes that this new procedure has improved communications with applicants and has helped to reduce overall time to approval.

The Office has been working with firms to facilitate the electronic submission of data (ESD) used to support bioequivalence studies. This is also referred to as the bioequivalence/bioavailability database. The ESD format contains the core information from a bioequivalence study and allows raw data to be accessed for further analysis. Reviewers can compile a review by using efficient word processing tools and query functions to expedite the review process. In addition, ESD allows reviewers to instantly check individual data without manually searching pages of hardcopy data. These functions save review time and improve the quality of reviews. Nine electronic submissions have been received to date for this program, with four during fiscal year 1997. Also, OGD has begun accepting submissions of similar chemistry, manufacturing and controls data for beta testing. It is anticipated that this electronic submission will also provide a more efficient means of review.

Also, OGD initiated a process of providing pen and ink changes to proposed labeling rather than preparation of a detailed narrative letter. This reduces the time required for drafting and finalizing letters, and provides for a faster labeling review process.

The Office continues to utilize overtime for the reviewers in a effort to help reduce cycle times and improve approval times.

The Office has hired a Medical Officer to facilitate timely review of ANDA's with bioequivalence studies with clinical endpoints. In the past, these complicated studies were consulted to Medical Officers in the Office of Review Management (ORM) for review. Responses to these consults were often delayed due to Prescription Drug

User Fee Act (PDUFA) priorities in ORM. Evaluation of these studies by an OGD Medical Officer has permitted more timely completion of the review process.

The Office also initiated a procedure to contact applicants that undergo two or more major deficiency cycles. Applicants are requested to contact OGD for discussion or clarification regarding the deficiencies. If OGD is not contacted, the Office will call the applicant within 30 days to see if any further discussion, or perhaps a meeting, is necessary. OGD is attempting to provide guidance to applicants and reduce or eliminate additional review cycle, thus moving applications to approval more quickly.

The Office issued a Manual of Policies and Procedures entitled: "Procedure for Public Release of Bioequivalence Protocols and Reviews." Firms frequently submit proposed bioequivalence protocols to OGD. Often these are duplicates of already submitted and reviewed protocols. In order to decrease the burden of reviewing several protocols for the same drug product, OGD is now making available copies of acceptable protocols and related review comments. OGD believes that by utilizing completed review comments, firms will need to submit fewer protocols, freeing time for reviewer evaluation of applications.

Since the inception of the initiative to publicly release bioequivalence protocol reviews, 40 protocols have been issued to date, 34 of which were issued in fiscal year 1997. Making these protocols publicly available reduced the total number of protocols received by the Office from 153 in fiscal year 1995 to 60 in fiscal year 1997, since multiple protocols for the same drug no longer require individual review. This initiative has also reduced the need to develop Biopharmaceutic Guidances to the same extent as before. These guidances are now developed only for drugs products with special/unique bioequivalence issues.

The Office has identified and started development of several Biopharmaceutic Guidances for drugs products with special/unique bioequivalence issues predicted to be the subject of multiple generic drug application submissions during the next few years. It is anticipated that this proactive guidance program will reduce the review time for the selected drug products, thus reducing the number of overdue applications. One revised guidance was issued in fiscal year 1997. Eleven others are being developed and are expected to be issued in fiscal year 1998.

Chemistry review branches with a significant actual or predicted backlog have been reassigning reviews in accordance with Office procedures to other branches with lower workloads in an effort to reduce the number of overdue applications and supplemental applications.

The Office implemented a policy on "Substitution of an Alternate Source of the New Drug Substance in Unapproved Abbreviated Applications." Previously, if a generic drug application was otherwise approvable with the exception of an unsatisfactory current good manufacturing practice (cGMP) inspection for the primary new drug substance (NDS) supplier used to manufacture the exhibit/bioequivalence batch, it would not be approved until those cGMP issues were resolved. In order to qualify an acceptable alternate source, a new exhibit batch based on the alternate source would be needed. Additionally, a bioequivalence study would be required, depending on dosage form to support use of the alternate source. For unapproved applications OGD now allows substitution of an alternate source of the NDS based on assurance that the specifications and test data are essentially the same as those of the original source used in the exhibit batch and bioequivalence study if required, provided that the original source would have been acceptable except for cGMP issues. Generally, a new in vivo bioequivalence study will not be required for the alternate exhibit batch, but it will be necessary to provide comparative dissolution data depending on the dosage form of the proposed product. This new policy should reduce approval times in certain situations.

In addition, to facilitate streamlining, improve review and approval times, and increase communication with applicants, OGD will continue to issue letters to the generic drug industry and hold meetings with the three generic drug trade associations: the Generic Pharmaceutical Industry Association (GPIA), the National Association of Pharmaceutical Manufacturers (NAPM), and the National Pharmaceutical Association (NPA).

We do not believe, however, that the number of pending applications is likely to be reduced substantially, due to two factors. As previously stated, OGD has established a facsimile program for communicating deficiencies to applicants. If the applicants respond to the minor deficiencies within 30 days, the OGD reviewers will then complete review of the applications rather than issuing a deficiency letter that closes the review cycle. This program has significantly contributed to the reduction in approval times, but does increase the number of pending ANDA's (including overdues) as the reviews are kept in pending status until the firms respond and the reviewers complete their reviews. Traditionally, the process just described was con-

ducted in two shorter cycles which reduced the number of overdue applications but increased the overall time to approval. The other factor is that the number of original applications submitted to OGD has increased from 300 ANDA's received in fiscal year 1991 to 462 ANDA's received in fiscal year 1997. Staffing has remained relatively constant during this period.

As we mentioned earlier, review cycles comprise FDA's portion of overall approval times. The reduction in the number of cycles has subsequently resulted in reduced overall approval times. We will provide this information for the record.

[The information follows:]

APPROVAL TIMES

[In months]

Fiscal year	Median	Mean
1995	28.2	35.3
1996	24.7	33.2
1997	19.6	25.6

The reduction in review cycles and overall approval times enabled FDA to continue the increasing yearly approval trend for abbreviated applications.

Fiscal year	*Total ANDA's approved*
1991	141
1992	239
1993	215
1994	255
1995	288
1996	340
1997	404

Question. How many FTE's are currently assigned to review generic drug applications?

Answer. As of April 1, 1998, 133 FTE have been assigned to OGD.

Question. How many FTE's would be needed to meet FDA's statutory requirement to approve generic drug applications within 180 days?

Answer. The statutory requirement is to review generic drug applications within 180 days. A review may result in an approval or not approval action.

However, provided there is a steady submission rate of original ANDA's, the Office estimates that it will need approximately 75 additional FTE to review the majority of applications within 180 days. There will always be a few applications that cannot be reviewed within 180 days due to complicated scientific issues or other barriers outside the direct control of OGD. In addition to these FTE, other parts of the Food and Drug Administration that support the generic drug review program will need additional FTE, such as the Office of Regulatory Affairs and the Office of Compliance.

Question. I have been informed that the report to the President on food safety showed that FDA was in "critical condition" with respect to its food safety inspection functions, and that the agency regulates 53,000 plants and has an average inspection frequency of once every 10 years. Are food plants currently required to register? If not, how does the agency know who to regulate? Would registration of food processors help the agency to conduct more frequent food safety inspections?

Answer. Food plants are not required by law to register with the FDA. The only exceptions are producers of Acidified and Low Acid Canned foods, which are required to register and file scheduled processes with the Agency, and Infant Formula producers which are required to notify the Agency prior to initial product marketing or major changes in formulation.

The Agency maintains an inventory of food processing establishments that are subject to our jurisdiction. This inventory is maintained in a variety of ways to include reviewing industry data bases, such as Booz-Allen and Hamilton directories, reviewing product labels, and following-up to industry/consumer complaints and inquires.

Requiring food processors to register with the Agency may provide FDA with more complete and up-to-date information on firms that go out of business or begin food production. However, such a system will require the allocation of additional resources both for the maintenance of the system as well as the verification of the accuracy of data in the system. We believe that given other priorities for scarce re-

sources, the current inventory maintained by the Agency provides a reasonably accurate database of food producers in the U.S.

Question. I have been informed that the FTE's dedicated for food safety inspections average only about 17 inspections per year. Why so few? What can be done to increase the effectiveness of the inspection program?

Answer. While it is true that the number of food inspections per investigator per year, now at 17, has been steadily declining for the last few years, there are a number of factors that impact this situation. FDA Consumer Safety Officers, also called CSO's, or inspectors, are employed to engage in a variety of consumer protection and enforcement activities. While inspections and sample collections are the most frequently mentioned and easily counted output activities, investigational personnel historically do many other tasks and have taken on additional responsibilities consistent with reinvention initiatives that while they are not output measures as such, are important to the outcome goal of a safe food supply.

First, the kind of inspections conducted by FDA investigators has changed over the years. Because of changes in the food supply with more ready-to-eat foods and increased pathogens, FDA conducts fewer sanitation inspections and more microbiological inspections. These microbiological inspections take longer to conduct and, when combined with constant turnover in Consumer Safety Officers, have a negative impact on the number of inspections per CSO per year.

Moreover, CSO's conduct activities under at least 14 established categories, only one of which is factory inspections. Besides inspections, Consumer Safety Officers perform such tasks as sample collections, audit checks, recall follow-ups, and provide training and technical assistance. For example, food safety checks of establishments made after a natural disaster are not reported as inspections but rather investigations, as are epidemiological trace backs after a food borne illness outbreak, for example lettuce contaminated with E-coli. Consumer complaint follow-up, and incidents associated with food allergens also consume FDA investigator time, none of which is associated with output measures and all of which take away from time to conduct inspections. FDA Consumer Safety Officers are not assigned to inspect individual plants in a local duty station day after day as are some inspectors in other agencies. Rather, FDA investigators travel great distances to inspect a wide variety of food processing plants.

Food safety inspections are also performed by state authorities under contract to FDA and in partnership with FDA. As such, FDA investigators provide assistance, training and oversight to these food safety activities. While these activities are not output measures and not routinely reported as inspectional time, they do leverage FDA inspection resources in the foods area. In recent years, as the number of field management and support personnel has declined, more investigator time has had to be devoted to industry assistance in the form of meetings and presentations, training of industry employees, and pre-operational process reviews that provide manufacturing guidance to company officials to better enable them to comply with FDA regulations.

All of the preceding are examples of activities that FDA Consumer Safety Officers must do besides conduct inspections. While most are not output oriented, all are important in assuring consumer protection and a safe food supply. Nonetheless, we believe there are a number of areas that can be examined and modified or re-engineered to provide our investigators more time to conduct inspections and thereby increase the total number of inspections conducted in a year. For example, we plan to initiate efforts to shorten in-plant times by conducting more directed inspections of certain products or processes and increased monitoring of in-plant time by supervisors. We will also review the requirements of written inspection reports for non-violative establishment inspections, and increase our use of abbreviated inspection reports or checklists. We will also look for innovative ways to collect food samples rather than relying on our investigators.

Question. Last year, the Committee supported increased funding for FDA to implement the President's Food Safety Initiative. I have been informed that a portion of that money, $8 million was dedicated to hiring 80 new seafood safety inspectors to help with the implementation of the new HACCP program. Why does each food safety inspector cost $100,000?

Answer. The $8 million of Food Safety Initiative, or FSI, funds for fiscal year 1998 are supporting more FDA field activities than just the payroll and benefits costs of 80 investigators. The average salary and benefits per inspector is estimated at $70,000, for a total of about $5.6 million. In addition to salaries and benefits, these funds support the costs of training and outfitting these new FTE with equipment. FSI funds also pay inspectional travel costs, the costs of purchasing products that the agency wishes to sample, packing and shipping samples to laboratories, as well as the costs for analyzing samples and identifying pathogens, if any are found. The

inspection activities supported include implementing the HACCP regulations, and applying HACCP principles to retail food service operations. These funds are also supporting Federal/State Partnerships to ensure consistency in HACCP techniques, enhanced coordination, and communication between the FDA and the State regulators.

Question. I have been informed that the FDA implemented a new program to improve the safety of seafood products last December. How is the agency enforcing the program for our trading partners?

Answer. FDA has a three-part strategy for enforcement of the seafood HACCP program. We plan to continue FDA's traditional sampling program at ports of entry; inspect importers to verify that they are meeting their obligations under the seafood HACCP program; and develop HACCP-based equivalence agreements with U.S. trading partners that are found to meet the U.S. level of protection for seafood safety.

Importers would have an obligation to take "affirmative steps" to ensure that the products they are importing meet U.S. HACCP requirements. Importers must keep records of their affirmative steps. Inspections of importers have begun. FDA has scheduled over 1,500 audits of paperworks for imported seafood products for the first year. Under the FDA seafood HACCP program, importers will be able to meet their affirmative steps obligations by importing from countries with which FDA has an equivalence agreement for seafood. FDA will never have the resources to inspect the many thousands of foreign processors that ship to the U.S. from over 135 countries. Where equivalence is determined to exist, the foreign government performs the inspections and FDA verifies that the government's regulatory system achieves the U.S. level of protection. FDA has received inquiries from over 30 countries seeking equivalence determinations. The determination process is rigorous and can take at least a year per country. FDA expects the first determinations of equivalence to occur this year.

Question. How did FDA reach the conclusion that the seafood HACCP systems could operate without any laboratory verification to ensure that the plans are operating effectively?

Answer. The seafood HACCP regulations do not mandate laboratory verification but they do list it as an option. There are several reasons for this policy. FDA's seafood HACCP program is designed to rely on preventive measures that have been scientifically determined to work. It is well established, for example, that pathogens can be destroyed by cooking at specific temperatures for specific times. If a HACCP system that involves cooking is able to consistently maintain the scientifically established temperature and time, the outcome is essentially assured. The original creators of HACCP used this concept of scientifically established preventive controls to replace expensive end-product testing as a means of determining whether a food is safe.

FDA's Fish and Fishery Products Hazards and Controls Guide is essentially a compendium of scientifically established preventive measures. Processors are free to take measures other than those recommended in the Guide, but they must be able to demonstrate that their measures are equivalent from a safety standpoint. This demonstration may well involve laboratory verification. It is worth noting that the Guide is receiving international recognition. For example, the Canadian seafood regulatory program has informally adopted it and it is being translated into other languages for use in a number of countries.

FDA was persuaded by the comments received on the seafood HACCP proposal, such as those from the American Society for Microbiology, that end-product testing has limited value in measuring the success of a HACCP system. A considerable amount of testing beyond what can reasonably be required, would be needed to verify a HACCP system with anything approaching full confidence.

Nonetheless, FDA continues to take samples as part of its overall verification strategy for seafood HACCP. It continues to take "for cause" samples as warranted, and also now takes "HACCP verification" samples under certain circumstances to determine the relationship between compliant HACCP systems and safe products. Additionally, the Seafood HACCP Regulation does require other forms of verification, including, record review, calibration of process control instruments, and periodic reassessment of the hazard analysis and HACCP plan.

Question. Does FDA have any plans to make their HACCP programs consistent with the one developed by USDA for use on meat and poultry products?

Answer. At its core, HACCP involves the application of seven internationally recognized principles that collectively provide for a system of preventive controls for food safety. Both FDA and USDA HACCP regulations require the seven principles with only minor variations. In that respect, the programs are highly consistent. Those differences in detail that do exist are essentially attributable to differences

in circumstance, such as the nature of the industry, or the nature of the inspection program.

Beyond that, there are differences in implementation and in program design outside of the basic seven principles of HACCP that are due to differences in the nature of the hazards and the controls for those hazards. For example, the majority of seafood is harvested from wild fish populations while the majority of meat and poultry is obtained from a more controlled and crowded farm environment. The regulatory strategy for seafood will inevitably be different in this regard than that for beef and poultry. These differences should not be interpreted as inconsistencies between programs. For the same reason, it should be expected that there will be differences in detail between the FDA seafood HACCP program and future FDA HACCP programs for other commodities.

Question. Has the rate of imported food products increased in the last few years?

Answer. Yes, the rate of imported food entries has doubled over the past seven years, and based on recent trends, we expect at least a 30 percent increase in imported foods by 2002. FDA focuses its examination of import entries on products that have a history of violations, or which have a high potential for pathogen contamination, or which are epidemiologically associated with illness. As international trade in food increases, and FDA's resources have been reduced, FDA's examination of imported foods has declined from an estimated 8 percent in fiscal year 1992 to less than 5 percent in fiscal year 1997. Based on FDA data, in fiscal year 1997 there were over 2.5 million "entry lines" of FDA regulated foods imported into the U.S.—an entry can contain several different "lines" of distinct products that must be evaluated separately—and processed through its automated system for imports, OASIS, or the Operational and Administrative System for Import Support. This does not include a substantial number of informal food entries valued at $1,250, which is to be raised to $2,000 effective July 2, 1998, or less that may not be processed through OASIS. As food entry lines have dramatically increased, and FDA resources have declined, the number of entries examined by FDA has declined substantially. It is clear that the increase in imported food products has made maintaining an effective import inspection and sampling program more difficult.

Question. What impact has this had on your import inspection program?

Answer. Prior to the development of FDA's import system, OASIS, FDA did not have an automated system for accurately determining the number of import entry lines it reviewed and relied on U.S. Census data. "Entry lines" is a more realistic way of determining the volume of imports which FDA must evaluate. Since each entry could contain more than one "line" of FDA regulated foods—on average each formal entry contains 1.7 lines—the number of entries underestimates the challenge posed in maintaining an effective import inspection system.

The increase in imported food products has had an effect in several areas on our import inspection program. For example, as international trade increases, and emerging pathogens, sometimes unique to particular environmental niches not normally found in the U.S., become associated with foods, our ability to rapidly develop effective detection methodology has been increasingly challenged. Food safety research is critically needed to develop the means to identify and characterize more rapidly and accurately foodborne hazards, to provide the tools for regulatory enforcement, and to develop effective interventions that can be used as appropriate to prevent hazards at each step from production to consumption.

The President's Food Safety Initiatives include a focus on imported products. This will address many of the deficiencies in FDA's current import program by directing resources toward the source and point of origin of foreign produce.

FDA, along with USDA, and EPA, is working directly with many foreign countries to enhance the food production system and regulatory oversight infrastructure of these countries to better ensure that exports meet U.S. standards. The U.S. provides technical assistance to help correct deficiencies in production practices or foreign monitoring and enforcement programs. In addition, the U.S. serves in leadership positions in international food safety standard-setting organizations.

In response to the increase in imported products, FDA also plans to expand the number of mutual recognition agreements, also called MRA's, with trading partners and will continue to review and evaluate ways to increase coverage of imports.

CONCLUSION OF HEARINGS

Senator COCHRAN. That concludes the hearings. The subcommittee will recess and reconvene at the call of the Chair.

[Whereupon, at 12:08 p.m., Tuesday, March 31, the hearings were concluded and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1999

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

MATERIAL SUBMITTED BY AGENCIES NOT APPEARING FOR FORMAL HEARINGS

[CLERK'S NOTE.—The following agencies of the Department of Agriculture and one related agency did not appear before the subcommittee this year. Chairman Cochran requested these agencies to submit testimony in support of their fiscal year 1999 budget request. Those statements follow:]

DEPARTMENT OF AGRICULTURE

DEPARTMENTAL ADMINISTRATION

PREPARED STATEMENT OF PEARLIE S. REED, ACTING ASSISTANT SECRETARY FOR ADMINISTRATION

Mr. Chairman and Members of the Subcommittee, I am pleased to report on current accomplishments and present the 1999 budget request for Departmental Administration, Agriculture Buildings and Facilities, and Hazardous Waste Management. The 1999 budget request for Departmental Administration affects each of USDA's staff offices, and will provide the level of support and accountability required to ensure that all USDA employees treat co-workers and customers fairly and equitably and with dignity and respect. Over the paste twelve months, we have set the stage for being able to make this assurance.

MAJOR CIVIL RIGHTS ACCOMPLISHMENTS

I will provide you with copies of the one year implementation report, "Civil Rights at the United States Department of Agriculture: One Year of Change" which outlines in detail the implementation status of the February 1997 Civil Rights Action Team (CRAT) Report. We have started to implement 90 of the recommendations. Today, I would like to note some of the highlights of this report.

Since January 1, 1997, USDA has settled or closed 224 of the 1,088 program discrimination complaints in the backlog, including some cases which dated back to the mid-1980's, and has closed another 5 cases filed since then. The current program complaint backlog will be completely eliminated in fiscal year 1998. New complaints received by the Department will be brought to the point of adjudication within 180 days of their filing.

USDA re-established the program complaints investigation unit in the Office of Civil Rights. The unit is working with the Department of Justice, the White House and the Federal Courts in an effort to resolve the class action suit filed by the Black farmers late last summer.

Of the 2,091 employee complaints that were active on January 1, 1997, nearly half—905—have been resolved, and we have closed another 10 cases filed since then.

USDA has established a new position within the Office of the General Counsel—the Associate General Counsel for Civil Rights—to provide additional legal resources

needed to assist with resolution of future program and employee complaints in accordance with civil rights laws.

Agency Heads are being rated each quarter on their civil rights accomplishments by the Assistant Secretary for Administration. All managers and employees from the Subcabinet to the field level will be held accountable for civil rights. Allegations of reprisal and abuses of power by USDA employees will be immediately investigated, and where the allegation appears meritorious, the official will be removed from managerial duties pending full investigation. Disciplinary action will be taken against any manager found guilty of reappraisals against any USDA employee or customer.

In April 1997, USDA halted all pending foreclosures of USDA farm loans until a review of each case could be made. An independent review team in Washington, D.C. reviewed 3,148 pending foreclosures. We halted actions in 116 cases, pending investigations of possible civil rights violations. USDA has now directed each state to appoint a diverse Civil Rights Independent Review group, representative of the state's population, to review each case and future cases to determine if discrimination or inequitable treatment contributed to the failure of each farming operation.

On August 22, 1997, the Office of Outreach was established to provide Department-wide leadership and coordination to assure that all eligible customers have access to USDA programs and services and to administer the Socially Disadvantaged Farmers Outreach Program. Authorized by Section 2501 of the Food, Agriculture, Conservation, and Trade Act of 1990, the program is designed to assist socially disadvantaged farmers and ranchers to participate in USDA programs and be successful in their operations by providing outreach and technical assistance. The 1999 budget proposal would provide $10 million for this program in direct funds, an increase of $7 million, rather than continuing to rely upon additional funding from the Fund For Rural America.

A 30-member National Commission on Small Farms has made recommendations to Secretary Glickman for a national strategy for small farms and ranches that will help ensure economic viability and address the rapid decline in the numbers of minority farmers and ranchers. The Deputy Secretary will head a task force to implement the Commission's recommendations.

USDA has instituted new human resources management hiring, retention, promotion, and training policies for employees to help prevent workplace conflicts, disputes, and problems before they occur. A new Conflict Management Unit has been designed to address conflict early and pro-actively. Managers will be held accountable for managing workplace conflict. The goal is to address workplace disputes before they become disciplinary actions, grievances or EEO complaints.

These reforms will benefit both customers and employees in reduced conflict, a more productive workplace, better morale and working relationships, more effective programs, better management, better service to customers and employees, increased productivity and more efficient operations throughout USDA.

Several legislative proposals were introduced by Congress last year to effect legislative changes needed to implement some of the CRAT Report recommendations. Most of the issues were addressed by Congresswoman Eva Clayton of North Carolina in her legislation, H.R. 2185. The Department is working on a legislative proposal for civil rights initiatives that would modernize the Farm Service Agency state and county committee system, improve access to credit, reconstitute the lease back/buy back programs, and help ensure equity in funding for minority-serving educational institutions.

SUSTAINING THE CIVIL RIGHTS CHANGES

Now, I want to tell you about our 1999 budget request. The policy, oversight, and program changes in USDA's civil rights arena cannot be sustained unless they are vigorously supported with adequate resources. The President's 1999 budget request calls for the largest increase in civil rights funding in two decades to carry out the CRAT recommendations as well as the recommendations of the National Commission on Small Farms which support our civil rights agenda. In total, USDA is requesting about $250 million for civil rights-related activities that would increase farm ownership and operating loans; increase loans and grants to construct housing for the Nation's farm workers; support an integrated research, extension, and education competitive grants program for new technology adoption and transfer to small farms; eliminate disparities in funding and enhance the Department's efforts with institutions of higher education that are primarily devoted to the needs of minority students; and improve outreach and technical assistance to socially disadvantaged farmers and ranchers through a substantial increase in the Section 2501 outreach program.

Departmental Administration staff office activities will account for nearly $18 million of USDA's 1999 civil rights initiative. These funds will support additional staffing to improve personnel services and assistance to USDA agencies, including ethics compliance; improve outreach to USDA customers including support for the new USDA Office of Outreach that will ensure that all customers, especially underserved populations, have full access to USDA programs and services; enhance management-employee relations that support early resolution of employee grievances and conflicts within USDA; and ensure that a backlog of new program complaints does not develop because we are doing nothing to prevent new instances of discrimination.

The increased funding will be used to improve civil rights personnel oversight, training and services to USDA agencies to correct management and program practices that resulted in the Department's past poor civil rights performance. The funds would also be used for outreach to USDA customers, institutions and businesses. They would support outreach to under-served farmers and ranchers; increase opportunities for small and disadvantaged businesses to participate in USDA contract and program activities; and accelerate outreach to 1890 and 1994 Institutions and Hispanic-serving institutions by providing the opportunity to convey excess federal property to them. A conflict prevention and resolution unit will be established to prevent management-employee relations from reaching complaint status that will negatively impact USDA services and internal operations.

OTHER 1999 BUDGET INITIATIVES

A portion of the increased funds will be used to establish a Health Unit for USDA employees at the new Beltsville complex, and to support the Secretary's breast-feeding mothers initiative for nursing mothers at Headquarters and Beltsville by providing adequate space, furnishings and medical supervision. An increase for the Office of Administrative Law Judges will be used to hire an additional law judge to meet projected workload requirements. Finally, $1.9 million of the proposed increase is needed for ongoing Departmental Administration activities that were reduced by more than 20 percent in the 1998 appropriation. A permanent funding reduction of this magnitude cannot be absorbed without a reduction-in-force to meet the payroll, and will reduce services to a caretaker role. It is important to keep in mind that these activities provide basic support essential for the new civil rights initiatives proposed in the Departmental Administration budget.

FISCAL YEAR 1998 SUPPLEMENTAL BUDGET REQUEST

The President has proposed a $4.8 million fiscal year 1998 supplemental to ensure that the high priority activities supporting the CRAT report's recommendations and the administrative support units which make these reforms happen can be sustained in fiscal year 1998. Of this amount, $2.4 million will be used to accelerate by six months implementation of the Departmental Administration CRAT recommendations proposed to be fully implemented in fiscal year 1999; $500,000 will be used to establish a no year fund for a new Civil Rights Advisory Committee; and $1.9 million will be used to partially restore the civil rights related operating base of Departmental Administration activities which were reduced in the 1998 appropriation to fully establish the program complaints investigations unit. This supplemental request will be offset by proposed rescissions in ten USDA agencies.

AGRICULTURE BUILDINGS AND FACILITIES AND RENTAL PAYMENTS

The 1999 Budget request for Agriculture Buildings and Facilities and Rental Payments of $155,689,000 is a net increase of $24,711,000 above the adjusted 1998 level. This increase includes an increase of $9,564,000 for rental payments to GSA and $18,505,000 for the continuation of the USDA Strategic Space Plan which is based on projected reductions in staff levels. These increases are partially offset by a decrease in operations and maintenance of current facilities and by a one-time reduction in relocation expenses.

USDA STRATEGIC SPACE PLAN

I would like to thank the Congress for its past support and ask for your continued support of our efforts to reduce costs associated with housing our employees. Through the long term Strategic Space Plan, we will consolidate USDA Headquarters into two Government-owned locations which will provide modern and safe facilities and enhance USDA operations. This plan consists of two major projects—the Beltsville Office Facility and the modernization of the South Building. In fiscal year 1998, the funding level for the plan is $5 million. In fiscal year 1999, we are

requesting an increase of $18.5 million for a total of $23.5 million to continue the South Building modernization including the construction of Phase 2, wing 4, and related costs for design of Phase 3. In the fiscal year 1998 request, the Administration proposed a one-time reduction from $23.5 million to $5.0 million to ensure that the budget and program operations were coordinated and so that program funds were requested when they were actually needed. The fiscal year 1999 request represents a restoration of funding for the strategic plan to the fiscal year 1997 level.

The Beltsville Office Facility, now substantially completed, is located on Government-owned land at the Beltsville Agricultural Research Center in Maryland. This facility has been designed as a low-rise campus of four buildings with 350,000 gross square feet capable of housing up to 1,500 employees. Construction of the Beltsville Office Facility was begun in June 1996 by Tompkins Construction. As of January 1998, the buildings are being occupied. Work is continuing to fit out and occupy the new space. The agencies selected to house some of their staff in the facility include the Office of the Inspector General, the Agricultural Research Service, the Food Safety and Inspection Service, the Natural Resources Conservation Service and some Departmental Administration staff.

The 61 year old Agriculture South Building, which is eligible for listing on the National Register of Historic Places, is in dire need of repair and renovation to make it safe, efficient and functional. The required renovation work includes fire protection systems; abatement of hazardous materials such as asbestos, PCB light fixtures and lead paint; replacement of old, inefficient heating ventilation and air-conditioning systems; improved accommodations for disabled persons; and accommodation of modern office telecommunications systems. The current plan is to modernize the building in eight primary phases and to consolidate USDA agencies into the modernized areas as each construction phase is completed.

We are now making great progress on the modernization of the South Building. The first phase, which includes reconstruction of Wing 3, is about to begin. The design for Phase 2 is underway, and a construction contract is planned to be awarded in fiscal year 1999 if our fiscal year 1999 budget is approved. By the end of the South Building modernization project, USDA Headquarters offices will be consolidated into two government-owned locations, the Beltsville facility and the downtown Headquarters Complex. This will reduce our reliance on leased space, which will result in considerable savings.

BUILDINGS OPERATIONS AND MAINTENANCE

We are requesting a net decrease of $658,000 for Buildings Operations and Maintenance in fiscal year 1999. The request includes an increase of $667,000 and three full-time staff and associated costs to provide operations at the new Beltsville Office Facility for a full year; an increase of $450,000 to fund contract price increases determined by the Department of Labor, the Fair Labor Standards Act and the Service Contracts Act; and an increase of $216,000 for pay cost and related retirement costs. These increases are offset by decreases of $1,000,000 for one-time security upgrades identified in the Department of Justice assessment of vulnerability in U.S. Federal office buildings and funded in 1998, and $991,000 for operating reductions.

HAZARDOUS WASTE MANAGEMENT

The safe disposal of hazardous waste is a challenge we must meet. We are now paying the cost of cleanups associated with environmental problems caused by past disposal at our facilities including primarily the activities of others on lands under the jurisdiction, custody, or control of USDA. Of some 38,000 abandoned and inactive mines, mainly on Forest Service lands, we currently estimate 1,700 could require environmental cleanup. Up to 120 inactive or abandoned landfills are closing or are undergoing evaluation for cleanup. In addition, there are USDA Commodity Credit Corporation leased grain storage facilities in communities throughout the mid-west where fumigants may have contaminated the ground water. USDA is investigating drinking water wells in these communities to determine whether actions need to be taken to ensure safe drinking water supplies. Kansas and Nebraska, the U.S. Environmental Protection Agency, and the Commodity Credit Corporation are currently working on 42 sites, and have identified an additional 30 sites that may need cleanup. The Department requests $15,700,000 for the central Hazardous Waste Management Program under the Comprehensive Environmental Response Compensation and Liability Act and the Resource Conservation and Recovery Act. Funding from this appropriation is allocated to agencies based on priority needs and made available until expended. The funds will facilitate the cleanup of abandoned mines and landfills, identify and clean up drinking water sources, and support other

agency cleanup efforts throughout the Department on a small fraction of sites needing action.

CONCLUSION

This concludes my statement, Mr. Chairman.

FARM CREDIT ADMINISTRATION

PREPARED STATEMENT OF MARSHA PYLE MARTIN, CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Mr. Chairman, Members of the Subcommittee, I am Marsha Martin, Chairman of the Board and Chief Executive Officer of the Farm Credit Administration (FCA/Agency). I will highlight FCA's accomplishments during the past year, report briefly on the condition of the Farm Credit System, and present our fiscal year 1999 budget request.

MISSION OF THE FARM CREDIT ADMINISTRATION

The FCA is charged with a highly challenging, increasingly complex mission: to promote a safe and sound, competitive Farm Credit System (System) by creating an environment that enables System institutions to serve rural America as a dependable source of credit and financial services within the authorities established by Congress. We take this mission seriously, and it is one we take great pride in fulfilling. In support of this mission, we operate under a dynamic, and recently revitalized, strategic plan which focuses our efforts at accomplishing two major goals.

Our first major goal is to supervise risk in the System for the benefit of stakeholders.

Our second major goal is to maximize opportunities for the System to provide competitive and dependable services to agriculture and rural America.

Within our strategic plan we have developed several comprehensive objectives and specific actions, each crafted, and continuously refined, to ensure these goals are met. Embedded throughout our plan is our commitment to improve customer service, effect clear and candid communication, produce quality products, and ensure sound financial institutions thrive to better serve agriculture. This commitment is the foundation of my operating philosophy for the Agency, and, I hope, Mr. Chairman, our commitment comes through loud and clearly today in this proposal to fund the critically important job FCA performs in regulating the Farm Credit System.

FISCAL YEAR 1997 ACCOMPLISHMENTS

During fiscal year 1997, FCA continued to reduce costs, streamline operations, improve communication, and lessen regulatory burden. These successes reflect our efforts to improve operational efficiency and strengthen communication with our constituencies. I believe we continued to clearly demonstrate our commitment to effectiveness and cost efficiency this past year as we reduced Agency full-time equivalents (FTE's) from 361 to 319, established a new organizational structure and leadership team, reorganized several offices to better fulfill our mission, reduced a level of management by eliminating the regional offices within the Office of Examination (OE), and closed two field offices. We also continued to exercise effective controls over Agency spending, as our overall obligations were $2.5 million less than budgeted for in fiscal year 1997.

I particularly am proud of the fact that we were able to accomplish significant improvement without compromising our ability to oversee the safety and soundness of System institutions. Meeting the needs of our customers, without compromising safety and soundness, will always be our central focus and our greatest challenge. This delicate balance requires regulatory approaches which we have become quite adept at accomplishing.

Mr. Chairman, if I may, let me briefly share with you some more specifics on our accomplishments during fiscal year 1997.

EXAMINATION PROCESS IMPROVEMENTS

We place a high priority on developing increasingly efficient and innovative examination programs that not only ensure our evaluation requirements are met, but also result in minimal disruption to the vital business activities of our customers. Our examinations are conducted according to risk-based examination principles

whereby we deploy resources based on the level of risk present in an institution's operation. This risk is continuously evaluated and proactively addressed. When appropriate, off-site examinations are conducted on lower risk institutions. Also, beginning with fiscal year 1997, we implemented an 18-month examination cycle for institutions that meet specific thresholds for asset size, operations and performance. Combined, off-site examinations and the 18-month examination cycle allow us to efficiently use Agency resources and concentrate our examination presence in higher risk institutions.

During fiscal year 1997, we further enhanced our electronic access to System information systems and developed a standard method to electronically warehouse critical examination and System information. These accomplishments resulted in greater efficiencies through the use of improved electronic workflow methods. Presently, we are developing a uniform methodology to identify and respond to deteriorating performance trends in System institutions. While we are confident we have accurately identified current risk, we must remain vigilant so we can respond vigorously, with timely and appropriate action, to any warning clouds looming on the horizon that could mushroom into a systemic problem.

ENHANCED COMMUNICATION

In an effort to further improve communication with our constituencies, the FCA Board continued to hold annual information meetings with board chairmen and chief executive officers of System institutions. These highly productive meetings provide an opportunity for essential two-way communication on important topics ranging from the Agency's internal operations to current regulatory issues. FCA Board members and executives also visited System institutions and other agricultural organizations to keep in touch with grass roots level issues. These contacts provide us additional insight into how to direct our operations in a more responsive, customer-oriented manner. Also last year, the Agency revised and reissued one of its widely utilized publications, The Director's Role: Farm Credit System Institutions. This publication is used by many System institutions as the cornerstone for their director training programs.

ANNUAL PERFORMANCE PLAN COMPLETED

Another major accomplishment this year was development of our first Annual Performance Plan in accordance with good business practices and the Government Performance and Results Act of 1993. Our plan depicts how the FCA will implement initiatives detailed in the strategic plan and includes specific performance criteria that communicate clearly what we intend to do and how we will measure the effectiveness of our performance. The plan identifies the following four key outcomes from Agency operations:

—Effective Risk Identification and Corrective Action;
—Effective Regulation and Public Policy;
—Effective and Efficient Agency Administration; and
—Effective External Relationships.

These outcomes link directly to the FCA's mission, functions, and strategic goals and provide a thorough and balanced system of performance measures to assess the Agency's ultimate effectiveness in ensuring the safe and sound operation of the System. The performance measurement system incorporates individual criteria for each FCA office that rolls up to support the overall Agency-level measures. This will ensure that the Agency as a whole is pulling together toward the same goals.

YEAR 2000 PREPAREDNESS

The most pervasive technological change that will take place over the next several years will involve the efforts of FCA and Farm Credit institutions to ensure computer systems correctly interpret dates associated with the Year 2000. While the parameters of the problem can be stated simply, its scope is vast, and fixing it may be enormously time consuming. Problems associated with Year 2000 preparations pose potentially serious safety and soundness concerns because there is zero tolerance for late delivery or project failure.

The Agency views Year 2000 preparations with great seriousness, and we have placed a high priority on remediation of the problem by requiring each System institution to develop an action plan that will ensure business continuity for critical systems when the next millennium begins. Presently, we are analyzing each System institution to accurately assess what degree of exposure exists as a result of the millennium date change. This assessment will enable us to identify high risk System institutions early enough so that appropriate corrective action can be implemented.

In respect to our internal operations, the FCA Board last month approved a plan that details how the Agency will assess Year 2000 potential problems, including a comprehensive process to become Year 2000 compliant. Over the past three years, we completed implementation of a network operating system that is warranted as Year 2000 compliant. Throughout the process, our programmers have taken the required steps to accommodate the millennium change for the custom applications that run on the new system. This year we will run the final tests needed to assure ourselves and others that systems and applications will transition to the next century without adverse impact on their availability, integrity, or confidentiality. We are confident that all our systems will pass the testing process.

CLIENT/SERVER MIGRATION IMPLEMENTED

We have moved aggressively toward full implementation of a client/server computer architecture as the foundation for applying technology to improve Agency operations. This technology permits easier access to, and use of, information needed to accomplish our mission. It will enable us to streamline the examination process, enhance efficiency and effectiveness, and share information more quickly among headquarters and field staff.

REGULATORY BURDEN MINIMIZED

The FCA Board has legal authority to establish policy and interpret the Farm Credit Act to ensure System institutions comply with the law and operate in a safe and sound manner. Our objective is to promulgate only those regulations needed to implement the law or achieve safety and soundness goals while minimizing regulatory burden on the institutions we regulate. Fiscal year 1997 was an active regulatory year for the Agency in which we clarified safety and soundness requirements in several areas. We also eliminated, or proposed for elimination, several Agency prior-approval requirements and deleted several obsolete regulatory provisions identified through public comment or internal Agency review. On a continuing basis, staff provide recommendations to address unnecessary policies, regulations, bookletters, and other forms of guidance.

Currently, we are clarifying Agency requirements and expectations in the System's young, beginning, and small (YBS) farmer program. Available data indicates that the System provided nearly $6 billion of credit to almost 113,000 farmers categorized as young, beginning, and small during 1996. This is about 13 percent of total System loan volume and about 19 percent of their total number of loans. While the numbers are impressive, as the complexities of farming multiply and the capital requirements to enter farming escalate, the Agency must ensure the System's commitment to fund the next generation of farmers does not falter. Presently, Agency staff are drafting a FCA Board policy statement on providing service to YBS farmers to enhance existing System programs and safely ensure credit is available. Additionally, we are reviewing the continued appropriateness of current definitions and will revise reporting requirements for the YBS farmer program to ensure reporting is consistent with how other financial entities report their data.

LAWSUIT DISMISSED

Recently, the Independent Bankers Association of America and the American Bankers Association lawsuit challenging the authority of the FCA Board to revise the 25-year-old rules under which System institutions make loans to eligible borrowers was dismissed by the United States District Court for the District of Columbia (Court). In dismissing the suit, the Court noted that the Agency had adopted the new customer regulations in a thoughtful, reasoned manner, taking care to consider the concerns of the affected parties during the notice and comment period. The customer rule, coupled with new capital standards we established for System institutions, may be our most significant accomplishments of the decade. Together, they ensure strong financial standards and a continuing, competitive source of credit for agriculture and rural America.

We are extremely disappointed that the bankers' associations decided to appeal the Court's ruling. We consider it unfortunate they have chosen to expend more resources to challenge such a strongly stated Court opinion on this matter.

CONDITION OF THE FARM CREDIT SYSTEM

FCA activities ensure System institutions exercise safe and sound banking practices and that they comply with the law and regulations. We are proud of our performance in carrying out the Agency's activities, and we are satisfied with the con-

tinued progress the System has made in strengthening its financial condition and improving its operational practices.

Mr. Chairman, I am pleased to report that the Farm Credit System continues to operate on a safe and sound basis with further improvement noted in all key financial and operational areas. During 1997, its earnings reached $1.3 billion, a slight improvement above 1996 results. System capital increased to $11.6 billion at the end of 1997 and represented 14.8 percent of total assets. Total capital was 14.1 percent of total assets at yearend 1996. The quality of System assets also continued to improve. Nonperforming assets decreased by $115 million during the year and comprised only 1.4 percent of total loans and other property owned at the end of 1997. Overall loan volume climbed by $2.3 billion during the year.

The strengthened financial condition of the System is further reflected by improved CAMEL ratings—the Agency's evaluation of an institution's capital, asset quality, management, earnings, and liquidity. With a number 1 being the best rating, the percentage of System institutions rated 3, 4, or 5 dropped from 26 percent at the end of 1993 to only 2 percent on December 31, 1997. The number of System institutions under enforcement action also declined substantially, from 49 at yearend 1993, to 5 at yearend 1997. These 5 institutions accounted for less than 4 percent of the System's total assets, as compared with nearly 40 percent of the System's total assets at yearend 1993.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION

FCA has oversight responsibility for the Federal Agricultural Mortgage Corporation (Farmer Mac). After becoming profitable for the first time in 1996, Farmer Mac recorded a net profit of $4.6 million for the year ended 1997. Farmer Mac also had a successful stock subscription, increasing its capital to nearly double the $25 million required by law. Although these are encouraging signs, we recognize that additional growth in Farmer Mac's core business is needed for it to become a key factor in agricultural finance.

During 1997, FCA implemented provisions of the Farm Credit System Reform Act of 1996 (Reform Act) by approving final regulations to govern a Farmer Mac conservatorship or receivership and began work on risk-based capital standards, as required by the Reform Act. Also, in coordination with the Treasury Department, FCA monitors the operations and the financial condition of Farmer Mac and provides periodic and timely reports to Congress.

FISCAL YEAR 1999 BUDGET REQUEST

Mr. Chairman, we are very proud of our accomplishments as the safety and soundness regulator of the Farm Credit System and of our ability to contain costs while fulfilling our mission. I assure you, Mr. Chairman, during fiscal year 1999 we will continue with our commitment to effectiveness and cost-efficiency, and we will regularly review how further progress can be made in meeting this objective.

Mr. Chairman, before I present the budget request, I respectfully bring to the Committee's attention that FCA's administrative expenses are paid for by the Farm Credit System institutions FCA regulates. FCA does not receive a Federal appropriation, but instead is funded through annual assessments of System institutions. I would also point out that FCA has not requested a budget increase in the prior four years. In fiscal year 1995, our budget request remained the same as it was for 1994. In the three fiscal years following 1995, our budget request averaged a 5 percent reduction from each previous year for a total reduction of nearly 15 percent since 1995.

For fiscal year 1999, I propose a budget of $35.8 million. This is a $1.4 million increase, or about 4 percent, above the $34.4 million requested for fiscal year 1998 operations. Most of the increase is for salary and benefits for the FCA staff. In addition, our plan calls for 7 additional examiners in the field.

Our fiscal year 1999 budget request supports a staffing level of 318 FTE's. This proposed staffing level will maintain a ratio of 4.3 staff per billion dollars of System average earning assets and give FCA the right mix of positions and skills to implement our strategic plan and accomplish the Agency's mission. Please note, Mr. Chairman, the proposed FTE level remains substantially below the Office of Management and Budget's established target of 408 FTE's by fiscal year 1999 for FCA, and represents nearly a 30 percent reduction from the 450 FTE's we were authorized for fiscal year 1993.

Mr. Chairman, we welcome any questions the Subcommittee might have.

NATIONAL APPEALS DIVISION

PREPARED STATEMENT OF NORMAN G. COOPER, DIRECTOR

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you to discuss the fiscal year 1999 budget request for the National Appeals Division.

INTRODUCTION

The National Appeals Division (NAD) was established by the Secretary's reorganization Act of 1994. The Act consolidated the appellate functions and staffs of several USDA agencies to provide for hearings of appeals from adverse agency decisions, and review of appeal determinations by a director. NAD appeals currently involve program decisions of the Farm Service Agency, Risk Management Agency, Natural Resources Conservation Service, Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service. NAD is headquartered in Alexandria, Virginia, and has regional offices located in Indianapolis, Indiana; Memphis, Tennessee; and Lakewood, Colorado. NAD's staff of 130 includes over seventy hearing officers nation-wide.

MISSION

Our mission is to correctly determine appeals arising from the program operations of assigned agencies. That is, our mission is to issue timely and accurate determinations that recognize the rights of program participants and promote the lawful operations of agency programs. Our mission supports the USDA Strategic Plan Goals 1.1, Enhance the economic safety net for farmers and ranchers, 1.3; Provide access to capital and credit to enhance the ability of rural communities to develop, grow, and invest in projects to expand economic opportunities and improve the quality of life for farm and rural residents; and 3.1, Promote sustainable production of food and fiber products while maintaining a quality environment and strong natural resource base.

FISCAL YEAR 1999 BUDGET REQUEST

NAD is requesting $13,297,000 in direct appropriations for fiscal year 1999. This request represents an increase of $1,579,000 over the fiscal year 1998 appropriation. The increase is comprised of $271,000 for pay costs, $24,000 for an increase in Agency contributions for employees covered under the Civil Retirement system, and the remainder for two initiatives. The first initiative is completing the development and implementation of a nationwide Management Information System (MIS) ($695,000), which conforms to Year 2000 requirements and replaces a system which only supported the former FmHA National Appeals Staff operations. During fiscal year 1998, NAD began work on phase one of the MIS, which is the development and implementation of a case tracking system. This system is designed to provide information on all case activity such as the number of requests for a hearing, the type of case being adjudicated, length of time being adjudicated, and the disposition of appeal determinations on review. It is critical to NAD to be able to track an appeal as it proceeds because of legislative time frames. This one-time increase will provide the necessary funding for system development and training to complete phase two of the MIS, which is an administrative system. The administrative system is designed to provide information to aid management in accomplishing the goals and objectives stated within our Strategic and Annual Performance plans, and to enhance the delivery of NAD services to program participants. Reliable information on appeal rights, as well as public access to historical records of prior NAD decisions are service enhancements we intend to accomplish. The enhancements specifically impact farming communities, agribusiness, and the general public. The purpose of this initiative is to capture relevant financial and non-financial information for use in analyzing the efficiency, effectiveness, and results of NAD operations, and to disseminate information to the public regarding NAD's appeal process and how to participate in it.

The second initiative is for training ($589,000). The operating environment for NAD is dynamic because of the wide range of programs subject to NAD adjudication, and the changes in such programs which give rise to new and complex issues. NAD hearing officers issue decisions arising from agency programs that include; administrative off-sets pursuant to the debt collection laws; drought and disaster assistance; farm ownership loans; home ownership; conservation reserve programs; emergency loans; environmental programs under the "swampbuster" law; production flexibility contracts; rural rental housing loans; and multi-family housing projects among others. In order to make fair and equitable determinations, NAD hearing and review officers must possess not only a broad, in-depth knowledge of many program areas, but be aware of USDA policies, administration, ethics, and civil rights. It is critical that NAD maintains a well trained work force because the decisions NAD issues directly affect the quality of life for farm communities and other rural areas as well as the nation's environment, and directly impact the operation of agency programs. Decisions that are factually accurate and complete, legally correct, and rendered in a timely manner provide results that enable appellants to fully and fairly participate in agricultural programs which are efficiently and effectively managed. Continuous training and development is essential to providing the public competent and fair service which recognizes the rights of program participants and promotes the lawful operation of USDA programs. We expect these initiatives to improve the quality of service provided to rural and farm communities throughout the United States, as well as our customers within the federal government from Congress, to agencies within USDA.

CONCLUSION

Our mission is statutorily specific, but it is filled with complex challenges arising out of changing laws and policies. The opportunity that NAD makes available to the public is an opportunity for a review of an adverse decision made by a USDA agency, before an impartial hearing officer, and if requested, the opportunity for a review of the hearing officer's decision. Simply put, if a participant in one of USDA's programs is denied benefits by a USDA agency, that person has the right to have the denial reviewed by an impartial hearing officer. Further, there is a right to have the hearing officer's decision reviewed by the Director of NAD. The appeals process in NAD is a cost effective service for program participants to have their adverse decision adjudicated in a timely manner without incurring a lengthy, costly judicial proceeding. The initiatives in NAD's fiscal year 1999 budget will ensure that NAD meets its mission requirements in a more efficient and effective manner. They provide the necessary groundwork for accomplishing USDA strategic goals as well as the goals and objectives outlined in NAD's strategic and annual performance plan. More importantly, these initiatives provide farmers, ranchers, cooperatives, agencies, and other groups with an avenue to a fair and equitable adjudicative process. More detailed information regarding these budget initiatives is contained within our Explanatory Statement. That concludes my statement, and I am looking forward to working with the Committee on the 1999 National Appeals Division budget.

OFFICE OF THE CHIEF ECONOMIST

PREPARED STATEMENT OF KEITH COLLINS, CHIEF ECONOMIST

This statement discusses the functions and fiscal year 1999 budget request of the Office of the Chief Economist.

OCE is a small staff of analysts located in Washington, D.C., although a weather office staffed by one person will begin operation during 1998 in Mississippi. OCE reports directly to the Secretary of Agriculture and has three primary missions: (1) provide economic analysis to executive branch and Congressional policy officials on alternative policies, programs and regulations; (2) serve as a focal point for the collection and reporting of economic and weather data, forecasts and projections related to agricultural commodities, and the performance of the agricultural economy; and (3) conduct statutory review and oversight responsibilities related to risk assessment and cost-benefit analysis of major USDA regulations. OCE also coordinates several activities that cut across USDA mission areas, including sustainable development and agricultural labor.

OCE has three functional units: the Immediate Office, the World Agricultural Outlook Board—WAOB, and the Office of Risk Assessment and Cost-Benefit Analysis—ORACBA. Recent activities and accomplishments in each of these three areas are briefly discussed.

IMMEDIATE OFFICE OF THE CHIEF ECONOMIST

The immediate office, with a staff of nine, directs a wide range of analysis related to policy, program and legislative proposals, and regulations. The focus is on only the most substantial, complex and controversial issues, usually at the request of the Secretary, other Administration officials, or members of Congress. The most important products are briefings, and briefing and analysis papers prepared on tight deadlines. These analyses generally focus on short- to medium-term effects, involve staff from other agencies, and apply the results of existing, basic economic research to specific policy issues. The immediate office staff is also responsible for regulatory review. A key role of the staff is to coordinate analyses among USDA agencies. Examples of key activities during the past year are:

Supporting agency program and policy decisions.—OCE works with other agencies to assess program options and guide effective Departmental decisionmaking with respect to key program provisions. For example, OCE participated in a task force convened by the Secretary to develop the rules and selection procedures for the Conservation Reserve Program as authorized by the 1996 Farm Bill. OCE has participated in the process to determine maximum permitted rental rates, evaluate bids, and assess the impacts of accepted acreage on commodity markets.

OCE has been deeply involved in coordinating analysis of a variety of dairy issues. OCE led USDA's monitoring effort on the Northeast Interstate Dairy Compact. OCE also chaired USDA's Interagency Dairy Analysis Team which coordinated the analysis of the Agricultural Marketing Service's proposed rule for Federal Milk Marketing Order consolidation and reform. This analysis led to significant changes in the options presented for public comment.

OCE continues to assist the Animal and Plant Health Inspection Service—APHIS—in verifying compensation claims for producers, handlers and others adversely affected by the Federal quarantine established for the eradication of Karnal Bunt.

OCE developed and analyzed models of the Standard Reinsurance Agreement (SRA) to assist the Risk Management Agency—RMA—in their 1998 SRA negotiations with the crop insurance industry. The models were used to analyze the budget implications and industry rates of return of various reinsurance proposals, including reinsurance for catastrophic and revenue products.

OCE coordinated Departmental analysis of the proposed settlement between tobacco companies and State Attorneys' General. The analysis examined the effects of the settlement on tobacco leaf production and producer income.

OCE continued to play a major role in the Department's efforts to understand and address structural issues. Follow-up activities continued with respect to the Secretary's Advisory Committee on Concentration in Agriculture, with a series of programmatic changes developed and expected to be announced during the first half of 1998. OCE participated in the advisory team that assisted the Grain Inspection, Packers and Stockyards Administration in its efforts to reorganize in order to more effectively conduct market review and investigations on uncompetitive practices and the effects of market structural changes.

Agricultural Market Analyses.—The 1997/98 marketing years for commodities have witnessed a continuing adjustment to the record and near-record prices for many commodities during the prior year. OCE briefed the Secretary many times on the market developments, including the large increase in meat supplies, low pork prices and lower-than-expected beef prices; the initial decline and then recovery in milk prices during 1997; and the large 1997-crop production increases and reduced prices, particularly for wheat.

OCE helped organize a Departmental team to assess the effects on agriculture and rural areas of the currency devaluations occurring during 1997 in southeast Asia and in South Korea. These analyses were used to keep the Secretary up to date and support USDA forecasts for total agricultural exports and commodity forecasts reported in the World Agricultural Supply and Demand Estimates report.

Testimony and Congressional Analyses.—During the past year, the staff responded to many Congressional requests for information or analysis. During fiscal year 1996 and early fiscal year 1997, OCE testified before Congress as the principal USDA hearing witness on the consequences of estate and capital gains taxes for producers and on price and income variability facing producers under the new farm bill. In late 1997, OCE also testified on economic outlook for agriculture. In addition, the Chief Economist frequently appeared before Congress with the Secretary, Deputy Secretary or others on issues ranging from the USDA budget, dairy issues, trade and climate change.

Special Studies.—OCE has coordinated a number of special studies bringing together analysts from various USDA agencies to ensure the best expertise addresses the issue. For example, since late 1997, OCE has increasingly coordinated the Department's response to requested information on the effects of global climate change. OCE represented the Department in the development of the National Ambient Air Quality Standards issues during 1997. OCE chairs the Capper-Volstead Committee which responds to requests related to permissible activities of cooperatives. OCE responded to many requests for rapid analysis of issues such as the effects of El Niño; the rail mergers and performance of the rail industry; monitoring of the Northeast Dairy Compact; and the dairy options pilot program.

OCE participates in the USDA working group on the 1999 World Trade Organization agricultural negotiations including preparation of analysis of U.S. objectives and approaches. OCE also represents the Department on the United Nations Methyl Bromide Task Force. OCE also participated in the proposal reviews for the Fund for Rural America and provides staff support to the Secretary's Special Assistant for Trade.

Regulatory Review and Clearance.—The immediate office staff reviews and clears regulatory impact analyses of USDA regulations. During fiscal year 1997, OCE reviewed and cleared approximately 40 significant or economically significant regulations. This process often involves assisting the regulating agency with identification of feasible alternatives and planning the economic analysis. Examples of rulemaking efforts this past year ranged from the Federal milk marketing order reform to organic certification, Argentine beef imports, the livestock disaster program, peanuts, tobacco, Karnal bunt and the WIC program.

Agricultural Labor.—OCE fulfills the statutory mandate to consult with the Attorney General and the Department of Labor—DOL—with respect to the H–2A temporary agricultural worker program. OCE also consults with DOL, the Environmental Protection Agency, and the Immigration and Naturalization Service on other issues affecting agricultural workers. OCE staff was active with the agricultural worker issues of USDA's Civil Rights Implementation Team and has been assisting a consortium of California organizations in developing a Welfare-To-Farm work initiative.

Sustainable Development.—OCE coordinates sustainable development activities within USDA. This is done chiefly through USDA's Council on Sustainable Development, chaired by the Director of Sustainable Development, which develops, coordinates, and integrates the principles of sustainable development into policies and programs across all mission areas of the Department. During the past year, the Council has focused on removing credit and crop insurance obstacles hindering use of sustainable development practices and identifying sustainable development re-

search needs. The Director advises the State Department, Foreign Agricultural Service—FAS—and others on sustainable development issues for negotiations, treaty formulation and implementation, and trade discussions. The Director led the USDA delegation to the meetings of the United Nations' Commission on Sustainable Development, which is now focusing on irrigated land resources for the year 2000 meetings. The Director participated with FAS in preparing for meetings on sustainability for the Summit of the Americas and development of the U.S. Action Plan on Food Security, the follow-up to the World Food Summit. The Director serves as liaison to the President's Council on Sustainable Development (PCSD) and helped organize the September 1997 meeting with the city of Tulsa, Oklahoma and the Kerr Center for Sustainable Agriculture, which dealt with water quality in the Tulsa watershed. The Director also serves with the PCSD's Metropolitan and Rural Strategies Task Force.

WORLD AGRICULTURAL OUTLOOK BOARD—WAOB

The WAOB prepares world agricultural and weather assessments and coordinates USDA's work related to agricultural outlook, projections, weather, and remote sensing. The Board, with a staff of twenty-five, issues a monthly publication known as the World Agricultural Supply and Demand Estimates report and oversees long-term USDA forecasts required for preparation of the Federal budget. The Board also operates and manages the Joint Agricultural Weather Facility—JAWF—in cooperation with the National Oceanic and Atmospheric Administration—NOAA, and is home to the Department's Chief Meteorologist. In addition, it provides technical assistance and coordination for USDA's remote sensing activities.

Coordinating USDA Economic Forecasts.—The WAOB plays a critical role in assuring that the Department's commodity information system responds to today's rapidly changing world. The Board's mission is to ensure that USDA's intelligence on domestic and foreign agricultural developments is timely, accurate, and objective, and to speed the flow of that information to producers, consumers, and policy makers.

One of WAOB's primary functions is to coordinate and review all USDA forecasts and analyses of foreign and domestic commodity supply and demand conditions. USDA's Interagency Commodity Estimates Committees are chaired by staff of the WAOB. The purpose of these committees is to assure that sound information from domestic and international sources is fully integrated into the analytical process and that USDA's economic forecasts are objective, thorough, and consistent. The committees, with representatives from the Economic Research Service, Farm Service Agency, Foreign Agricultural Service, Agricultural Marketing Service, and WAOB, are responsible for developing official estimates of supply, utilization, and prices and reviewing economic reports issued by USDA agencies. In fiscal year 1997, the Board reviewed and approved for release approximately 200 such reports.

Each month, the WAOB publishes the World Agricultural Supply and Demand Estimates (WASDE) report, which forecasts production, trade, utilization, prices, and stocks. Coverage includes U.S. and world grains, oilseeds, and cotton and U.S. livestock and poultry products and sugar. Release is simultaneous with the U.S. Crop Production report. WASDE is internationally viewed as a benchmark for agriculture and provides timely knowledge of world commodity markets that is increasingly critical to our export-led farm economy. Equally important, the WASDE report gives early warning of changing crop production and supply prospects in the United States and in other countries.

Oversight of Long-Term USDA Commodity Projections.—WAOB chairs the Department's Interagency Agricultural Projections Committee that oversees preparation of long-term projections for farm commodities, the U.S. agricultural economy, and world agricultural trade. The Economic Research Service has the lead role in preparation of the projections. WAOB's role is to ensure a strong multi-agency effort and sound analytical procedures for the projections. The projections are used for a variety of analytic and mandated functions of the Department, such as preparing the USDA portion of the President's budget. These "baseline" projections provide an objective, rigorous, and thorough view of the likely path of the farm sector over the long term.

The most recent set, Agricultural Baseline Projections to 2007, was publicly released in February 1998 at the Department's annual Agricultural Outlook Forum. The projections indicate that the economic crisis in Asia will have a limited negative impact on the longer term positive trends in world food consumption and agricultural trade. The projections also point to favorable long-term trends in U.S. farm prices and income.

The annual USDA Agricultural Outlook Forum, conducted under OCE's leadership, is a public meeting on farm, food, and trade prospects. To provide a stronger programmatic foundation for the Forum, the Chief Economist invited the Agricultural Marketing Service, Animal and Plant Health Inspection Service, Grain Inspection, Packers and Stockyards Administration, Natural Resources Conservation Service, and Risk Management Agency to participate as co-sponsors in 1998. Per-agency participation costs were reduced and the event is now enriched with expertise on risk management, marketing, grain inspection, plant and animal health, and soil and water conservation.

Outlook Forum 1998, the seventy-fourth annual meeting, took place in late February 1998. Attendance, topping 1,000, was the highest in recent years. The program featured a spectrum of issues affecting the future of agriculture, discussed from many vantage points. In addition to near-term and long-range agricultural prospects, topics ranged from new organic food standards to the impacts of biotechnology and environmental regulation. Speakers were drawn from farming, agribusiness, environmental groups, government, and academia. Extensive media coverage and posting of speeches on the Internet shortly after the Forum ensured the timely dissemination of information presented.

Monitoring Weather Impacts on Agriculture.—USDA places a high priority on incorporating weather-based assessments into all analyses. The focal point for this activity is the Joint Agricultural Weather Facility (JAWF). JAWF staff continually monitor global weather and assess its probable impact on agricultural output. JAWF briefings, reports, and special alerts are key inputs to the development of USDA crop yield estimates for both competitor and customer countries. JAWF weather assessments are made available to the public through the Weekly Weather and Crop Bulletin, the WAOB home page, and the news media.

During the 1996/97 winter and early spring months, unusually heavy snow cover raised concerns about U.S. spring planting conditions. JAWF staff cautioned that such conditions would not necessarily cause long planting delays by showing that 1969, an analog year, experienced a similar pre-season weather but turned out "normal." During the winter, high precipitation and flood potential in the pacific Northwest and California were closely tracked. To assess the probably impact of a freeze episode which occurred in Mid-January, JAWF analysts assembled data from sources along the Gulf Coast and in southern Florida. These alternate sources were needed because of data losses associated with budget cuts at the National Weather Service.

The Chief Meteorologist and the JAWF staff briefed government officials and media on the agricultural impacts of spring floods in the upper Mississippi River basin. WAOB's Remote Sensing Coordinator obtained imagery of spring flooding along the Red River in North Dakota and Minnesota and along the Ohio and Mississippi River. Through an arrangement with the National Imagery and Mapping Agency and Radarsat, WAOB enabled the Natural Resources Conservation Service, Agricultural Research Service, Foreign Agricultural Service, Forest Service and National Agricultural Statistics Service to obtain a complete set of flood imagery for free, a substantial cost savings to the Department.

Disseminating USDA Numbers to the Public.—As commodity prices are affected less by Government programs and more by market forces, the need for objective and current market information is becoming especially critical. The WAOB recognizes the need for rapid information dissemination and strives to place the WASDE report Weekly Weather and Crop Bulletin in the hands of farmers and other users as quickly as possible. The goal is to provide simultaneous access at a minimum cost to all market participants.

During fiscal year 1997, WAOB began posting the market-sensitive World Agricultural Supply and Demand Estimates on its home page within minutes of release, replacing the Department's expiring Computerized Information Dissemination System (CIDS) as the locus of first release. Most of the Weekly Weather and Crop Bulletin also is posted each week.

WAOB continues to be a key participant in the management of the USDA Economics and Statistics System, a website for periodicals and data bases maintained by Cornell University. In 1997, this site was selected as a "Best Library-Related Web Site" by Library Hi Tech magazine. Free e-mail subscriptions to crop reports are a popular feature of the site. The number of e-mail subscriptions to the WASDE report continued to increase in fiscal year 1997. WAOB and other partner agencies met with Cornell University staff in December 1997 to plan future enhancements to the site.

Technical Cooperation with China.—As part of an agreement between China's State Statistical Bureau and USDA's Foreign Agricultural Service, WAOB took part in technical exchanges that are yielding important analytical benefits. China re-

quested USDA's assistance as the country prepared to execute a comprehensive agricultural census during 1997. A USDA team visited Beijing under leadership of the WAOB Chairperson to explain the Department's agricultural sampling techniques and present seminars on near-term and long-term agricultural prospects. In two return visits, Chinese analysts shared their first commodity balance sheets for rice and cotton, prepared with help from the WAOB. The balance sheets provided critical new data for evaluating USDA's estimates for China.

Understanding TCK Smut.—WAOB meteorologists continued to work with Agricultural Research Service scientists to develop a scientifically-based response to China's concerns that TCK smut from imported grain will spread dwarf bunt disease in China's winter wheat. USDA's position is that meteorological conditions in China will not support significant spread of the fungus.

Information Exchange with South Africa.—WAOB took part in an initiative with South Africa to share weather technologies and data. Getting better data from South Africa is important because of its role in world corn trade. A meteorologist of the WAOB's JAWF provided support at a Binational Commission ministerial meeting in Capetown. He also accompanied a team of South African scientists to observe Oklahoma's "Mesonet" weather data system, which is under consideration as an adaptable model for South Africa, and took part in a return visit to South Africa in February 1998.

Planning Assistance for Colombia.—At the invitation of the Government of Colombia and Institute for Inter-American Cooperation on Agriculture, WAOB participated in a two-day agricultural seminar in Cali, Colombia entitled, "Visions for Future and Long-Term Planning." The WAOB Chairperson presented USDA's long-term baseline projections to an audience of 250 Colombian agricultural leaders.

Restoring Farm Weather Data.—Recent termination of specialized agricultural weather services by the National Weather Service (NWS) has created a gap in weather data needed by agriculture. WAOB has been leading USDA efforts to revitalize plans for a National Agricultural Weather Information System, which was initially authorized in the 1990 Farm Bill. In fiscal year 1997, alternatives were developed to achieve cooperation with NWS and the private sector and link with existing local agricultural data collection networks.

Southeast Meteorological Position Established.—WAOB obtained approval to establish a meteorological position co-located at the Cooperative State Research, Education, and Extension Service site in Stoneville, Mississippi, recently vacated by the National Weather Service. The new position will be dedicated to collecting meteorological data in the Southeast and marks the first step in development of a USDA National Agricultural Weather Observing Network.

Interagency Initiatives.—WAOB's Chief Meteorologist represented the Department in a number of climatic activities, including liaison to the Office of the Federal Coordinator for Meteorology and the World Meteorological Organization. The Chief Meteorologist supported USDA's Deputy Secretary in his role as co-chair of the Western Drought Coordination Council, a cooperative project with the Western Governors Association. In fiscal year 1997, the Chief Meteorologist helped organize the Council's first meeting in Albuquerque, New Mexico.

The JAWF worked closely with the National Water and Climate Center of USDA's NRCS and with NOAA Regional Climate Centers on a Unified Climate Access Network to provide on-line access to weather and climate data from a variety of sources. At the request of the World Meteorological Organization, JAWF staff prepared a training course on agricultural data management procedures. Plans are afoot for JAWF staff to present the course to WMO member countries. JAWF has also begun to put updated sections of its popular handbook Major World Crop Areas and Climatic Profiles on the Internet, and is working with the U.N. Food and Agriculture Organization to develop an expanded CD-Rom version using geographic information system (GIS) technology.

Weather Data Receiver Upgraded.—The National Weather Service now requires recipients of its data, including the JAWF, to install compatible hardware and software or purchase NWS data elsewhere at substantially greater cost. The Office of the Chief Economist obtained Departmental approval to install a suitable receiving site in Kansas City, Missouri. Once operational, a customized stream of real-time meteorological data will be downloaded and made available to all USDA end-users, free of charge.

Remote Sensing Activities.—As the chair of the Department's Remote Sensing Coordination Committee (RSCC), WAOB coordinated revision of a draft Memorandum of Understanding between USDA and the National Aeronautics and Space Administration (NASA), which was signed by the Secretary in February 1998. WAOB arranged for more than 20 briefings of the RSCC on technical and space program issues. WAOB established a remote sensing web page to enable customers and cli-

ents to access all USDA remote sensing offices and selected imagery products. At present, WAOB is coordinating USDA inputs for a proposed NASA research announcement on agricultural remote sensing. Also, WAOB is coordinating a study being conducted by the Office of Science and Technology Policy to identify potential agency requirements for remote sensing data from commercial sources.

1890 Institution Partnership.—WAOB strengthened its relationship with the University of Maryland at the Eastern Shore (UMES), an 1890 institution. WAOB employed two UMES students as interns. One found permanent employment with a USDA statistical agency and the second worked on a application of GIS technology, a burgeoning field. WAOB conducted an agricultural career seminar for preregistered UMES students (high school seniors) to introduce them to the work of USDA and opportunities in agriculture.

OFFICE OF RISK ASSESSMENT AND COST-BENEFIT ANALYSES—ORACBA

The principal task of ORACBA, with a staff of five, is to promote effective and efficient USDA regulation of hazards to human health, human safety and the environment. This is accomplished by bringing science and management together in policy and regulatory development. By statute, ORACBA is required to ensure that the analysis supporting a major rule proposed by USDA includes a risk assessment and a cost-benefit analysis for mitigation measures that are performed consistently, and use reasonably obtainable and sound scientific, technical, economic, and other data. ORACBA serves as a focus in USDA for developing new methods and approaches to risk assessment for agriculture related hazards. To accomplish this, ORACBA works with USDA agencies in coordinating analyses supporting major regulations.

Supporting and Expanding USDA Risk Assessment Capabilities.—ORACBA programs for training, information resources, analytical support, and peer review are the primary means for integrating science-based risk assessment and regulatory impact analysis. For example, ORACBA sponsors two interagency work groups to coordinate these activities. One, for food safety issues, is the Interagency Food Risk Assessment Group (I-FRAG). The other, for ecological and conservation issues, is the Ecological Risk Assessment Work Group (ERAWG). Both groups are actively carrying out research on methods and application of methods to hazards managed by USDA. The groups include representatives for every pertinent USDA unit as well as members from other government agencies and industry associations.

ORACBA continues to sponsor monthly seminars, the Risk Forum, which brings in notable speakers for discussion of technical and scientific issues relating to food safety, human health and ecological risk assessment. The ORACBA Newsletter continues to provide an outlet for further discussion of risk assessment issues within USDA. Circulation for hard copies has reached 850; all newsletters available through the Internet.

ORACBA continues to support an interagency Fellowship program between USDA and FDA, sponsored through the American Association for the Advancement of Science. This expands our government ties to the research community to stimulate research in critical areas where USDA and FDA programs affect human health, safety, or the environment. Two scientists from the Agricultural Research Service work with ORACBA to assess food safety risks and examine risk assessment and management for USDA's conservation programs.

ORACBA has joined the Joint Institute for Food Safety and Nutrition (JIFSAN) in the development and establishment of a curriculum in risk analysis. The curriculum will be taught at JIFSAN as summer institutes, at University of Maryland for semester courses, and at the USDA Graduate School as short courses. Other colleges and universities will also have access to these materials, allowing them to offer courses on their own campus. Tuskegee University is working with USDA and JIFSAN in developing these course materials.

Conducting Reviews and Supporting Risk Assessments.—ORACBA has reviewed a number of risk assessments and related activities, both from within USDA and through its role in interdepartmental review. For example, ORACBA provided support and technical assistance to FSIS during the dioxin in chicken episode. ORACBA's input helped develop a policy which protected consumers while helping identify the dixoins as from a natural source. ORACBA has worked with the Animal and Plant Health Inspection Service to develop a policy for animal health regionalization regulations and will review all risk assessments for imports brought in under the rule. ORACBA has also advised on the recently proposed organic rule, the Animal Feeding Operation Strategy Working Group under the Vice President's Clean Water Action Plan, the President's Initiative on Fruit and Vegetable Safety, EPA's report to Congress on mercury in fish, and the interagency development of a plan to assess the risk of illness due to salmonella in eggs.

FISCAL YEAR 1999 BUDGET REQUEST

For fiscal year 1999, OCE is requesting $6,173,000 in direct appropriations. This request represents a net increase of $1,125,000 over the fiscal year 1998 adjusted base. The proposed budget includes an increase of $131,000 for the annualization of the fiscal year 1998 pay raise and the anticipated fiscal year 1999 pay raise, an increase of $32,000 for retirement costs, a decrease of $38,000 to achieve the Streamlining Level in support of the President's Executive Order and $1,000,000 are for the following items.

(1) *A net increase of $219,000 for Modernization of Weather and Climate Data Acquisition.*—This consists of a decrease of $525,000 included in the fiscal year 1998 budget for a one-time equipment purchase for NOAAPORT telecommunications equipment which was installed at a central USDA location to serve as a hub for interagency access to the National Weather Service (NWS) data and products. This was the first phase of a multi-year modernization initiative.

The increase items include an increase of $410,000 and two staff years for the Modernization of Weather and Climate Data Acquisition. The expected outcome is expanded access for USDA to weather and climate data needed to accomplish USDA's administrative responsibilities and Congressional mandates related to the impact of weather and climate on agriculture and the national forests. The NWS is implementing a multi-billion dollar modernization and restructuring initiative which includes the adoption of state-of-the-art communications technologies. The collection, dissemination, and quality control of weather and climatic data will be accomplished on AWIPS/NOAAPORT equipment, which was installed during fiscal year 1998. The next phase of modernization will be to provide staffing and pre-Advanced Weather and Information Processing System (AWIPS) equipment at strategic sites. The increase will provide for the purchase of hardware and software necessary to fully implement operational sites, telecommunications and maintenance, as well as the hiring of two staff years. The staff will be tasked with managing the system, hardware and software, maintaining the integrity of the data network, and utilizing an AWIPS compatible Geographical Information System package to ensure near real time availability of the data at all operational sites. The acquisition of AWIPS technology will also provide USDA with a link to the Unified Climate Access Network (UCAN), an information delivery system which provides complete and efficient access to all weather data sources in the United States. Through UCAN, a wide variety of climate applications that are essential to USDA will become more readily accessible to weather and climate analysts in both the public and private sectors.

(2) *An increase of $334,000 and four staff years for the National Agricultural Weather Observing Network (NAWON).*—As a result of the full implementation of NAWON, an infrastructure will be created to rapidly deliver local level weather and climate data for agricultural areas to public and private sector users. The data could then be used for a broad range of analytical purposes. NAWON will link different agricultural weather data collection networks already in existence, such as the NWS volunteer "Cooperative Observer" (COOP) network around the Nation; the State and university operated networks such as the Oklahoma Mesonet and the High Plains Automated Weather Station (AWS) Network; and the USDA operated networks such as the NRCS SNOTEL (SNOpack TELemetry) and FS RAWS (Remote Automated Weather Station) networks. Some new sites in major agricultural areas will also be established. The effort would be a full partnership between the Federal and State agencies, extension specialists, agricultural research scientists, university researchers and the private sector.

This is the second year of implementation of this initiative. The focus in fiscal year 1999 will be to reestablish access to data that has previously been collected through the COOP program and to establish new data collection sites in key agricultural areas. As part of the restructuring and modernization, NWS has announced plans to eliminate about three-fourths of the active 12,000 COOP sites. USDA staff will be placed in strategic locations around the Nation to assist state climatologists, Regional Climate Centers, and COOP observers in preserving an accurate and reliable network for agricultural weather data. Without access to basic weather and climate data for agricultural areas, the accuracy of their advisories and forecasts is compromised. In addition, both public and private sector analysis and decisions concerning agricultural commodity trade and markets, fire weather management, forest management, ecosystem conservation, assessments of crop conditions and yield potential, and responses to natural disasters affecting agriculture, all depend on the availability of this data.

(3) *An increase of $255,000 and two staff years for support for the World Agricultural Outlook Board.*—This funding would be used to support two additional agricul-

tural economists. These analysts would be assigned lead responsibility for analyzing selected oilseeds and grains, while providing needed statistical and computer support to the senior analysts for these commodities. A primary mission of the World Agricultural Outlook Board (WAOB) is to produce the Department's highly market-sensitive World Agricultural Supply and Demand Estimates Report. The Board was designed to be a small staff, consisting of only 25 FTE's, including staff supporting all weather and climate activities. The commodity marketing analysis core of the Board is comprised of the Chairperson and six senior level agricultural economists, each of which chairs an Interagency Commodity Estimates Committee (ICEC) for a major commodity group, i.e., wheat and feed grains, rice, oilseeds, livestock, cotton, and specialty crops. The membership of each ICEC includes representatives from other USDA agencies which contribute relevant information and expertise to the analytical process. As originally conceived, the Board was to function primarily as a coordinating body with strong resident analytical capability.

As commodity expertise within the Department has eroded due to agency budget reductions and reallocations, the Board's role has gradually shifted from interagency coordination, as originally intended, to one of primary responsibility for the situation and outlook products released by the Department. Increasingly, industry requests for current market intelligence are being deflected to the Board from participating agencies. At the same time, support provided to the Board such as data collection, quality control, and data entry, have, in many cases, been withdrawn or curtailed by participating agencies. The ICEC chairpersons now have difficulties filling information voids and providing the in-depth analyses needed to generate the quality commodity situation and outlook assessments for which the Department is renowned worldwide. ICEC chairpersons are working under enormous pressure, and analytic underpinning of USDA forecasts is deteriorating. Four years ago, the Deputy Chairperson position was lost to downsizing and reorganization and the six senior level ICEC chairpersons function with no backup or in-house analytical or statistical support.

While numerous factors have caused agencies within the Department to cut support for commodity situation and outlook work, public and private sector demands for objective and unbiased analyses have increased sharply. With the passage of the 1996 Farm Bill, risks associated with agricultural enterprises have increased. Marketing alternatives to manage risk have become more, not less important. To serve its constituency, the Department must not abandon its long-standing tradition of providing the highest quality unbiased market information possible. However, at this time, the WAOB is barely able to maintain the current forecast and projection program and is not likely to be able to do so in the future without additional resources.

This initiative would help maintain OCE's capability of improving the U.S. agricultural economy by facilitating efficient price discovery in agricultural markets by coordinating the release of comprehensive, consistent, reliable, timely and objective USDA estimates, forecasts, and projections of commodity supply, demand, and prices.

(4) *An increase of $78,000 to support a Risk Assessment Fellows Program.*—The Office of Risk Assessment and Cost-Benefit Analysis (ORACBA) undertakes a limited number of efforts to develop partnerships in agricultural risk analysis activities. Experience over the past years has proven one of the most valuable efforts to bringing outstanding young scientists to work at USDA for one year. During fiscal year 1998, ORACBA participated with the American Association for the Advancement of Science (AAAS) and the Food Safety and Inspection Service to fund a limited number of fellows who contributed importantly to food and animal risk analysis projects. During fiscal year 1999, an increase in risk analysis related to food safety and international trade in animal products is expected. The annual increase of $78,000 would allow an additional fellow to participate in this young scientist's program and provide temporary assistance in addressing the risk analysis program needs. ORACBA would also conduct an outreach program with universities to promote risk analysis research in support of USDA program needs. This initiative supports the achievement of OCE's strategic goal to ensure regulations affecting the public are based on sound, objective and appropriate economic and risk analyses.

(5) *An increase of $98,000 for ORACBA to support the President's Food Safety Initiative.*—The President's Food Safety Initiative cites six critical elements for a comprehensive and more effectively coordinated nationwide program to improve the safety of the food supply and, thereby reduce the possibility that consumers will suffer the adverse health and economic consequences of foodborne infections. One of these elements is the development of improved risk assessment methods for foodborne pathogens. Risk assessment methods help characterize risks to human health of foodborne hazards and help regulators make decisions to ensure effective

and efficient interventions for improving public health. This increase would fund activities in the Office of Risk Assessment and Cost Benefit Analysis to support the improvement of risk assessment methods for foodborne pathogens.

The first of these activities is Peer Review—review by independent scientists and risk assessors of key risk-based methods, programs, and activities for the purpose of making improvements. For example, a risk assessment model is currently under development in USDA through ORACBA's Interagency Food Risk Assessment Group (IFRAG) to consider microbial risks to beef products from farm to table. It is expected that this model will be widely useful in Government and industry for risk-based evaluation of procedures and processes important in beef production and processing. This model will become part of the risk assessment capability for the National Food Safety Initiative, as well as support efforts in international trade of food commodities. Another example concerns FSIS' use of risk analysis to revise the residue testing program. The program will develop a risk-based system for allocation of inspection and testing resources to assure the safety of red meat. Since the current USDA system for residue evaluation has been criticized by international trade groups, it is important that the system under development have peer review to assure adequacy of the proposed program to support domestic needs and export activities.

The increase would also be used to fund activities to develop greater expertise in risk assessment research related to food safety issues, and to assure trained and competent analysts are available to complete risk analyses, both within and outside USDA. Overall, these activities will benefit USDA food safety programs, help develop the analytical capabilities of USDA staff, and enlarge the number of trained professionals involved in food safety risk analysis. This budget initiative also supports the achievement of OCE's strategic goal to ensure regulations affecting the public are based on sound, objective, and appropriate economic and risk analyses.

(5) *An increase of $350,000 for the Commission on 21st Century Production Agriculture.*—The Commission on 21st Century Production Agriculture authorized by the Federal Agricultural Improvement and Reform Act of 1996 (Farm Bill), was created to make farm program policy recommendations to Congress regarding future farm legislation beyond the year 2001. The Commission is comprised of three members appointed by the President and eight members appointed by the Chairmen of the Senate and House Agricultural Committees.

The Commission is to conduct a comprehensive review and assessment of the success of production flexibility contracts in supporting the viability of U.S. farming; assess the economic risks to farms delineated by size; assess the changes in farmland values as a result of the 1996 Farm Bill; assess the extent to which regulatory relief and tax relief for agricultural producers is implemented; and assess the effects of trade embargoes, international trade agreements and export programs on U.S. agriculture; assess the likely effect of transferring peanut quotas across State lines; assess the personnel and infrastructure requirements of the Department of Agriculture necessary to support the future relationship of the Federal Government with production agriculture and make specific legislative recommendations to the Congress in this regard.

OFFICE OF THE CHIEF FINANCIAL OFFICER

PREPARED STATEMENT OF SALLY THOMPSON, CHIEF FINANCIAL OFFICER

Mr. Chairman and members of the Subcommittee, it is a pleasure to appear before you today as we present the President's budget proposal for fiscal year 1999 for the Office of the Chief Financial Officer—OCFO—and the Department's Working Capital Fund. I would like to introduce Ted David, the Deputy Chief Financial Officer, Steve Dewhurst, the Department's Budget Officer, and Constance Gillam, my budget officer.

Mr. Chairman, the OCFO administers its programs and activities, as required by the CFO Act of 1990, and delegated by the Secretary of Agriculture, to provide financial management leadership and service to support program delivery in USDA. As important examples, we develop financial management systems policies that promote complete, reliable, timely and consistent information from financial systems; provide policy guidance and oversight of the Department's internal controls and management accountability programs, to ensure adequate controls over Department assets; coordinate implementation of the Government Performance and Results Act—Results Act—in USDA, including strategic planning and performance measurement; and provide budget support for Departmental Offices and the Office of the Secretary. In addition, the CFO is responsible for leadership of USDA's National Finance Center.

PROGRESS IN FINANCIAL MANAGEMENT IN USDA

I'd like to share with the Committee today the progress OCFO has made in strengthening financial management in USDA as well as our current plans for further improvements in financial management in USDA. Our plans are based on the following four major strategic goals for OCFO which have been identified in USDA's Strategic Plan:

—Ensure the provision of timely and reliable financial management information, advice, and counsel to support informed decision making by USDA policy and program personnel.

—Ensure accountability for assets and resources entrusted to the Department.

—Provide coordination, compliance, and monitoring services to USDA agencies for specified financial management and related legislation, regulations, and administration policy.

—Develop and maintain administrative and financial management information processing systems at the National Finance Center that are responsive to user and customer needs. It should be noted that this particular goal is financed through the Departmental Working Capital Fund but is under the direction and guidance of the Office the Chief Financial Officer.

We are committed to these Strategic Goals. Our Annual Performance Plan and budget request for fiscal year 1999, which are directly linked to these goals, are designed to ensure that USDA's policy and program officials have the financial information they need to deliver quality, low cost programs and services to the American public.

FINANCIAL MANAGEMENT INFORMATION ADVICE AND COUNSEL

In today's Government environment, unless policy and program officials have accurate, timely, reliable, consistent, and accessible financial information, they cannot adequately assess the effectiveness and efficiency of their programs, as required by the Government Performance and Results Act (GPRA) and by good management practice. In recognition of this need, OCFO has defined the need to provide quality information in a timely fashion as a major strategic goal and devoted significant resources toward its accomplishment.

As part of our Annual Performance Plan, we have identified four performance goals for fiscal year 1999 to achieve the strategic goal of providing financial management information and advice to policy and program officials. The first performance

goal is the continued implementation of the single integrated financial management information system to modernize financial systems through the multi-year Financial Information Systems Vision and Strategy (FISVIS) project.

We already have made significant progress in implementing FISVIS. For example, we have developed a single set of financial standards and definitions for USDA that are consistent with Governmentwide standards and requirements. This in itself is a major achievement considering several years ago there were different financial standards for each USDA agency, with a single account code having many different definitions. We are also progressing in implementing the Foundation Financial Information System (FFIS), using Commercial Off-the-Shelf software. Toward that end, we have converted the appropriation accounts of OCFO and three organizational units in the Forest Service to the FFIS system. We have also developed a tool kit that will simplify future implementations of smaller agencies to the new systems. Further, the Farm Service Agency is well on its way to implementing the new system. By fiscal year 1999, we plan to implement the remainder of the Forest Service. We will implement other USDA agencies beginning in fiscal year 2000 and plan for complete implementation by the beginning of fiscal year 2001. Of equal importance, we will ensure Year 2000 (Y2K) compliance for our financial systems long before the inevitable deadline of January 1, 2000.

While USDA has had major achievements in implementing our single integrated financial information system, our progress has not been as rapid as planned. We have encountered some of the difficulties inherent in the implementation of complex financial systems. We are working with the Chief Information Officer to assess current status and, if necessary, to modify our project approach. I believe, however, we are well on our way to implementing a new single integrated financial information system which will enable program policy and management personnel to fulfill their responsibilities.

As part of implementing the single integrated financial information system, OCFO is responsible for ensuring that other financial systems and the financial portions of the mixed systems developed by USDA agencies are in compliance with Departmental standards. We are also working with the Office of the Chief Information Officer to ensure that all financial systems in USDA will be Y2K compliant before we enter the new millennium.

Our second major performance goal is to achieve an unqualified opinion on USDA's financial statements. An unqualified opinion is required by legislation, such as the Government Management Reform Act. More importantly, an unqualified opinion on the financial statements provides assurance to our users and customers that the financial systems which underlie those financial statements are sound and generate consistent, reliable, and useful information. OCFO is continuing to make significant progress in achieving that goal. Implementation of FFIS is expected to be a key factor in our success. In addition, the Forest Service financial health project, upgrading of our credit reform accounting policies and improving the quality of information received from our State partners are all significant factors in our ability to achieve an unqualified opinion. Our strategic and performance plans call for achieving an unqualified opinion on USDA's fiscal year 1999 consolidated financial statements as verified by the OIG audit opinion which we will receive in fiscal year 2000.

A third performance goal is to fully implement cost accounting systems and methodologies in USDA. Accurate, reliable, consistent cost data at the lowest organizational level are essential for good financial management. We want to ensure that sound cost principles are applied consistently throughout USDA. With improved cost data, we can generate credible information on the cost of services, products, outputs, and outcomes as required by the Results Act as well as for day-to-day decision making. In fiscal year 1998, our consolidated financial statements will show the full costs of major USDA programs. In fiscal year 1999, cost accounting standards will be implemented at lower levels of the organization. In fiscal year 1999, USDA will meet the requirements of the CFO Act, to review all fees and other charges every 2 years for compliance with cost accounting and other standards by reviewing 50 percent of its fees, annually.

Our fourth performance goal is to provide financial management advice, counsel and technical expertise to USDA policy and program personnel. This is, perhaps, one of the most important services that we offer and one of the most difficult to measure. We have chosen to use customer satisfaction as our measure of performance. The timeliness and quality of the advice and assistance we provide will be assessed and validated by a customer service survey. The baseline will be established during fiscal year 1998. Action plans to improve performance will be implemented and incremental improvement achieved in fiscal year 1999 as validated by a follow-up survey.

ACCOUNTABILITY FOR ASSETS AND RESOURCES ENTRUSTED TO USDA

Our second strategic goal is to ensure accountability for assets and resources entrusted to USDA. The Department is responsible for approximately $136 billion of taxpayer assets. It is critical that we demonstrate our accountability for those resources and that we are indeed good stewards of the public's funds.

Our first performance goal in demonstrating accountability is to achieve incremental progress on ensuring effective management controls throughout USDA and timely completion of corrective action plans. The adequacy of management controls is primarily determined by two processes: internal reviews by management as reported in the Federal Managers Fiscal Integrity Act (FMFIA) and audits by the Office of Inspector General. I am proud to report that for the first time in 7 years, USDA has provided reasonable assurance that, taken as a whole, the Department is in compliance with the management accountability and control provisions (Section 2) of FMFIA. We are still not able to report compliance with the financial systems provisions of the Act (Section 4); however, our current efforts to improve our financial systems will enable us to achieve such conformance.

During fiscal year 1999, we will focus on the remaining corrective actions for Section 2 material weaknesses and resolve the Section 4 nonconformances. Our performance goal is to achieve full compliance with FMFIA for fiscal year 1999.

Our second accountability performance goal is to publish an Accountability Report for fiscal year 1999. The new Accountability Report will combine into one document the FMFIA Report, the Secretary's Management Report to Congress, the consolidated financial statements, the Prompt Pay Report, and others, so that Congress may get an overall view of accountability for those assets entrusted to the Department. We plan to issue our first Accountability Report for fiscal year 1999.

In addition, as part of this strategic goal, we plan to improve the quality of the budget and related services which we provide to Working Capital Fund activities and to client agencies. These services assist client agencies in determining and justifying resource needs, allocating resources, and reporting on the utilization of those resources. In fiscal year 1999, we will continue to improve the timeliness, accuracy, responsiveness and reliability of these services, including implementation of new tools and techniques to improve the efficiency and effectiveness of our operations.

DEPARTMENTWIDE POLICY AND OVERSIGHT

OCFO's third strategic goal is to provide coordination, compliance, and monitoring services to USDA agencies for specified financial management and related legislation, regulations, and administration policy. In this role, OCFO establishes departmentwide policies, provides expert advice, coordinates systems development, and monitors agency performance to ensure that policies are implemented in accordance in Department and Governmentwide requirements. These policy and oversight services enable us to ensure compliance with the GPRA, the Debt Collection Improvement Act (DCIA), the Cash Management Improvement Act (CMIA), Prompt Pay Legislation, Credit Reform Act, and other legislation. In addition, OCFO provides similar services for other fiscal requirements, including travel policy, federal assistance, asset management, and other fiscal matters.

During fiscal year 1999, we will continue to provide expert assistance, consultation, and oversight in these areas; however, we will accord a high priority to the following activities:

Government Performance and Results Act.—Fiscal year 1999 is the first year for which Annual Performance Plans are "in effect" for all USDA agencies and the first year for which an Annual Performance Report is required. OCFO will assist agencies in identifying and developing performance information, develop the form of the Performance Report itself and prepare the Performance Report. While the Report will be for fiscal year 1999, by law it is to be submitted by March 2000. In addition, we will continue to provide technical assistance and support to USDA agencies, as they institutionalize strategic and performance planning in their organizations.

Debt Collection Improvement Act.—During fiscal year 1998, significant portions of DCIA will be implemented, including those portions relating to administrative offset and cross-servicing. During fiscal year 1999 we will continue offset and cross-servicing activities and implement the requirements for electronic funds transfer (EFT) which are to be put in place by January 1, 1999. Other aspects of the Act will be implemented based on Treasury guidance. We will also monitor agency achievement of delinquent debt reduction goals and, as with GPRA, continue to provide technical assistance to USDA agencies on overall improvement of our credit programs.

Implementation of new credit card programs.—In early fiscal 1999 the General Services Administration will put into effect new credit card programs available to USDA and other Federal agencies. These new programs provide significant flexibil-

ity to USDA to use one or more of the vendors on the approved list. We will work with USDA agencies to implement that combination of credit card programs which is most advantageous for USDA program officials.

New travel systems.—We will, with USDA agencies, begin to develop a new travel system, taking advantage of new legislation and advanced technology.

Other.—USDA agencies have identified specific goals for reduction in delinquent debts, on-time payment under the Prompt Payment Act, use of advanced methods for payments and cash collections and other operating performance indicators. We will monitor achievement of those goals as well.

Since much of the guidance, coordination, and oversight is provided through consultation with USDA officials on travel, grants, cash, debt, and other fiscal policies, we will strive to improve the quality and timeliness of our service and will measure the success of our efforts through use of customer surveys.

FISCAL YEAR 1999 BUDGET REQUEST

Our fiscal year 1999 budget request of $4,562,000 is an increase of $279,000 and 2 staff years over our fiscal year 1998 appropriation. The increase covers additional personnel costs of $123,000 for pay costs and $35,000 for the Civil Service Retirement System. The remaining $121,000 and 2 staff years are needed to develop cost-related performance information. This increase supports two of our strategic goals financial management information, advice and counsel, and Departmentwide policy and oversight with specific focus on implementing GPRA. We will provide leadership throughout USDA to develop cost management systems and information and to identify suitable cost-related measures to be used to measure the cost of achieving mission areas' and agencies' strategic and performance goals.

WORKING CAPITAL FUND—NATIONAL FINANCE CENTER

Mr. Chairman, I would like to conclude with a brief overview of our major initiative for the largest activity financed by the Working Capital Fund the National Finance Center. While the Fund finances 22 activities, most of those are managed by the Assistant Secretary for Administration and Chief Information Officer. They can speak in greater detail about their WCF-funded activities. Since the NFC is under my administration, I will focus my comments on NFC initiatives.

During fiscal year 1998, one of the major activities at the National Finance Center is to assure that all of our systems are compliant with Year 2000 requirements. Thus, we are devoting significant effort this year to modify and test computer systems code. In the process, we are eliminating a number of computer programs which are no longer necessary and are renovating those systems which will be used in the new millennium. Our current plan is to renovate all code in fiscal year 1998 and to continue our testing throughout fiscal year 1998 and early fiscal year 1999. NFC will be Y2K compliant on or before the target date established by the Office of Management and Budget and the USDA Chief Information Officer.

We have allocated significant NFC resources to assure that we can achieve Y2K compliance, as we continue to modernize and upgrade some of our major systems in fiscal year 1998 and fiscal year 1999. The objectives of these modernization efforts are to reduce the cost of NFC services to our client agencies and to reduce the costs of administrative activities by our client agencies. These modernization efforts include:

—The implementation of the Foundation Financial Information System (FFIS) discussed previously, an integral part of the Department's ability to provide financial information to program and policy personnel.

—Modernization and enhancements to the payroll system. This will reduce the costs of NFC services and enable our client agencies to reduce their costs of processing personnel and payroll actions.

—The implementation of a new purchase card management system which will significantly reduce the costs of small purchases of our customer agencies.

—Ongoing efforts to develop a procurement management system, working closely with the Assistant Secretary for Administration and the procurement community. Continued compliance with the technical infrastructure requirements of the Chief Information Officer.

—Achievement of Level 2 of the Capability Maturity Model which will enable us to develop systems more effectively and efficiently.

—Implementation of methods to reduce the volume of paper sent to our clients so as to reduce NFC and client costs.

In addition, we are continuing to actively market NFC services to other Federal agencies. We continue to obtain new clients, particularly for the payroll/personnel

system, for example, the Capitol Police—Senate—and we anticipate that our modernized systems will result in additional cross service business.

NFC cannot achieve these ambitious goals without the participation and support of our customer agencies inside and outside USDA. That support comes with an obligation to us to reduce costs wherever the opportunity presents itself. An example will illustrate the point. As I mentioned, we are devoting significant effort to assuring that our systems are Y2K compliant. To do this, we have not asked for additional resources from our client agencies. Instead we have reallocated resources within the Center to ensure that Y2K costs are absorbed within the resources available to NFC. This means we have suspended certain of our maintenance activities and that some agency specific requests for work cannot be accommodated this year. Given the similar difficulties our agency partners are experiencing in achieving Y2K compliance, we believe that our customers understand our strategy and appreciate our efforts to hold down costs. We will continue to ensure that cost increases are fully justified and that agencies are informed of increases and involved in decisions that affect their budgets.

Mr. Chairman, the National Finance Center has become a benchmark against which other providers of financial and administrative services are measured. The initiatives identified here today will enable NFC to continue to serve as a benchmark well into the future.

I appreciate the opportunity to meet with you this afternoon and will be pleased to answer any questions the committee has.

BIOGRAPHICAL SKETCH

SALLY THOMPSON

Sally Thompson served as the State Treasurer of Kansas. First elected in 1990, Thompson won reelection in 1994. Thompson resigned as State Treasurer to become the Chief Financial Officer for the U.S. Department of Agriculture. As Treasurer, Thompson managed a staff of 54 employees with an annual budget of more than $90 million. During her tenure as State Treasurer, Thompson initiated a complete overhaul of the agency, which consisted of a $5 billion municipal bond portfolio and cash management services of $11 billion annually.

Thompson's efforts to reform the State's investment laws have earned Kansas $700 million in interest income since 1992. Thompson served on the Pooled Money Investment Board (PMIB), the entity that directs the State's investment policies. Thompson also developed the Municipal Investment Pool, an investment alternative for local governmental entities that has earned participants more than $150 million combined in interest income since 1993. In addition, Thompson updated the State's unclaimed property laws, returning $13 million in unclaimed property to its rightful owners. The program includes the Kansas Cash Connection, a portable computer database that contains more than 300,000 records of unclaimed property. Thompson also served as a trustee on the Kansas Public Employees Retirement System Board (KPERS) and was a member of the Surety Bonds and Insurance Committee.

Active in treasury issues at the National level, Thompson served as Secretary/Treasurer of the National Association of State Treasurers. She is a past chair of the National State Debt Management Network and served as treasurer of the Midwest Association of State Treasurers as well as a member of the Executive Committee for the Council of State Governments.

Before entering public life, Thompson spent 20 years in the private sector, Thompson served as President and Chief Operating Officer of Shawnee Federal Savings in Topeka. Prior to that position, she worked as Vice President of Business Planning and Development for the United Banks of Denver. A certified public accountant, Thompson began her career as a financial manager at Touchc Ross, a multinational accounting firm.

Thompson combined her professional experiences with community involvement. She has served on the boards of the Topeka YWCA, Everywoman's Resource Center, Downtown Topeka and the Topeka Chamber of Commerce. Thompson also graduated from the Leadership Kansas, Leadership Topeka and the Council of State Governments' Toll Fellowship programs.

Thompson graduated magna cum laude from the University of Colorado, Boulder, with a bachelors degree in business, accounting and finance. A nontraditional college student, Thompson graduated at the age of 35. She has three children and three grandchildren. A longtime Topeka resident, she now resides in Arlington, Virginia.

OFFICE OF THE CHIEF INFORMATION OFFICER

PREPARED STATEMENT OF ANNE F. THOMSON REED, CHIEF INFORMATION OFFICER

INTRODUCTION

Mr. Chairman, Senator Bumpers, members of the Subcommittee: thank you for inviting me here today. I will submit my testimony for the record and also offer a few remarks.

I am honored to have been chosen by Secretary Glickman to serve as Chief Information Officer of USDA, and to lead the Department's efforts in implementing, developing and maintaining applications of new technologies which will cut waste, serve USDA's customers more efficiently, and open new opportunities for farmers, families, and rural communities.

I am proud to work for Secretary Glickman whose leadership and commitment has transformed USDA into a vibrant, vital force for the American people and their communities. With the strong bi-partisan support and cooperation of the Congress, USDA is stronger, abler, leaner and more cohesive, which will better serve our nation.

Though USDA has turned the corner on a new path of efficiency and quality program delivery, we still face many challenges, such as assuring Year 2000 compliance and in the area of implementing new technologies. We recognize that these challenges come at a time when the federal government has fewer and fewer resources. And we realize that creativity, innovation, and hard work are needed to assure that we stretch every dollar in our budget.

President Clinton has laid out a balanced budget plan that works to aid families, strengthen education, and promote the expansion of economic opportunities, which is welcomed news for all Americans. The benefits of a balanced budget will show themselves in continued economic growth and prosperity. A strong national economy is critical to a strong farm economy and critical to the mission of USDA. Secretary Glickman has worked long and hard with the White House to lay out a vision for USDA, and the President's budget seeks to fund and promote these priorities: Expanding opportunities for family farmers and rural communities; Making a major commitment to food safety and to fighting hunger in America; Providing wide stewardship of our natural resources; and Protecting the integrity of USDA programs.

Within each of these priorities lies the need for the expanded use and integration of new technological applications, whether it be faster program delivery to small farmers, new PC's and Internet access for rural grade schools, computerized testing to assure food safety, or new telecommunications vehicles and further system integration which create greater long-term savings and efficiencies for USDA. Implementing new information technology will turn these visions into reality.

USDA INFORMATION TECHNOLOGY BUDGET HIGHLIGHTS

The 1999 total budget request for information technology at the Department is $1.2 billion. This includes the Department and all of its agencies. This total includes approximately $327 million for acquisitions, including equipment and software; $236 million for commercial support services for operations and maintenance; $31 million for supplies; $447 million for inter-governmental payments, such as grants to states and FTS 2000 services; $280 million in personnel costs; and $75 million in other services, including non-FTS 2000 voice and data communications. Offsetting these costs are collections from non-USDA agencies of approximately $146 million.

By targeting our efforts to promote these priorities, it is our hope that all USDA customers and employees will benefit. I look forward to working closely with you and your staffs on this task in the days to come. Let me begin to discuss our challenges in more detail.

SYSTEMS INTEGRATION

The Department is making real headway in its efforts to integrate systems and expand the application of new technologies. Over the past year, USDA has reduced

the unnecessary paperwork burden on the public by 30 percent, exceeding the President's goal of 25 percent; more than 40 percent of USDA's 1,320 mission critical systems are already Year 2000 compliant and the remaining systems are projected to be completed by no later than March 1999; and USDA won three Government Technology Achievement Awards. This past year saw the National Resources Conservation Service's (NRCS) flood management system, Rural Housing Services' (RHS) Dedicated Loan Origination and Servicing System, and the Agricultural Research Service's (ARS) computerized irrigation system all come away with this prestigious recognition.

In addition, other USDA infrastructure investments in 1999 include an estimated $27 million to ensure that every USDA system and application is year 2000 compliant. A proposed $67 million for the Common Computer Environment (CCE), a USDA Service Center Implementation project, will provide a single computing platform for USDA's Service Centers, which deliver farm and housing loans, conservation assistance, and other programs in America's rural communities. Also, the Forest Service seeks to invest $143 million in Project 615, a continuing effort which provides geographic information, telecommunications, and hardware and software infrastructure in support of program delivery throughout the country. The Animal & Plant Health Inspection Service's Integrated Systems Acquisition Project (ISAP) will provide a common electronic mail system allowing for a more efficient communications environment. ISAP implementation is underway or planned for key APHIS science centers, regional and field offices. The fiscal year 1999 planned investment is $6.7 million.

Other USDA agency proposed technology expenditures include $8.1 million for the Dedicated Loan Origination and Servicing System, a Rural Development program which provides centralized escrow and servicing of housing loans made by USDA in rural communities. Approximately $14.3 million has been requested by the Food Safety & Inspection Service for information technology to facilitate the implementation of the Pathogen Reduction/Hazard Analysis and Critical Control Point System (HACCP)—a science based food safety system, and to support field restructuring.

OFFICE OF THE CHIEF INFORMATION OFFICER BUDGET REQUEST

This proposed funding for OCIO will facilitate continuing efforts to integrate USDA technological programs and services, and assure that USDA Information Technology (IT) resources are expended wisely. The fiscal year 1999 Office of the Chief Information Officer budget request totals $7,222,000, an increase of $1,671,000 and 6 staff-years over the 1998 level of $5,551,000.

Within this increase, $500,000 and 6 staff-years are requested to support Information Technology Capital Planning and Investment Control programs. The Clinger-Cohen Act of 1996 and the Office of Management and Budget Circular A–11 Part 3 require USDA to intensify its review and analysis of information technology systems as capital assets. Numerous internal (IG) and external (GAO) audits and studies in recent years have found the Department's Information Technology management and acquisition systems to be lacking, and criticized the deployment of these IT assets. There is a clear and critical need for a centralized, Departmentwide approach to capital planning and investment control for USDA's IT assets. The Secretary and I have responded with a moratorium on IT acquisitions and begun to build the decision making structures, policies, and support systems for a USDA IT Capital Planning process. An Executive Information Technology Investment Review Board (EITIRB) was established in 1996, and efforts are underway to support this Board, but much more needs to be done from both a policy and a practical aspect to provide needed information to the Board on capital planning, life-cycle cost analyses, and risk assessment for IT investments. Work has begun in this area with two efforts underway to accomplish the development of a model capital planning and investment control (CPIC) process and a case study of how a USDA agency uses the model to document and operate the process. This effort is jointly funded with the Department of Energy and the National Performance Review. After the results of the study and the model are determined, the tools developed as part of the model will be made available to the agencies.

The design and implementation of a USDA-wide capital planning and investment control program and supporting automated information system is a multi-year effort requiring an infusion of resources to OCIO for a permanent, ongoing program management staff. As the process is used across USDA, skilled staff will be needed to perform and review benefit-cost, return on investment, and other detailed analyses in order to reduce as far as practicable the risk of failure in the development, deployment, and operation of USDA information technology systems. The necessary skills are beyond those of current staff and will be of particular importance in pro-

viding support to the EITIRB. Revised management processes need to be established, training on the use of the planning and tracking tools for CPIC provided, and project management systems set up to report accurate cost, schedule and performance data. The resources requested will allow us to successfully carry out the process.

The greatest portion of the 1999 funding increase is $1,000,000 for continued development of the USDA Technical Architecture, including technical standards, business data, and telecommunications, and for contractor expertise for the Department's Earned Value Management System to track and account for the cost, schedule, and performance of information technology projects, and to provide valid, timely audit data for management. Contractor expertise is required to assess the completeness of the USDA Information System Technical Architecture (ISTA) against accepted industry standards, which takes into account the multiple layers of an information systems architecture, including basic scope and purpose, enterprise or business model (design of the business and how its entities and processes interact), system model (the data elements and functions that represent the business entities and processes for the information system), the technology model (the adaptation of the system model to detailed technologies), and the detailed description of the system. The ISTA model will provide a framework for USDA agencies to migrate their existing technology base to the new architecture, resulting in an increased level of interoperability and data sharing. The architecture is the vehicle for applications used by one agency to interoperate with applications used by another agency. OCIO needs contractor skills and modeling capabilities to achieve this important work. It will cost less to manage and operate under this single ISTA than it will for each agency to manage their own unique component.

Development and use of an Earned Value Management System (EVMS) will improve the management of information technology projects in terms of cost, schedule, and performance. The Earned Value Management concept requires the integration of a program or project's technical, cost, and scheduling requirements into a comprehensive performance management baseline against which progress is assessed. EVMS analyzes the added, earned value that IT resource investments bring to program delivery and provides a common framework for communicating program status to managers for informed decision-making. EVMS will improve accounting for IT projects expenditures, fostering better management decision-making on the investment of the Department's IT resources and will correct a material weakness in many USDA control systems. EVMS will improve management of information technology project scheduling, prevent cost overruns and slippages, and generate performance data needed to support the CPIC process. My office needs contractor expertise to benefit from the contractor's often first hand experience with other agencies and firms' best practices. Provision of these resources will strengthen our ability and flexibility to meet USDA's IT challenges successfully and without costly failures.

CIO PLAN OF ACTION

The appropriate application of information technology is critical to the Department's ability to deliver programs and services to the public. We have invested many resources in technology to improve government accountability and to transform program delivery through the use of modern business practices. Secretary Glickman has challenged the Department to significantly strengthen our corporate management of technology so that information can be more readily shared across organizational lines, assuring that investment decisions are based on sound business principles.

This plan of action is firmly based on the requirements of the Clinger-Cohen Act coupled with the business needs of USDA to improve service to our customers. The Act has guided our actions through the capital planning and investment control process. This pathway directed our portfolio investment policies and the creation of a technology architecture over the past year. Our plans may initially appear ambitious, but they are necessary, and USDA is up to the task of applying these management principles to all IT capital investments.

Today, we are building on the foundation which we have worked arduously to create. The activities of my office are structured around five critical objectives:

—Assure that mission-critical systems are Year 2000 compliant;

—Implement a single information technology infrastructure and supporting organization for the Farm and Foreign Agricultural Services agencies, the Rural Development agencies, and the Natural Resources Conservation Service;

—Improve the Department-wide management of telecommunications;

—Develop policies and procedures for implementing the provisions of the Clinger-Cohen Act through strengthening the capital planning process, instituting an information technology program review and evaluation strategy, refining the enterprise-wide architecture, providing for business process reengineering and developing work force planning capacity; and

—Build a strong management team and develop strategies for improving the corporate management of USDA's information infrastructure.

These objectives support the Department's strategic plan for information technology, establish clear milestones for achievement, and identify responsible parties.

YEAR 2000 STRATEGY

The Department is taking a strong management approach to effectively respond to the challenges of Year 2000 remediation. USDA has begun implementation of a strategy to assure that the Department's systems and operations are compliant. The Department is also working to raise awareness in the communities which we serve, to assure that they do not suffer prolonged interruption in services or incur hazards to public health and safety. During the past year USDA has:

—Made OCIO, in particular the Year 2000 Program Executive and myself, responsible for planning, oversight, and evaluation of the USDA's efforts to achieve Year 2000 compliance. The Under and Assistant Secretaries and Agency Directors have been given the programmatic, budgetary, managerial, and technical responsibility for ensuring that USDA's mission-critical systems nationwide are Year 2000 compliant by March 1999 in their respective areas.

—Appointed a senior executive in each agency area to address the Year 2000 issue. For purposes of Year 2000 remediation, this designee reports directly to the Agency Administrator, and is charged with establishing a Year 2000 project team. In order to establish accountability, Year 2000 remediation is a critical element in the performance standards of the executive sponsors.

—Issued a procurement moratorium requiring CIO approval of any IT procurement over $25,000. Under this moratorium, purchases will only be approved on an emergency basis or when the acquisition is directly related to Year 2000 remediation. I have sole signatory authority under the moratorium, which will remain in place throughout fiscal years 1998 and 1999 to assure that the Year 2000 is the Department's information technology priority.

OCIO has begun to reach out to USDA customers—corporations, farmers, nonprofits, and rural communities—to increase awareness about the need to address the integrity of their technological applications in regards to the Year 2000 problem.

—I was an active participant in agricultural industry forums that have addressed the Year 2000 issue and have discussed compliance issues with agricultural manufacturers.

—USDA initiated an effort to raise Year 2000 awareness across rural America. The OCIO, REE, FSA, and RD mission areas are increasing their contact with partners and constituents in the state and local sector, including the National Association of Counties, the National Governors Association, and the National Association of State Universities and Land Grant Colleges.

—I have actively participated in government-wide initiatives to work with the states on Year 2000 compliance.

The OCIO has identified more than 8,000 external data exchanges with states and other entities. Approximately 95 percent of the exchanges have been assessed for Year 2000 compliance with 58 percent already compliant. In addition, USDA has undertaken a comprehensive inventory of all network and telecommunications equipment and software. More than 3,700 network routers have been specifically identified, and several hundred will require software upgrades in order to be Year 2000 compliant.

The Department currently estimates the total cost of becoming Year 2000 compliant to be $120 million. This includes costs beginning in fiscal year 1996 and continuing through the Year 2000.

ADMINISTRATIVE CONVERGENCE/SERVICE CENTER IMPLEMENTATION

Over the past several years, we have been addressing the difficult challenge of modernizing and streamlining delivery of program services at the county level. The consolidation and collocation of the county offices is nearing completion. By the end of this year, we will have reduced the number of county office locations from 3,700 to fewer than 2,600 USDA Service Centers. The Secretary's vision is that any USDA customer of the county based agencies, FSA, NRCS, RD, can go to any USDA Service Center to conduct business. Furthermore, the continued implementation of mod-

ern integrated technology will allow many customers to do some business from their homes.

The first phase of modernizing the technology infrastructure is the deployment of an integrated telecommunications system for both voice and data. This system will link these agencies within the Service Centers as well as with other offices, thereby enabling the sharing of equipment and information as we achieve a Common Computing Environment (CCE). Deployment of the telecommunications systems will be completed by the end of the year.

Interagency Business Process Reengineering initiatives are moving forward to define improved and more integrated ways of delivering USDA programs to customers. The results of these efforts provide the framework and requirements for technology improvements. We are initially testing these business and technology improvements in a laboratory environment, then moving to field pilots, beginning in April. We anticipate beginning the acquisition of parts of the technology infrastructure in late fiscal year 1998 and continuing with acquisition and deployment of the new infrastructure over the next four years.

A related initiative is the decision to consolidate administrative and information technology staffs of the county based agencies into one unit as part of the Secretary's administrative convergence strategy. These consolidations will bring about immediate efficiencies and savings that will rapidly increase as we build and deploy our integrated technology systems and dispose of our legacy systems.

My office has oversight responsibility; however, direct responsibility for managing Service Center initiatives rests with the Agency Administrators. Last year, I established an oversight unit with Senior Executive leadership to manage this responsibility. This staff works continuously with the agencies, Service Center Implementation Team, and other policy officials to facilitate and monitor progress on these initiatives. Outside, independent resources are also used regularly to identify the need for modifications and for mid-course corrections. Through these efforts, and the moratorium, USDA has dramatically changed its approach to managing modernization efforts.

TELECOMMUNICATIONS

In the last year, I have taken significant steps to change telecommunications management practices at USDA. When reviewing the process previously used to order telecommunications equipment, I learned that 300 people had procurement authority and many had not been adequately trained. Furthermore, there were not adequate mechanisms to allow for the sharing of information and resources.

Today, only 17 people have authority to order equipment. They receive training quarterly, and they have access to a database of information that allows for more efficient decision-making. Through these and a series of specific cost reduction initiatives, we have saved several million dollars over the past year.

Now, USDA is continuing to focus its efforts on establishing a telecommunications environment which optimizes improvements in mission performance while minimizing program operational costs. USDA is doing so through three major initiatives: The Telecommunications Enterprise Network, the Telecommunications Ordering, Billing and Inventory System (TOBI), and a comprehensive review and update of telecommunications and security policies. The Telecommunications Enterprise Network will eliminate further proliferation of agency private, wide-area data networks, and capitalizes immediately on savings from efficiencies. Measures are in-place today which permit USDA to stabilize its current telecommunications environment. A key example is the establishment and certification of Telecommunications Mission Area Control Officers who manage mission area and agency needs centrally while identifying and implementing planning which optimizes consolidation and cost avoidance opportunities from a broader corporate perspective. The Network plan will also allow for a national infrastructure to be constructed and managed under the authority of the USDA CIO, as a corporate enterprise asset allowing greater planning and system integration between the various USDA agencies significantly reducing costs and speeding program delivery.

The TOBI system integrates the recently reengineered administrative processes with an automated management information system, allowing for greater control and accounting of USDA telecommunications acquisitions.

The third major telecommunications initiative encompasses a comprehensive review and update of the existing telecommunications and security policies. Policy development and implementation are imperative to ensure that the Department moves in a uniform direction, standards are applied consistently, information and resource sharing opportunities are maximized, and cost reductions are realized. Policy revisions are needed to address the changing environment resulting from enactment of

the Clinger-Cohen Act, the proliferation of new technologies such as Internet and Intranets, and the increasing number of network security threats. A strong security program is our first line of defense against increased threats and vulnerabilities. My staff has greatly increased coordination on security efforts with all USDA agencies—sharing information and raising awareness at all working levels.

CLINGER-COHEN COMPLIANCE

CAPITAL PLANNING AND INVESTMENT CONTROLS

New processes have been implemented for approving capital investments in IT. USDA adopted procedures recommended in the OMB Capital Programming Guide. The Executive Information Technology Investment Review Board met to review and endorse the fiscal years 1998–99 investment portfolio. As we move forward, we will strengthen the analytical support provided to these senior policy decisions. My office established a capital planning and investment control (CPIC) process for implementing the Clinger-Cohen Act. Concurrently with this process development, we are participating in a joint development effort with the Department of Energy and the National Performance Review to implement an information system which will assist us in this management. This project is named the Information Technology Investment Portfolio System (I-TIPS). I-TIPS will provide USDA managers with ready and shared access to a variety of up-to-date information about individual IT initiatives as well as their entire IT investment portfolio. I-TIPS is a World-Wide-Web application that requires only an Internet connection and a browser to access.

I am happy to report that there is wide interest for I-TIPS in the federal community, with many agencies already committed to I-TIPS installations including: Energy, Justice, Labor, and HUD. Both the General Accounting Office and the Office of Management and Budget have reviewed I-TIPS and firmly support its use as a management tool to help agencies monitor their IT investments. USDA plans to use this system this budget year for our analysis of agency IT investment initiatives and Department level decision-making for our entire IT portfolio.

INDEPENDENT VERIFICATION AND VALIDATION EFFORTS (IV & V)

My office embarked on an independent verification and validation program in 1996. We recognize that non-partisan analyses and observations are needed at various points in the life cycle of a program to identify deficiencies before systems are built. Our IV&V program targets major information technology initiatives and has several objectives: Assess the quality of plans and management strategies; assess how well systems address customer needs; and verify that every system is well-designed and meets all USDA specifications.

Several IV&V tasks already completed include the review of the management and plans for the installation of telecommunications facilities in the field service centers, analysis of the technical alternatives and business case for the future computing environment at the service centers, an analysis of the Department's developing information technology architecture, and an analysis of the requirements of the Department-wide financial information system.

We expect to continue to employ the IV&V concept as part of our IT management strategy. Unlike in the past, we want to make sure that all future technology expansion is part of a cohesive and integrated planning process. We want to ensure that it works right the first time, and that USDA and the American taxpayer get what was paid for.

INFORMATION SYSTEMS ARCHITECTURE

A rapidly changing information intense environment demands new approaches, particularly in the way the Department deploys technology to meet its business information needs. USDA recognizes that effectiveness can be achieved and economies gained through coalescence of business activities and information technology resources. Under my leadership, USDA has developed the Information Systems Technical Architecture (ISTA) to meet these immediate and future needs. The ISTA will be one of the mechanisms used to strategically manage information and information technology resources at USDA. The ISTA will evolve through continuous assessment of USDA's business needs, modern management practices, and technology advancements.

As I indicated earlier, the USDA ISTA was reviewed by an outside contractor under the IV&V Program to evaluate the existing ISTA against an accepted architecture methodology and make recommendations regarding the integration, implementation, and management of the architecture. While the IV&V findings were generally positive regarding USDA's first effort, there are several recommendations

that we will incorporate. My office is currently examining the plan to ensure that USDA is taking a highly pragmatic and cost-effective approach to architecture design and implementation. In this regard, OCIO will leverage existing agency projects by identifying best practices in the various architectural components. We will also establish a configuration management board, standards criteria, and a program management staff. The ISTA is linked to the Capital Planning and Investment Control process and is a required input for the selection phase and for the implementation of the Information Technology Investment Portfolio System (I-TIPS).

USDA TECHNOLOGICAL WORK FORCE

As this Committee is all too aware, current Bureau of Labor Statistics' projections show a major shortage of information technology workers in the fields of computer engineering, computer sciences and computer programming. We have anecdotal evidence that this is becoming a problem at USDA. We have many talented individuals, and that is well known to the corporate sector.

To address this work force crisis, I have recently designated a staff member to oversee USDA's IT workforce planning and development efforts. I am also working within USDA and in conjunction with the CIO Council to develop recruitment and retention strategies to ensure that USDA's information technology systems are competently managed and operated in the years to come.

CIO MANAGEMENT STRATEGIES

Every successful organization has strong and effective leadership at its highest levels. With the continued support of Secretary Glickman and Deputy Secretary Rominger over the past year, great strides have been made toward building a competent management team within my office, and a credible, business-like information technology program for the Department. One of my earliest appointments was a Senior Executive to provide oversight of Service Center Implementation activities. In May 1997, a Deputy CIO was named to create a strong management focus on all USDA IT matters. The executive team includes an Associate CIO for Policy, the Director of the NITC, and a Senior Policy Advisor for Year 2000 remediation. A search will soon begin for a telecommunications executive to fill a recent vacancy. Each of these executives has demonstrated an understanding of USDA business and customer service requirements and the role of information technology in supporting these requirements. All have demonstrated their leadership, energy, communications, and technical skills.

As the team evolved, we have been unified in our vision and focus for managing USDA's information technology resources from a corporate perspective. My in-house expertise has been further leveraged through the development of strong partnerships with USDA agency Chief Information Officers and counterparts in other federal organizations. Recognizing that we face common goals of increasing performance while meeting the challenges of reduced staffs, shrinking budgets, and greater time constraints, these partnerships have demonstrated synergy in developing new approaches and solutions to shared problems.

In addition, through benchmarking and other opportunities, I have sought the advice of corporate CIO's who manage large and complex organizations. This advice has proved instrumental as we have established new IT governance strategies.

Also as part of OCIO's management strategies implementation process, we recently completed the development of our comprehensive reorganization plan, of disparate USDA IT elements, into a strong corporate program agency to meet the challenge of providing the right mix for leadership and program delivery for USDA information technology.

FISCAL YEAR 1998 MANAGEMENT INVESTMENT STRATEGY

Deputy Secretary Rominger issued the USDA IT investments moratorium on November 12, 1996. The initial purpose of the moratorium was to restrict USDA agencies from purchasing IT resources until improvements were fully implemented which control our management of IT resources. To assure that agencies focused on correcting Year 2000 issues before initiating new IT projects, the moratorium rules were revised to apply to any IT acquisitions of over $25,000. Agencies now receive a moratorium waiver from my office only for true emergencies and Year 2000 remediation actions.

Through the moratorium, the Department has been able to ensure that USDA agencies are focusing on the Year 2000 problem and carefully evaluating their IT needs in conjunction with their partner agencies, allowing for more coordination and cooperation.

CONCLUDING REMARKS

As with most other CIO's, my top priority for the coming year is Year 2000. In addition to priorities associated with Service Center/Administrative Convergence, Clinger-Cohen implementation, and telecommunications, there are significant issues to address with legacy systems, security, inter-operability, electronic commerce, management of change, skilled labor shortages, and exploding technology. There is a growing awareness that improved corporate management of USDA's information infrastructures can only occur when leadership and the right mix of business, management, and technical skills are present. With my current team in place, I believe I am positioned at the highest level of my organization to meet current and future challenges.

The historic balanced budget which President Clinton has introduced provides a framework to meet the many technology challenges that we face, in a way that is good for USDA and good for America. Over the past year, USDA has made great strides in righting past wrongs and redirecting our technological goals. Aside from our internal systems usage, USDA has taken technology to deliver our programs to the public—quicker and more efficiently. We instituted the HACCP program to make food safer for America's families. The Electronic Bid Entry System (EBES) is creating more business opportunities for the commodities industry and our nation's businesses. The USDA telemedicine loan and grants programs are bringing the latest medical innovations into rural communities across the nation. And the Forest Service, through Project 615, is using technology to improve our stewardship of America's precious natural resources and public lands.

There is still more to accomplish—more challenges ahead of us. And we must stay focused on addressing these challenges. We must continue to take action on reconciling our internal Year 2000 problems, while at the same time reaching out to our broad constituencies in rural America and the agriculture industry to make them aware of the threat to their systems and their health and safety. We must address the IT work force shortage, to ensure that USDA will have the expertise in the future to continue to deliver services and address the needs of both the Department's staff and the public. And most importantly, we must continue to work together to prove to the American people that we can meet these challenges in a creative, competent, common-sense manner.

Over the past year, I have had the privilege of working with this sub-committee in a positive way to meet these challenges. I look forward to working with all of you in the months to come to build on this relationship and meet our mutual needs and objectives as we head into a new century. I expect to be able to report tangible results on these initiatives at next year's hearings. Thank you.

OFFICE OF COMMUNICATIONS

PREPARED STATEMENT OF TOM AMONTREE, DIRECTOR OF COMMUNICATIONS

Mr. Chairman and members of the Subcommittee, I am pleased to discuss the fiscal year 1999 request for the Department of Agriculture's Office of Communications—OC.

When in 1862, Congress wrote the law establishing what is now the U.S. Department of Agriculture, it said the Department's "general designs and duties shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of the word." The Office of Communications coordinates the implementation of that original mandate.

The Office of Communications coordinates communications with the public about USDA's programs, functions, and initiatives, providing information to the customers and constituency groups who depend on the Department's services for their well-being. It also coordinates the communications activities of USDA's seven mission areas, and provides leadership for communications within the Department to USDA's employees.

In keeping with President Clinton's balanced budget plan, this office continues to streamline its operations. For fiscal year 1999, we will have 120 staff years, 30 less than in fiscal year 1993. At the same time, we are adopting new technologies to meet the increased demands for information. Using the Internet's world wide web, radio, television and teleconference facilities, we are able to ensure that the millions of Americans whose lives are affected by USDA's programs receive the latest and most complete information.

The Office of Communications' 5-year strategic plan includes the following goals:

—Increase the general public's awareness of USDA policies, programs and initiatives, with particular attention to reaching traditionally underserved communities.

—Using the latest and most efficient communications technology, methods and standards, improve access to and distribution of USDA information to news media, constituent groups, and individual customers.

—Improve communications with USDA employees by leading and coordinating internal USDA communications.

—Continue development of an efficient and effective results-oriented, public affairs community within USDA that provides high-quality customer service.

—Foster civil rights and diversity throughout USDA's public affairs community and its communications products and services.

To accomplish these goals, we will continue to take an active part in policy and program management discussions, coordinating the public communication of USDA initiatives. We will continue to provide centralized operations for the production, review, and distribution of USDA messages to its customers and the general public, and we will monitor and evaluate the results of these communications.

The Office of Communications will continue to acquire and instruct staff in using the most effective and efficient communications technology, methods, and standards in carrying out communications plans.

The Department values its employees as good Government "ambassadors" who need to be kept informed. The Office of Communications intends to improve communications with USDA employees, especially those away from headquarters. We will help employees understand USDA's general goals and policy priorities, to become more familiar with USDA programs and services, and to understand initiatives, especially cross-cutting ones, and how they relate to each employee's specific job duties.

OC is also working hard to ensure compliance with Government Performance and Results Act. We will be working to update USDA regulations and guidelines for communications; conducting regular training sessions for USDA communications staffs about using communication technologies and processes to enhance public service; fostering accountability for communications management performance through-

out USDA; and continuing to work to create a more efficient, effective and centralized Office of Communications.

The Office of Communications will also provide equal opportunity for employment and promote an atmosphere that values individual differences. We will continue to provide equal opportunity for contracting goods and services. We will increase availability of USDA information to underserved communities and geographic areas to ensure equal opportunity in USDA's outreach efforts, and will continue to develop universally accessible information products.

FISCAL YEAR 1999 BUDGET REQUEST

The Office of Communications is requesting a budget of $8,319,000. This is a net increase of $181,000 over our fiscal year 1998 current estimate. The net increase covers additional personnel costs of $195,000 for pay costs, and $51,000 for the Civil Service Retirement System; a decrease of $100,000 based on the approval of two buyouts; and an increase of $35,000 for an initiative to improve communications to underserved groups. This effort is directly related to OC's Strategic Plan management initiative to improve efforts to reach groups that are working with small and limited resource producers in underserved communities and geographic areas, and to improve their understanding of USDA programs and initiatives. It would also increase awareness among USDA stakeholders and consumers about such important issues as food safety.

This concludes my statement, Mr. Chairman. I will be pleased to respond to any questions.

OFFICE OF THE GENERAL COUNSEL

PREPARED STATEMENT OF CHARLES R. RAWLS, ACTING GENERAL COUNSEL

INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am pleased to have this opportunity to present our fiscal year 1999 budget request and to also provide you with an overview of our agency to include some of the current activities and issues facing the Department.

MISSION

The Office of the General Counsel (OGC) is the law office for the Department. As an independent, central agency within the Department, OGC provides all legal services necessary to support the programs and activities of USDA. OGC provides legal advice and services to the Secretary of Agriculture and other officials of the Department of Agriculture with respect to all USDA programs and activities.

ORGANIZATION

OGC's services are provided through 12 Divisions in Washington and 18 field locations. The headquarters for OGC is located in Washington, D.C. The Office is directed by a General Counsel, a Deputy General Counsel, six Associate General Counsels, and a Director for Administration and Resource Management. The attorneys located in headquarters are generally grouped in relation to the agency or agencies served. Our field structure consists of five regional offices, each headed by a Regional Attorney, and 13 branch offices. The field offices typically provide legal services to USDA officials in regional, State, or local offices.

Our full staffing levels are approximately 242 attorneys and 108 support staff, including 17 paralegals, in the Washington, D.C. headquarters and field locations. Approximately half of our personnel are located in the field.

FISCAL YEAR 1999 BUDGET REQUEST

For fiscal year 1999, OGC is requesting $30,446,000 in direct appropriations. This request represents an increase of $1,922,000 over the fiscal year 1998 appropriation. Of this amount, $683,000 is for the anticipated pay raise, which is needed to maintain staff so that existing levels of mission efforts may continue. OGC is requesting $219,000 to cover the increase in Federal agency contributions for employees covered under the Civil Service Retirement System.

OGC has made substantial improvements in the automated data processing (ADP) computing environment, upgrading both its hardware and software as well as making substantial improvements to the OGC communication network. In order to continue to implement a centralized work tracking system for correspondence, document and opinion archiving, as well as database management for a variety of OGC work items, an increase of $100,000 is necessary.

OGC is also requesting an increase of $250,000 to support and maintain current staffing needs because the demand for legal services by agencies within USDA has not diminished. This increase will enable OGC to meet its strategic objective of providing effective legal services in a timely and responsive manner to support USDA activities.

Also included in this request, is an increase of $670,000, which includes a $235,000 supplemental ($470,000 on an annualized basis) for civil rights. In accordance with the recommendation of the USDA Civil Rights Action Team (CRAT), a separate Civil Rights Division in OGC was established, headed by an Associate General Counsel, reporting directly to me. For the Associate General Counsel for Civil Rights and CRD to be effective in effectuating their mission, additional resources are sorely needed. The additional funding requested for the Civil Rights Division will ensure that the Department can meet its civil rights reform goals without limiting OGC in other important mission areas. The new Division must expand on with

the work performed last year by the General Law Division—assisting in carrying out the CRAT recommendations, reviewing program discrimination cases, and assisting the Office of Civil Rights in processing decisions in civil rights complaints brought by USDA customers and employees. With the high priority placed by the Secretary on ensuring that the civil rights laws are vigorously enforced, the Civil Rights Division will be working side-by-side with the Office of Civil Rights, and the rest of the Department, to make sure that this key objective is met.

CURRENT ACTIVITIES AND ISSUES

There are several areas of our current work that I would like to highlight to demonstrate how OGC serves the Department. During the past year, OGC has supported the activities of the Foreign Agricultural Service (FAS) in numerous areas. Pursuit of the benefits and enforcement of the commitments of the Uruguay Round Agreements on Agriculture and on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) continues to be of paramount concern to FAS and OGC.

Accordingly, OGC played a leading role in the victory of the United States in the World Trade Organization (WTO) dispute on the European Union's (EU) import ban on meat produced with the use of growth-promotant hormones. During the EU appeal of the initial panel result, OGC played an instrumental role in formulating and coordinating the United States strategy and submissions. The WTO Appellate Body ruled in favor of the United States, finding the ban not consistent with the EU's obligations under the SPS Agreement. OGC will continue active involvement in the development and application of the effort necessary to compel the EU to fulfill its international obligations.

WTO litigation is increasingly a priority area for OGC. The United States has recently invoked the dispute settlement process within the WTO in several agricultural matters, and OGC has played a leading role in all of them:

(1) Philippines—Administration of tariff-rate quotas for pork and poultry meat. The efforts of OGC were a significant factor in the development of a Memorandum of Understanding with the Philippines that is expected to lead to significantly improved access in that market for U.S. pork and poultry meat exports;

(2) Japan—Requirements to re-establish the efficacy of quarantine treatments for pests on a varietal basis. This issue is of particular importance to apple, nectarine, cherry, walnut, and other stone fruit exports;

(3) Canada—Access for U.S. fluid milk and cream and Canadian export subsidies through application of milk class price-pooling; and

(4) European Communities—Export subsidies on processed cheese manufactured under inward-processing arrangements.

In efforts to realize the benefits of the Uruguay Round Agreements other than through litigation, during the past year the United States and the EU resolved many of the difficult outstanding issues that had precluded an equivalency agreement on veterinary inspection matters. Due in large part to the efforts of OGC, the text of the agreement has now been finalized, but a few implementation issues remain. OGC will continue to be actively involved in the effort to achieve a signed agreement.

OGC also has provided valuable drafting assistance in connection with the ongoing negotiation of a veterinary biologics annex to the recently concluded Mutual Recognition Agreement between the United States and the EU. Agreement on a veterinary biologics annex would allow the United States and the EU to accept imports of veterinary biologics from one another on the basis of a mutual recognition of the efficacy of one another's regulatory systems.

After two years of negotiations in which the United States played a significant role, the United Nations Food and Agriculture Organization Conference adopted a revised text of the International Plant Protection Convention (IPPC). A primary objective of the revisions was to strengthen the ability of the IPPC members to develop phytosanitary standards as envisioned in the SPS Agreement. OGC was a principal participant in the review of iterations of draft text and other documents and also participated in the interagency group. These efforts ultimately led to United States support of adoption of the revised text.

OGC also continues its active involvement in other FAS program areas. OGC continues to provide extensive legal advice in the rejuvenated export credit guarantee program, as well as in the development of the supplier credit guarantee program, the facilities guarantee program, and the emerging markets program. During this past year, OGC has also become more actively and directly involved in efforts to reduce the necessity and enhance collection of admiralty claims arising from damaged or distressed cargo shipped in connection with title III of Public Law 83–480.

Attorneys from OGC have provided significant assistance with respect to commodity, disaster and conservation programs. Implementation of the provisions of the Federal Agriculture Improvement and Reform Act of 1996 (the 1996 Act) authorizing Production Flexibility Contracts (PFC) has resulted in numerous requests for OGC assistance to resolve such issues as those involving the division of program payments between landowners and tenants and the succession-in-interest by new owners and tenants to existing program contracts. In addition to routine requests for assistance, implementation of the peanut poundage quota provisions of the 1996 Act has resulted in the filing of two major lawsuits against the Government.

The administration of the revised Conservation Reserve Program (CRP) required a major devotion of OGC resources to develop new CRP regulations and contracts as a result of the enactment of the 1996 Act. These efforts included: the resolution of unintended conflicts between PFC provisions of the 1996 Act, the CRP provisions of the Food Security Act of 1985, and the tobacco and peanut program provisions of the Agricultural Act of 1938 in a manner that provided enhanced opportunities for participation in the CRP by tobacco and peanut producers without remedial legislation; development of agreements for administration of the Conservation Reserve Enhancement Program portion of CRP, including the drafting of the agreement between the State of Maryland and the Commodity Credit Corporation concerning the protection of the Chesapeake Bay; and the provision of daily assistance on CRP matters as a result of the conduct of the 15th and 16th CRP enrollments which involve several hundred thousand contracts and approximately 24 million acres.

OGC attorneys have been working with the Office of the United States Attorney for the Eastern District of North Carolina, the Farm Service Agency (FSA) and the Office of Inspector General (OIG) to bring approximately 40 criminal cases, 40 civil false claim cases, and numerous administrative cases as the result of an extensive OIG investigation of the 1990–1992 activities of more than 100 tobacco warehouse operators and dealers in North Carolina.

Working with FSA officials, OGC attorneys provided expeditious assistance in the development of the various livestock emergency feed assistance programs implemented as a result of severe winter blizzard conditions. Similarly, OGC attorneys were significantly involved in the development of program regulations for the Tree Assistance Program and the Livestock Indemnity Programs authorized by Congress in 1997.

OGC attorneys are substantially involved in providing legal services related to the continuing changes in the Department's crop insurance program, especially the review of private insurance company initiatives including crop revenue coverage; nonprocurement suspension and debarment issues; the development of new crop insurance programs and amendments to old ones. OGC has been particularly involved in the development of the risk management education initiative and the Dairy Option Pilot Program.

The enactment of welfare reform legislation in 1996 has continued to raise many legal issues. The implementation of the alien provisions and the provisions restricting the eligibility of persons convicted of trading in controlled substances generated substantial Constitutional challenges. OGC attorneys are also working closely with the Food and Nutrition Service (FNS) in connection with the implementation of the Debt Collection Act of 1996 and to enhance food stamp program efficiency and integrity through implementation of electronic benefit transfer systems. Debarment and suspension activities continue with OGC attorneys assisting FNS in taking actions to protect the federal government and the public with respect to over 200 dairy companies and individuals convicted of bid rigging on school milk contracts.

In trade practices, we are continuing to give assistance and counsel to the Secretary on issues of concentration in agriculture and the continuing response of the Department to recommendations of the Advisory Committee on Agricultural Concentration. We are continuing to pursue administrative enforcement against the nation's largest packer on allegations that the packer gave an undue or unreasonable preference to certain feedlots in the procurement of cattle, and that case is now before the Department's Judicial Officer for decision. We are working with agency personnel on a number of investigations into procurement and other trade practices in areas of production where there are high levels of concentration, and on investigations and enforcement actions involving allegations of false or misleading statements or representations in the marketing of agricultural products.

The last year has been an especially busy year for OGC as it relates to work for the food safety mission area. We dedicated substantial resources to the Food Safety and Inspection Service (FSIS) in connection with the implementation of the new requirements for standard sanitation operating procedures in all inspected establishments. We also assisted FSIS in the related redraft of its existing sanitation regulations and the promulgation of a proposed rule that would eliminate most "command

and control" rules and replace them with a streamlined set of performance standards for sanitation. Additionally, we provided daily support to FSIS as it prepared for the January 1998 implementation of the Hazard Analysis/Critical Control Points (HACCP) inspection procedures in the largest FSIS-inspected establishments. Our work on HACCP implementation and compliance issues can be expected to increase over the next two years as the "small", and then the "very small" plants are brought under the HACCP requirements.

Enforcement matters under the meat and poultry inspection laws have continued to require extensive legal support, and in the coming year, we will be working closely with FSIS to publish final rules of practice governing enforcement actions under the HACCP, microbiological testing, and pathogen reduction regulations.

Finally, we spent considerable time with FSIS on the development of a legislative proposal to enhance the Department's food safety enforcement authorities under the meat and poultry inspection laws, and a proposal involving the interstate shipment of meat and poultry from state-inspected plants.

We worked closely with the Animal and Plant Health Inspection Service (APHIS) by assisting in the implementation of our WTO obligation to regionalize our regulatory requirements governing the importation of animals and animal products. This past year, for example, regulations allowing the importation of beef from Argentina, and pork from Sonora, Mexico, were promulgated. In addition, a comprehensive policy statement and complementary rule changes were adopted establishing the regulatory structure APHIS will use to review and act on requests for regionalization, and how it will use risk assessment methodology to arrive at proposed safeguards to prevent the introduction of communicable diseases of livestock and poultry.

We have also been heavily involved in defending a lawsuit filed by five environmental groups challenging APHIS regulations governing the importation of logs, lumber, and other unmanufactured wood products. In June of 1997, the court found for the Department on most issues, but nonetheless enjoined APHIS from issuing new permits for the importation of certain temperate wood products until a supplemental environment impact statement (EIS) is prepared and regulations based on it are promulgated. We worked assiduously with APHIS to see that the draft supplemental EIS, which was published in December 1997, meets the requirements of the court's order. We anticipate that the final supplemental EIS will be published before a scheduled status conference on May 15, 1998.

In 1997, after lengthy court proceedings, we settled a $34 million lawsuit filed by the State of Florida arising out of the 1984 to 1986 citrus canker eradication program. The settlement stipulated that the funds paid to Florida in settlement of all claims would be used exclusively in the current program to eradicate the most recent citrus canker infection in Florida. We also worked closely with APHIS on its regulatory measures to eradicate a large infestation of Mediterranean fruit flies in Florida discovered in May of 1997. We have also assisted in the development and promulgation of an array of quarantines and regulations throughout the U.S., including the refinement of the Karnal bunt (Kb) regulatory measures and the issuance of regulations providing for compensation for those affected by the Kb outbreak.

There continue to be very significant developments in connection with marketing order regulations and litigation. The issuance of two voluminous and complex regulations concerning organic food labelling, and the reform of milk marketing orders required extensive legal involvement and assistance. In the litigation arena, we provided counsel and assistance in successfully applying the Supreme Court decision in *Wileman Bros. et al.* v. *Glickman* to challenges under both marketing orders and free-standing research and promotion programs as well as defending the appeal of the Northeast Interstate Dairy Compact case.

In the area of animal welfare, we successfully litigated numerous significant cases, including a case involving the death of a circus elephant. The circus operator's license as an exhibitor under the Animal Welfare Act was permanently revoked and he was assessed a civil penalty of $200,000, the highest civil penalty ever assessed in an Animal Welfare Act case. We also took actions against several research facilities to require that they provide humane care to animals used for research. We assisted in developing the strategic plan for the Horse Protection Act program. The plan will give the Tennessee walking horse industry an enhanced role in the enforcement of the Horse Protection Act through the USDA authorized inspection system.

OGC also provides legal services to agencies which manage some of America's largest lending portfolios. The ongoing implementation of centralized processing (CSC) for Rural Housing loans uses substantial legal resources. OGC continues to be heavily involved in debt collection and foreclosure work with many cases going back to the emergency loan programs of the 1970's and 1980's. Implementation of

the Debt Collection Improvement Act of 1996 and the flexibility gradually being made available under the Rural Community Advancement Program of the 1996 Act also requires substantial legal resources.

The Secretary is committed to regulatory reform. We continue to work with Department officials to implement the President's regulatory reform package. This is a significant undertaking as we work with agencies throughout USDA to reduce regulatory burdens, eliminate obsolete or unnecessary regulatory requirements, and streamline regulation, particularly in the areas of rural, farm and utility lending. This year we look for a substantial push in this area from the Rural Utilities Service (RUS), Farm Service Agency (FSA), Rural Business-Cooperative Service (RBS), and Rural Housing Service (RHS).

OGC provided considerable assistance to the Rural Utilities Service (RUS) on a range of matters related to the changing electric and telecommunications industries. In particular, the introduction of competition in the electric industry has resulted in increased demand for legal services by RUS on a number of key electric program matters. For example, OGC has provided legal services in connection with the restructuring of borrowers' power supply arrangements through mergers, alliances, and other types of reorganizations and through the renegotiation of borrowers' power supply contracts. OGC has also dedicated substantial resources to the negotiation and drafting of new security arrangements for some large power supply borrowers. These arrangements, patterned after indentures used in the private sector, will provide borrowers with more flexibility in operating in the new competitive environment while facilitating access to private market financing.

As a result of the Telecommunications Act of 1996, which introduced deregulation and competition to the telecommunications industry, the RUS telecommunications programs is facing a wide range of issues and concerns requiring legal services. These include issues of loan purposes, loan security and borrower structure as well as the impact of FCC orders implementing the Telecommunications Act on RUS borrowers and program interests. RUS for the first time made distance learning and telemedicine (DLT) loans in addition to its DLT grants. Legal assistance is required both in the promulgation of new regulations implementing the DLT program and in developing the documents for these loans and grants. One cannot underestimate the legal resources which will be required by the movement to deregulate in the rural electric and telephone area.

In the natural resources area, we have been involved in a number of extremely significant undertakings concerning national forest management and soil conservation programs. We have provided assistance nationally to the Natural Resources Conservation Service in implementing a number of conservation programs including the Environmental Quality Improvement Program (EQIP), the Wetlands Reserve Program (WRP), the Farmland Protection Program, the Conservation Farm Option and Emergency Watershed Protection.

Management of our National Forests is a subject of intense debate and litigation, with a great deal of legal work generated by the impact of new scientific information on ongoing Forest Service projects and commitments. Such legal questions include challenges regarding the nature of forest planning in the Circuit Courts of Appeal and in the Supreme Court (*Ohio Forestry Association* v. *Sierra Club*), the relationship of the Endangered Species Act to the forest planning process and revisions of the first generation of forest plans.

Further, we are defending against numerous timber sale claims arising from legally created delays and contract modifications to protect the habitat of endangered species. We also successfully defended challenges in several places in the West by local governments and individuals under the so called "County Supremacy" movement disputing federal ownership or jurisdiction over public lands.

We have also devoted substantial resources to other legislative and regulatory initiatives, such as land exchanges, Clean Water Act questions, water adjudications, relicensing of hydro projects, grazing reform, reauthorization of the Endangered Species Act, the Safe Drinking Water Act and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). OGC also provided the Forest Service with support in the administration of the National Forest lands as they are affected by the complex statutes related to mineral exploration.

In addition, we regularly provide advice on compliance and litigation arising under the pollution control laws. Most frequently, pollution control issues involve abandoned and inactive mines and landfills on federal lands, the use and storage of agricultural chemicals, and management of hazardous waste at agricultural research facilities. We have worked with other federal resource management agencies on implementation of executive authority under CERCLA to address cleanup of hazardous substances affecting federal resources.

As the Administration and the Congress continue their efforts to re-invent the Federal government, and as the Department takes its own initiatives to make its delivery of services more efficient, streamlined, and customer friendly, we anticipate greater demands in the general law area. These range from providing legal services regarding personnel and labor matters; increased legal services as we implement the Electronic Freedom of Information Act, debt collection initiatives, and Year 2000 compliance; and legal support for creative approaches of doing more with less through mechanisms such as partnering.

Agency implementation of new administrative offset procedures pursuant to the Debt Collection Improvement Act of 1996 have triggered numerous appeals to the National Appeals Division (NAD) and resulting legal questions regarding the intersection of the offset process and the NAD appeal process. Last year, the U.S. Court of Appeals for the Eighth Circuit held that the Administrative Procedure Act and the Equal Access to Justice Act apply to NAD proceedings, thus allowing recovery of legal fees incurred by appellants in NAD proceedings.

With regard to the procurement of property and services, the Clinger-Cohen Act of 1996 mandated many changes that address source selection procedures in negotiated procurements; the acquisition of commercial items; and the acquisition, use, and disposal of information technology by the Federal Government. In particular, the general law division will continue to devote substantial resources to assist the Chief Information Officer created by the Act in fulfilling her duties both under the Act, and under separate Secretarial mandates, to improve information technology management in the Department.

Also with regard to procurement, the most recent revision of the General Accounting Office (GAO) protest rules has resulted in the general law area, providing more and an enhanced level of legal representation of USDA agencies in protests before GAO. This includes the provision of legal representation to the Forest Service in all Forest Service GAO protests.

OGC continues to provide legal services to the Alternative Agricultural Research and Commercialization Corporation regarding the scope of authority of the Corporation, as well as issues relating to grants, cooperative agreements, loan guarantees and other financial assistance provided to entities by the Corporation for the purpose of commercializing new non-food uses for agriculture commodities.

We continue to provide legislative drafting and related assistance to the Department and Congress on major legislative activities that involve the Department. We are providing assistance in the development of legislation to reauthorize the Department's research, education, and extension activities and the Department's child nutrition activities. We are preparing legislation to improve the Department's food safety programs. In addition, we are participating in the preparation of legislation in a number of areas in support of the President's fiscal year 1999 budget requests for USDA.

Over the past year the Department has engaged in massive efforts to reform its civil rights performance. The Secretary wants to ensure that all our customers and employees are treated with dignity and respect and are afforded equal employment opportunity and equal access to all USDA programs. The Civil Rights Action Team appointed by the Secretary in December 1996, and the Civil Rights Implementation Team formed in January 1997, both concluded that an essential component to achieving the Secretary's civil rights goal is to establish a new division within OGC staffed with lawyers fully trained in, and dedicated to, civil rights compliance and enforcement.

Our first Associate General Counsel for Civil Rights has been hired. The Associate General Counsel for Civil Rights is the chief civil rights attorney for USDA and is responsible for providing advice on civil rights law to the Department and its officers. The Associate General Counsel for Civil Rights is responsible for establishing and directing the newly created Civil Rights Division (CRD). CRD will assist USDA in fashioning responses to discrimination claims and provide assistance to the Department of Justice in relation to litigation of civil rights claims.

The CRD will provide legal advice to the USDA Office of Civil Rights, which is responsible for investigating and administratively adjudicating complaints of discrimination by employees and farmers in the delivery of credit and other services by USDA. CRD will also assist the Office of Civil Rights in ensuring that investigations and decisions are conducted in accordance with the law. This effort includes assisting in the effort to resolve the significant backlog of program and employment complaints. The Secretary has requested that these complaints be resolved as quickly and fairly as possible.

CRD will ensure that every mission area and agency within USDA receives timely and accurate legal advice on issues impacting the Department's compliance with, and enforcement of, civil rights laws. Further, CRD will proactively work to identify

civil rights issues and potential problems, notify the General Counsel, the Secretary, and other appropriate Department officials of the issues and problems and possible courses of action, and work with the General Counsel, Secretary and Department officials to address the issues and problems.

OGC has requested a supplemental in fiscal year 1998 which would provide funds needed to staff the newly created Civil Rights Division. The activities of this division cannot be carried out at current OGC resource levels without substantially reducing vital legal services to other areas of the Department. Since OGC has appointed an Associate General Counsel for Civil Rights, additional resources are now required to staff and maintain this new division with attorneys who are committed to civil rights in USDA and who specialize in civil rights law.

Mr. Chairman, it is important to note that these comments only touch on the dozens of daily issues that come before the legal office of a Department with over 100,000 employees administering programs in an extremely wide range of areas.

CLOSING

That concludes my statement, Mr. Chairman. We very much appreciate the support this Subcommittee has given us in the past. Thank you.

OFFICE OF INSPECTOR GENERAL

PREPARED STATEMENT OF ROGER C. VIADERO, INSPECTOR GENERAL

INTRODUCTION AND OVERVIEW

Good afternoon, Mr. Chairman and members of the Committee. I am pleased to have this opportunity to visit with you today to discuss the activities of the Office of Inspector General (OIG) and to provide you with information on our audits and investigations of some of the major programs and operations of the U.S. Department of Agriculture (USDA).

Before I begin, I would like to introduce the members of my staff who are here with me today: James Ebbitt, Assistant Inspector General for Audit; Jon Novak, Acting Assistant Inspector General for Investigations; and Del Thornsbury, Director of our Resources Management Division.

I want to thank the Committee for its support during the nearly 3½ years since my appointment as Inspector General. We have tried to work closely with you, and I hope that we have been able to address some of your concerns.

I am proud to say that in fiscal year 1997, we continued to more than pay our own way. In the audit arena, we issued 255 audit reports and obtained management's agreement on 207 recommendations. Our audits resulted in questioned costs of approximately $900 million. Management also agreed, as a result of our audit work, to recover $19 million and put $267 million to better use. Additionally, our investigative staff completed 958 investigations and obtained 703 convictions. Investigations also resulted in nearly $83 million in fines, restitutions, and other recoveries and penalties during the year.

We continued to work closely with agency officials to address key issues and to expand our cooperation with other Federal, State, and local law enforcement and audit agencies to broaden the impact of our work. Our achievements would not have been possible without the actions of the Department's program managers who worked closely with us in carrying out our mission. Working together, our staffs identified program weaknesses and program violators. Capitalizing on the staffs' respective expertise, we created solutions for positive action.

In fiscal year 1998, we are focusing our audit efforts on the Department's financial accounting systems, farm credit programs, civil rights, the Rural Rental Housing Program, and the Food Stamp Program including its Electronic Benefits Transfer project. Our investigative priorities include the timely and thorough investigation of threats to the health and safety of the public, emergency responses, child and adult care programs, employee integrity issues, and fraud in the Department's loan, regulatory, and benefit programs.

Before I move to our special law enforcement initiative and other specific audit and investigative activities, I would like to update the Committee on our progress in implementing the requirements of the Government Performance and Results Act (GPRA) and our forfeiture authority.

We have made significant progress in implementing GPRA in OIG. We have prepared a 5-Year Strategic Plan that describes our mission and sets forth our general goals and objectives through fiscal year 2002. We have completed our first Annual Performance Plan under GPRA, which contains specific performance goals and objectives for the fiscal year. We have also developed performance measures to assess our progress in achieving these goals and objectives under the plan so that we might make adjustments to maximize our effectiveness.

On the forfeiture front, as I discussed last year, with the Committee's support we are now authorized to receive proceeds from forfeiture actions arising from our investigations. While we have seized over $11 million in assets for possible forfeiture to the Government as a result of our investigative actions since OIG was provided the authority in November 1995, to date, OIG has received only about $100,000 from these proposed forfeitures. We are continuing to work with the Department, the Office of Management and Budget, and the Departments of Treasury and Justice to ensure OIG receives its appropriate share of proceeds from these proposed

forfeited assets as approved by you. However, after more than 2 years, the Department of Justice has not signed a memorandum of understanding with this agency.

Special Law Enforcement Initiative

Mr. Chairman, at this time I would like to discuss our special law enforcement initiative included in our fiscal year 1999 budget request. This initiative will be a major undertaking for the agency, and we ask your support to provide the resources necessary for it. I have provided each of you a handout on the initiative, highlighting our need and what we expect to achieve from this effort.

This special law enforcement initiative is to provide funding for OIG to crack down on fraud and abuse in the Food Stamp and other nutrition programs, assistance programs such as the Rural Rental Housing Program, and disaster and health and safety programs requiring immediate response.

Health and safety of food from production to the consumer is of special concern because of such highly visible emergencies as contaminated strawberries in the School Lunch Program and tainted meat in the food distribution chain which resulted in the recall of 25 million pounds of ground beef. Also, OIG's recent pilot effort, Operation Talon, in 24 metropolitan areas around the country, has been extremely successful, resulting in the arrest of over 2,200 fugitive felons and the potential savings of millions of dollars to the U.S. Treasury. This initiative is to allow the agency to expand such efforts nationwide.

Operation Talon

The Department estimates that over $50 million a year in food stamps go illegally to convicted felons and prison inmates, and that a sizable number of retailers who accept Food Stamps make money from them illegally. Prior to the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, also known as Welfare Reform, the exchange of information between law enforcement and State social service agencies was not allowed. Welfare Reform provided many useful tools to the law enforcement community, such as making fugitives and people who are violating conditions of probation and parole ineligible for food stamps. Additionally, the legislation made it possible for State social service agencies to provide law enforcement authorities certain identifying information from their files pertaining to fugitives.

As a result of the tools provided by Welfare Reform, we initiated "Operation Talon," a law enforcement initiative led by OIG and carried out in conjunction with other law enforcement agencies and State social service agencies across the country. Under this initiative, law enforcement agencies' fugitive records are matched by social service agencies with their food stamp recipient records. Information on fugitives is then shared with OIG and other law enforcement officials who use it to locate and apprehend the fugitives. As of January 13, 1998, "Operation Talon" has resulted in 2,235 arrests of fugitive felons, the vast majority of whom were food stamp recipients or former recipients. These fugitives included numerous violent and dangerous felons who were wanted for murder, child molestation, rape, and kidnapping.

I have included a chart which identifies the offenses for which these felons were wanted.

Offense	*Total arrests*
Murder	9
Attempted murder	10
Child molestation	10
Rape	7
Attempted rape	2
Kidnapping	6
Assault	115
Robbery	86
Drugs	645
Other	1,345

An example of the type of individuals we arrested is a fugitive wanted for selling a large quantity of marijuana. He was arrested at a sting site in Chicago, Illinois. The individual came to the site believing he had an appointment to discuss his food stamp benefits. When he was confronted by a Cook County Sheriff's deputy, the fugitive attempted to flee, running down a small corridor where an OIG special agent and local police officer tackled and subdued him. This fugitive later threatened to burn down the Cook County detention facility and kill the police officers and special agents. On his person, and in a bag, he was carrying 8 knives, 11 assorted lengths

of steel pipe, 2 screwdrivers, 1 wrench, and materials such as glass containers, wicking material, and candles needed to make Molotov cocktails.

Operation Talon is a success story. I say this not only for OIG, but also for the State and local law enforcement agencies we helped to locate and arrest fugitive felons. Even more importantly, Operation Talon is a success for the American people who can know that their communities are safer now that these people wanted for murder, rape, drug dealing, and other violent and dangerous crimes have been taken off their streets and that food stamp benefits go only to those who need them.

On December 18, 1997, Vice President Gore publicly announced Operation Talon during a press announcement at the White House. Also present for this announcement were 10 members of State and local law enforcement agencies with whom we worked during this operation. These participants included the Sheriff of Cook County, Illinois, where Operation Talon "bagged" 470 fugitives. Two deputies with the Pierce County, Washington, Sheriff's office, the entire fugitive squad for that office, traveled all the way across country to participate and to express their appreciation for our efforts, which they characterized to us as the "best thing that has happened." They just could not get over that, with this new information, 90 percent of the doors they knocked on produced the fugitive they were looking for. This kind of positive feedback exceeded even what we had expected.

Successful as they are, activities such as Operation Talon are not without their price. As of January 13, 1998, 116 OIG special agents had expended nearly 2,500 staff days on this operation. We can continue to recover and save money for the taxpayers only if we have the resources needed to perform our mission. Adequate funding and staffing for OIG makes good sense because we help create a Government that works better, produces positive results, and saves the taxpayers' money. We believe the success demonstrated through our pilot work in Operation Talon and the other areas of our special initiative provide outstanding examples of what can be accomplished if the necessary resources are made available to the agency to perform this critical work.

Child and Adult Care Food Program (CACFP)

Another area we are looking at in our initiative is the Child and Adult Care Food Program. The objective of CACFP is to ensure that children and adults being cared for in participating day-care homes and centers receive nutritious meals. To accomplish this, the Food and Nutrition Service (FNS) reimburses day-care providers for the meals they serve and sets nutritional requirements for the food. The program is administered by State agencies through sponsors, who are generally public or private, nonprofit organizations. Sponsors act as the link between the State agency and individual day-care providers. More than 14,000 sponsors administer the program in just over 230,000 day-care homes and centers nationwide. CACFP funding for fiscal year 1996 was $1.5 billion.

To ensure the integrity of the program, sponsors are required to train providers in program requirements and perform onsite visits to providers' homes and centers to make sure they are fulfilling these requirements. Sponsors are also responsible for reviewing provider claims to ensure that the meals are nutritionally balanced and that the children are eligible. Sponsors are ultimately responsible for program operations in the day-care homes they oversee. In return for carrying out their responsibilities, sponsors are reimbursed for their costs of administering the program.

In a CACFP investigation in California, four executives of a non-profit child-care sponsoring organization are awaiting sentencing in March after they pled guilty to mail fraud in connection with their participation in CACFP. The organization oversaw in excess of 60 day-care centers and 175 day-care homes in the Los Angeles and Orange County areas.

Our investigation disclosed that, through various fictitious names and bogus entities, two of the executives fraudulently obtained and diverted approximately $2.3 million in CACFP funds for personal and nonprogram-related expenses, including the purchase of a $1.5 million residence and the payment of their children's college-related expenses. The other two executives claimed and received over $60,000 in CACFP funds for nonexistent day-care home providers.

One of the executives was also employed by the California Department of Education (CDE), the State agency responsible for administering CACFP. In that capacity, she was specifically responsible for monitoring her own sponsoring organization's compliance with CACFP. She and her husband used various aliases to conceal their business and family affiliations from her employer. She was subsequently fired by CDE as a result of her conflict of interest involving her association with the sponsoring organization. This investigation was conducted jointly by OIG and the U.S. Postal Inspection Service.

A separate civil forfeiture action was filed against four residential properties in Southern California, owned by the subjects, and valued in excess of $2 million. This is being handled through the U.S. Postal Inspection Service and the Civil Division of the U.S. Attorney's Office, Eastern District of California in Sacramento.

In the audit arena of CACFP, our reviews revealed a breakdown in controls at the sponsor level. In our pilot test, we have concentrated on the approximately 1,200 sponsors who primarily sponsor day-care homes. We reviewed 12 sponsors in 10 States and found 11 of them to be seriously deficient in their administration of the program—and this is only the tip of the iceberg, considering there are about 1,200 sponsors of some 195,000 day-care homes nationwide.

As part of our sponsor reviews, we conducted unannounced visits to a substantial number of day-care homes and found widespread deficiencies in their operations. Many providers did not have adequate records to support the meals they claimed or had no records at all. Claiming of unallowable meals by providers appeared to be common. Many of the children for whom the providers claimed meals were not present when we visited, and we questioned whether they were actually in care. We also questioned whether some providers were eligible to claim the meals they served to their own children. At some homes, we found unsafe or unsanitary conditions and licensing violations, and we reported these conditions to the local health or licensing authorities.

Based on the large numbers of problems we found at the homes, we concluded that the sponsors' training and monitoring efforts were generally ineffective. Sponsors did not provide all required training and did not conduct all required reviews. Reviews that were performed were often ineffective. Sponsor visits were usually scheduled in advance, were brief, in many cases, only 5 or 10 minutes in length, and very seldom disclosed any problems. Some of the extensive problems our unannounced home visits found included the following.

—Conditions were unsafe or unsanitary at 10 providers of an Illinois sponsor. At one home, the only sources of heat, in the month of February, were the gas and oven burners on the kitchen stove. Several homes were seriously over capacity, with only 1 adult caring for up to 25 children, versus State licensing provisions which allow 1 adult to care for not more than 8 children.

—One Oregon sponsor did not adequately monitor or train its providers, claimed unallowable administrative expenses, and failed to accurately report administrative costs on its monthly claims for reimbursement. The sponsor also may have been conducting unrelated outside business activities and charging their costs to the program. Based in part on our audit report, the State agency terminated this sponsor from the program.

—Nearly one-third of a New Mexico sponsor's providers we attempted to visit were not home, yet they later claimed meals which were purportedly served at these times.

—One-sixth of the reimbursements claimed by one Alabama sponsor's providers were improper. Numerous providers claimed reimbursement for meals not served or for ineligible meals. We recommended recovery of the $3,000 paid for ineligible meals and meals not served.

Because of the serious deficiencies, FNS has terminated the participation of 5 of the 12 sponsors. Four of the five sponsors are being investigated for fraud-related activities.

Due to the significant problems found, we have included this work in our national initiative to expand our efforts to identify abusive sponsors. These efforts will include "sweeps"—unannounced, targeted visits—of sponsors and providers conducted jointly by OIG auditors and investigators with the assistance of FNS and State agency personnel. Because the "sweeps" place a large cadre of reviewers at selected onsite locations simultaneously and without warning, they will provide an authentic snapshot of CACFP operations in the targeted areas. Those sponsors found to be abusing the program will be removed from sponsorship; ineligible payments recovered; and, if warranted, prosecuted.

Electronic Benefits Transfer (EBT)

Another area we plan to emphasize in our initiative is monitoring of EBT systems that deliver program benefits. OIG remains the lead agency, under agreement with the President's Council on Integrity and Efficiency (PCIE), to review EBT systems that deliver State-administered programs. For USDA, the State-administered programs are the Food Stamp Program (FSP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Also included as State-administered programs are the Temporary Assistance for Needy Families (TANF), funded by the U.S. Department of Health and Human Services (HHS), and States' general assistance programs.

While the majority of FSP benefits are still distributed in the form of paper coupons, electronic distribution of benefits is growing rapidly and currently sends about 27 percent of local food stamp benefits. Currently, 26 States have operational online food stamp EBT systems with 8 of the States operating statewide systems. Two States have operational off-line systems using the smart cards with one of these States using its system for the WIC Program. Many of the remaining States have selected EBT vendors and are at various stages of awarding contracts. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 mandates EBT for all States by 2002.

EBT has an impressive impact in identifying individuals and retailers who are committing fraud in the program. While trafficking of benefits has not been eliminated by EBT, we believe the number of individuals involved in street trafficking has been reduced. EBT benefits are less negotiable "on the street" and, thus, less likely to be used as a "second currency." We have not found, to any significant extent, the exchange of EBT benefits for illegal drugs, a not too uncommon occurrence with coupons. Instead, the individuals now exchanging cash and non-food items with recipients are generally retailers or those working with them.

In addition, information available under EBT is now used to identify and prosecute those who engage in illegal transactions. While paper food coupons are generally not traceable to individual recipients, under EBT, details of all transactions are recorded. The system records the date, time, amount, recipient and store involved in all benefit transactions. This information is used to identify and prosecute both the retailers and the recipients involved in trafficking. FNS has also used EBT data to disqualify violating retailers, and State authorities are using information obtained from EBT records to disqualify recipients who have sold their benefits.

An example of a significant EBT investigation was completed recently in Baltimore, Maryland. Maryland was the first State to implement EBT statewide. In this case, eight people pled guilty in Federal court to a variety of money laundering, conspiracy, and food stamp trafficking charges for their roles in a conspiracy that defrauded the program of $2.4 million.

The group used eight stores, both authorized and unauthorized, to purchase and then redeem EBT benefits. In the unauthorized stores, ring members obtained the account and personal identifier numbers from recipients and then relayed the information over the telephone to members in authorized stores. The authorized stores had EBT machines which were used to access the recipients' accounts and remove the benefits. The recipient was then paid a reduced amount of cash. In addition, other ring members purchased benefits "on the street" and used mobile telephones to call in recipient information.

The ring leader was sentenced to 48 months in Federal prison, while five others received prison terms ranging from 4 to 21 months. Additional subjects are pending prosecution and sentencing.

This case is also useful in demonstrating how EBT data can identify traffickers. During analysis of EBT data during another trafficking investigation in Baltimore, our agents identified the above-mentioned conspiracy. We used the system to follow recipients with suspicious transactions to a second group of stores. We also followed recipients from the second set of stores to yet another trafficking operation in Baltimore. Members of all three trafficking operations were prosecuted.

As mentioned earlier, EBT has also been used by State authorities to disqualify recipients who have sold their benefits. This has been occurring on a large scale in Maryland. For the past 3 years, we have provided lists of recipients who used their EBT benefits in stores which we found to be buying benefits, along with transaction information, to the Maryland Department of Human Resources (MDHR) Baltimore City Food Stamp Trafficking Unit. This information was compiled from data developed during OIG investigations of 14 stores.

As an unfortunate indication of the extent of food stamp fraud and abuse, to date, over 5,200 heads of households in Baltimore, or 8.3 percent of all Baltimore households receiving benefits, have been disqualified from FSP based upon the EBT data. These disqualifications have thus far resulted in a savings of over $3 million in suspended benefits. Additionally, another 11,604 Baltimore households—18.2 percent of the total households receiving benefits in the city—are in various stages of administrative action by MDHR.

We would like to take this opportunity to commend MDHR, especially its Baltimore City staff, and the prosecutors with the Office of the State's Attorney for Baltimore City for their efforts in addressing the problem of recipient fraud trafficking. Their aggressive administrative disqualifications and prosecutions of recipients have saved the taxpayers millions of dollars and should serve as an excellent deterrent to others who might consider abusing this valuable program.

During the course of another OIG investigation into suspicious EBT transactions in Essex and Hudson counties in New Jersey, 10 authorized stores were identified as having engaged in food stamp fraud. Those stores redeemed an estimated $9.5 million in food stamp benefits during the period of investigation, of which $6 million is alleged to have been involved in fraudulent transactions. In addition, approximately 1,000 individual food stamp benefit recipients were identified as having engaged in suspect transactions larger than $1,000. Thirteen men and three women who owned and/or operated the 10 stores pled guilty for various charges including conspiracy, food stamp fraud, and fraud in connection with electronic access devices. Seizure warrants netted $75,000 in cash, and asset seizures of real property are pending. We worked on this investigation with the U.S. Secret Service (USSS); the Internal Revenue Service (IRS); and the East Orange, New Jersey, Police Department. The investigation was initiated after a review by FNS' Compliance Branch identified the stores as potential violators of the Food Stamp Program.

During the past year, we have performed audits of EBT systems used to issue FSP benefits in Illinois, New Mexico, North Dakota, South Dakota, and Wyoming. In Wyoming, we included the WIC Program in our review since Wyoming's EBT system delivers WIC benefits in six counties.

Overall, security policies and control processes in the States reviewed were adequate to ensure timely and accurate availability of FSP and WIC Program benefits to recipients and payments to retailers. We did identify some areas in the individual States needing improvement. For example:

—In Illinois, controls needed to be strengthened over State employee access to the EBT system, reconciliations of data transfers between the State and the EBT processor needed to be documented, and the aging of FSP accounts needed to be modified to comply with FSP regulations. Illinois also needed to address the EBT processor's timeliness in installing equipment at authorized retailers.

—New Mexico's contract with its processor expires in 1998, but New Mexico does not have a contingency plan to continue FSP benefits if it must operate without an EBT processor. Dormant accounts remained accessible to recipients beyond the 1-year authorized period.

—North Dakota and South Dakota use the same EBT processor, which agreed to provide interoperability between the two States. The EBT system did not document the full cycle of FSP activities and did not report approved FSP transactions pending retailer payment. As a result, the States cannot adequately monitor the processor's use of Federal funds or reconcile transactions to reimbursement drawdowns, which may increase the States' potential liabilities.

—Wyoming's WIC EBT system did not allow clients to purchase the full amount of their WIC food prescriptions because it rounded the weights of foods purchased. Variations in product coding sometimes prevented clients from purchasing sale items and unnecessarily increased program costs. The FSP portion of EBT had a design feature to expunge unused benefits over a year old, but it was not in use. Appropriate recommendations were made in the individual State reports to address the problems found and strengthen controls.

Emergency Response—Health and Food Safety

OIG's highest priority is the investigation of criminal activity which poses a threat to the general health and safety of the public. Because of the high-profile cases in this area during the past year and our belief that these are only examples of possible threats to the health and food safety of the public, we have included health and food safety as part of our special initiative efforts that must be enhanced. Among these crimes are violations involving the processing and sale of adulterated meat, poultry, and egg products; criminal tampering with food products consumed by the public; and product substitution, adulteration, or other misrepresentation of food products which are regulated or purchased by USDA.

OIG investigations in the health and safety area have traditionally been focused almost exclusively in the red meat industry. OIG agents traditionally investigated meat packers who clandestinely slaughtered diseased cattle and supplied the meat for public consumption, and processors who surreptitiously mixed tainted meat with wholesome meat which was sold to the public. The financial incentives for those who commit this type of crime remain so high that OIG expects to continue responding to these types of criminal activity far into the future.

While OIG continues to conduct these traditional health and safety investigations, recent investigations of health-related criminal activity involving the inspection programs and other USDA programs have identified an increasing need for OIG attention. Last spring, OIG immediately responded and took control of an investigation surrounding an outbreak of hepatitis A in Michigan which eventually sickened 190 school children and which was believed to have spread through their eating of

strawberries served through USDA's School Lunch Program. The president of a San Diego based food processing company, his company, and the former sales manager pled guilty to conspiracy in regard to substituting Mexican strawberries for U.S. domestic strawberries in this case. Sentencing for all three defendants has been scheduled for next month. The company, through three brokers, supplied 1.7 million pounds of frozen strawberries to the School Lunch Program, for which USDA paid over $900,000. The USDA contract called for frozen strawberries that were 100 percent grown and processed in the United States. The company's president certified to USDA that all of the 1.7 million pounds of frozen strawberries were domestically produced and processed, when in fact, at least 99 percent of the product supplied to USDA was grown in Mexico. This investigation was conducted jointly with the Food and Drug Administration (FDA), with assistance from the Federal Bureau of Investigation (FBI).

Also during the past year, OIG was called upon to investigate the circumstances surrounding another life-threatening emergency, this time involving the often deadly bacteria E-coli 0157:H7. Knowing this to be the same type of outbreak which had caused fatalities in previous occurrences, OIG immediately dispatched an Emergency Response Team to the Nebraska meat-processing plant which prepared the ground beef patties identified by State Health Department officials as the source of the bacteria. While our criminal investigation into this matter continues, and it would be inappropriate for me to discuss our findings at this time, this is a perfect example of how OIG reacts to emergency situations involving USDA-regulated matters and the type of activity we plan to expand as part of our special law enforcement initiative.

Rural Rental Housing (RRH)

We also plan to place special emphasis on the Rural Rental Housing (RRH) Program as part of our initiative. A recent legislative change provided a new weapon to OIG and to the Rural Housing Service (RHS) for use in the fight against program fraud and hazardous living conditions in the Nation's 16,300 rural multifamily housing projects. With these new criminal sanctions, the agencies can take aggressive action to identify and eliminate the worst offenders—those who convert tenant rental proceeds and Federal assistance to personal use while neglecting the physical condition of deteriorating properties. Owners, agents, or managers convicted of "equity skimming," or diversion of project assets, can be fined up to $250,000 or imprisoned for not more than 5 years, or both.

Using automated audit techniques and in consultation with RHS staff, we will identify RRH projects that have certain risk factors, such as chronically underfunded reserve accounts that may point to financial irregularities and threats to tenants' health and safety. A team comprising an auditor, an investigator, and an RHS employee will make visits to high-risk projects. We will follow up with detailed audit and investigative work where indications of fraud or unsafe living conditions are identified. To the extent necessary, local officials such as fire marshals and building inspectors may be involved to further corroborate any problems and to provide an additional impetus for improving substandard living conditions.

As an example of the type of financial abuse we expect to find, the general partner of a Pennsylvania management company pled guilty to nine counts of false statements made to RHS. The individual planned, built, and managed 32 apartment projects in Pennsylvania, New York, Maryland, Delaware, and West Virginia, all under the RRH program. The general partner established a central disbursement company to oversee the operation of the projects and their accounts. It was determined that the individual made more than $1.3 million in unauthorized withdrawals from the tenants' security deposit and replacement reserve accounts. The money was used to support private real estate ventures that were losing money, which included housing developments and shopping malls. Sentencing is pending.

Additional Controls Over the U.S. Department of Housing and Urban Development (HUD) Section 8/515 Projects Not Fully Implemented

Under the Section 515 RRH Program, RHS approves loans to provide housing for persons with low or moderate income and for persons aged 62 or over. Rent paid by tenants of these projects can be supplemented through RHS rental assistance or Section 8 rent subsidies provided by HUD. In September 1993, we reported several situations where improvements in servicing for projects receiving Section 8 rent subsidy were needed. RHS officials agreed to implement regulations requiring RHS countersignature for reserve withdrawals. RHS also issued instructions requiring servicing officials to identify and monitor projects with excess funds and cancel unneeded interest credit or recover the unneeded interest credit by collecting over-

ages. In addition, RHS agreed to monitor lump sum retroactive rent subsidy payments from HUD.

In followup to our 1993 audit, we selected 33 projects to determine if new procedures improved the cash management practices used by Section 8/515 borrowers and achieved savings. We found some borrowers were not investing project funds, in order to avoid tax liability. We estimated that interest income could have been increased by approximately $918,000 by investing reserve funds in accounts yielding higher interest rates. Countersignature reserve accounts were either not established or not operating effectively for approximately 48 percent of the projects reviewed. Also, $45.2 million of reserve funds was not adequately secured for 422 projects in our universe of 895 projects. In addition, we estimated that 46 percent of the projects did not transfer approximately $16.5 million from nonsupervised operating accounts to reserve accounts requiring the countersignature of an RHS official. In total, an estimated 258 borrowers, with interest credit agreements dated before RHS obtained regulatory authority, received $2 million of unneeded interest credit annually. In addition, we estimated 326 borrowers, with agreements dated after RHS obtained reduction authority, received unneeded interest credit totaling $3.4 million annually. An estimated 55 percent of projects accumulated excess funds totaling $31.3 million. In addition, we estimated that had approximately 28 percent of projects applied excess funds to loan obligations, annual savings to the Government and borrowers totaling $1.7 million would have resulted. We identified $169,000 of project funds used for questionable purposes, and we projected that $3 million had been used for questionable purposes.

We recommended RHS seek legislation to eliminate dual subsidies arising from unneeded interest credit and require project managers to deposit reserve funds in an escrow account directly under RHS control. In addition, we recommend RHS strengthen servicing and establish procedures for situations where project managers did not timely establish or maintain countersignature reserve accounts. We recommended recovery of the questioned costs.

Mr. Chairman, at this time, I would like to highlight some of our other audit and investigation activities.

ENTITLEMENT PROGRAMS

FOOD AND NUTRITION SERVICE (FNS)

Food Stamp Program (FSP)

The Food Stamp Program is our nation's primary nutritional "safety net" for those in need. Program expenditures in fiscal year 1997 were about $21.5 billion, with benefits provided to about 23 million recipients monthly across the country. The program is administered by FNS through various State and local government entities. According to FNS, as of the end of fiscal year 1997, about 75 percent of food stamp benefits was issued using food stamp paper coupons. However, States are rapidly moving to implement EBT systems, and under welfare reform, EBT is mandated by 2002. About 187,000 retail grocery and other stores are authorized by FNS to accept food coupons or EBT benefits from recipients.

Because of the huge size of the program and its vulnerability to fraud and abuse, OIG devotes a significant portion of its total resources to audit and investigative work in FSP. Our audit work focuses on the adequacy of controls and systems used to manage program areas such as issuance operations, wage-matching requirements, bank and retail store monitoring, and quality control procedures. Our audit staff is also working closely with FNS, other Federal agencies, and the States to monitor and review EBT systems as they expand in use. Our investigative emphasis is on food stamp trafficking, which is the illegal exchange of food stamp coupons or EBT benefits for cash or for other nonfood items. During fiscal year 1997, we devoted approximately 46 percent of our investigative resources and 8 percent of our audit resources to FSP work. During the year, we conducted 598 food stamp fraud investigations, and we issued 19 audits relating to FSP. Our food stamp investigations resulted in 540 criminal convictions of individuals and businesses and over $17 million in fines, restitutions, and other monetary penalties. For fiscal years 1995 through 1997, OIG has conducted over 1,900 investigations of food stamp fraud, which have resulted in over 1,800 convictions and $49 million in monetary results.

Trafficking

Trafficking in food stamps has been a problem since the program began. While most food stamps are properly issued to eligible recipients and are used as they were intended to buy food in FNS-authorized stores, a significant amount of trafficking continues and remains a problem to this day. Street trafficking involves persons who purchase or barter food stamps for cash or other nonfood items. Street traffick-

ers often obtain food stamps from recipients at a substantial discount of their face value, frequently in exchange for drugs or other nonfood items. Retailer trafficking involves FNS-authorized store owners and their employees who purchase food stamps for cash at a discount of their face value and then redeem them at their banks for full face value. Retailers traffick with both individual recipients and with street traffickers. Since the FNS-authorized retailer is the key to the eventual redemption of illegally obtained food stamps, OIG's primary investigative focus is on identifying and investigating those retailers who purchase food stamps. During fiscal year 1997, about 80 percent of our food stamp investigations involved FNS-authorized stores. During the year, 326 retail stores were disqualified by FNS based upon OIG investigations. Those stores had annual redemptions of $65 million.

FNS' Sanction Settlements Do Not Always Enhance Error Control

As an incentive to control food stamp certification error rates, States are awarded additional administrative funding for low error rates and sanctioned for excessive error rates. As outlined in our 1997 audit which covered a 14-year period ending in 1995, 48 States were sanctioned for excessive error rates. The States overissued approximately $8.5 billion in food stamps and were liable for approximately $1 billion for excessive errors.

Between fiscal year 1981, when the sanctioning process became effective, and fiscal year 1995, FNS had collected only $6.2 million of the $1 billion in liabilities. FNS may waive collection of a State's liability incurred after fiscal year 1985 on the condition that the State invests its own funds in error control activities. Through settlements with FNS, States were required to reinvest $65.1 million in FSP, with contingency provisions for reinvestment of another $36.7 million. Almost $765.4 million in potential sanctions was waived by FNS as part of the settlement agreements negotiated with the States.

We reviewed the settlements that FNS had negotiated with the States, as well as the reinvestment activities the States engaged in. We found that the settlements (1) absolved States of their liabilities regardless of their error rates, (2) did not always provide incentives for States to reduce error rates, and (3) included payment of Federal matching funds for activities that should have been fully funded by the States. We also found ineligible projects and costs included in the 45 reinvestment projects we reviewed in 17 States. The States had budgeted $70.8 million for the projects. We questioned an unduplicated $50.2 million of the budgeted and actual costs. For example:

—We questioned the eligibility of 11 projects budgeted for $42.3 million because most of the work performed under the projects constituted the basic activities required for program administration. Also, the States funded some of the projects by reallocating existing resources rather than budgeting new expenditures.

—The States charged ineligible costs to their reinvestment activities. We evaluated the propriety of costs charged to the 30 projects conducted by 11 of the 17 States. Of the $40.5 million the States had charged to the projects, we questioned $10.5 million in costs.

We recommended that FNS (1) collect sanctions from States with historically excessive error rates; (2) make any settlement agreement contingent on a State's ability to reduce its error rate below the national average; (3) ensure that reinvestment activities enhance the controls over errors, not merely meet the minimum requirements for program administration; (4) ensure that reinvestment projects are not funded by reallocation of resources; (5) review each State's reinvestment activities to evaluate its eligibility; and (6) recover the questioned costs or require the States to reinvest in error rate control activities that qualify.

FNS officials generally disagreed with our conclusions regarding the amount of questioned costs. We continue to work with them on resolution of the recommendations.

One State Overclaimed As Much As $25 Million in Employment and Training Funds

The Employment and Training Program (ETP) provides funds to train food stamp recipients to find work. FNS approves each State's Employment and Training plan, and reimbursements are based on the size of each State's food stamp work registrant population, as a percentage of food stamp work registrants nationwide, and on actual costs that exceed those calculated by the population formula. Reimbursed costs may not include overhead costs of normal educational operations.

At the request of FNS, we evaluated Wisconsin's methodology for identifying those costs to be submitted for Federal Employment and Training matching funds, and we reviewed the State's procedure for determining the number of eligible program participants.

FNS approved Employment and Training matching funds totaling $10.2 million in fiscal years 1995 and 1996 to which Wisconsin was not entitled. The State's calculation of work registrants included food stamp recipients who were ineligible for ETP. Wisconsin also charged for costs of operating the Wisconsin Technical College System even though neither the colleges nor the attending food stamp recipients were given any Employment and Training funds by the State. FNS was unaware of these conditions because the regional office did not recognize the large increases in the State's claim for matching funds as an indicator of possible problems.

An additional $15.3 million in Federal matching funds was approved for the costs of continuing a U.S. Department of Health and Human Services (DHHS) jobs program whose normal allocations had run out. Reimbursement of these transferred costs could constitute a violation of appropriation laws and, thus, may need to be refunded to FNS.

We recommended that FNS collect $10.2 million from Wisconsin for the ineligible costs of the technical college system and for the overstated number of Employment and Training participants. We also recommended that FNS' regional office obtain a legal opinion from the Office of General Counsel on whether the payment of costs allocated to a DHHS program constitutes a violation of law and whether the associated funds should be collected. Finally, we recommended that FNS strengthen its monitoring procedures to prevent future recurrences of these problems in other States.

FNS officials agreed that the State's grant and matching funds may have been overstated. They also agreed to obtain a legal opinion regarding the possible appropriations violation.

Other Food Stamp Investigations

In cooperation with the local Oregon police department, our investigation of an individual in Oregon who was illegally receiving food stamps, led to his January 30, 1998, guilty plea on two counts of Aggravated Murder. Our investigation determined that the individual, who was suspected of multiple homicides while riding railroad lines throughout the United States, had applied for and received food stamps using false identities in 12 States. Information we obtained from food stamp files around the country established a time line which tracked the individual around the country and helped place him in the locations where the homicides occurred and provided the motive for some of the murders. He admitted to using the identities of some of his homicide victims in order to receive their food stamp benefits. In Connecticut, 15 individuals were arrested in a food stamp sting operation. Owners and employees of eight authorized stores had purchased approximately $256,000 in food stamps for $118,450 in cash, two handguns, and two vehicles. The 13 store owners and employees involved with food stamp trafficking were charged with Federal and/or State violations. The owner of one store was a city councilman, who pled guilty to State food stamp charges. During the course of the investigation, the owner of an authorized store introduced the OIG undercover agent to a Connecticut State Representative, who was also a police officer, for assistance in expediting a pistol permit. The OIG agent paid the Representative $400 for his assistance. Even before the OIG investigation, the chief State's attorney's office had been investigating the Representative for election law violations. The OIG agent, while conducting this business, was approached by a second State Representative who was a police officer, as well. The Representative made a similar arrangement to assist in expediting the pistol permit. The OIG undercover agent paid this State Representative $200 for his assistance. Both Representatives were arrested and charged with various State violations by the chief State's attorney's office. Subsequently, both pled guilty, resigned from their positions, and were given suspended sentences with probation. The case was worked jointly with Connecticut's chief State's attorney's office, IRS, and the U.S. Attorney's Office.

While the vast majority of our investigative time spent in the Food Stamp Program involves trafficking, we also conduct investigations of other types of criminal activity in the program, such as large-scale thefts of coupons from issuance offices and multiple issuances of benefits to the same individual, particularly if interstate fraud is involved.

One recent investigation resulted in guilty pleas from three individuals who broke into food stamp issuance centers in Georgia, Oklahoma, and Alabama and stole nearly $500,000 in food coupons and over $47,000 in cash. The robbers gained entry to the businesses by cutting holes in the roofs. When employees arrived at work early in the morning, two of the armed robbers—dressed in black ski masks, gloves, and coveralls—crashed through the ceiling and climbed down ropes into the businesses. Two members of this robbery ring have pled guilty to multiple Federal crimes, including food stamp violations, and were sentenced to prison for 151

months and 60 months, respectively, along with total restitution of $142,380. The ringleader, who was wanted for numerous armed robberies in several States, was tried in Texas for a similar robbery which did not involve food stamps. He received two consecutive life sentences under the new Federal "Three Strikes and You're Out" law. The three gunmen have also been implicated in nine other armed robberies.

FARM PROGRAMS

FARM SERVICE AGENCY (FSA)

Tobacco Fraud

A North Carolina tobacco dealer, who was also affiliated with the Montana Freemen organization, and a Fredericksburg, Virginia, tobacco dealer were among the 40 tobacco dealers, warehousemen, farmers, and 1 corporation who have been convicted of felony charges for their roles in a tobacco fraud scheme that resulted in the illegal sale of more than 34 million pounds of excess tobacco valued at over $57 million. The Freeman pled guilty to charges of conspiracy to commit mail fraud and to making false statements regarding tobacco marketed on USDA tobacco dealer cards, after he and others used dozens of persons throughout the Southeastern United States to illegally sell the excess tobacco. He was sentenced to 5 years in prison for the tobacco-related charges. Information developed by OIG during the tobacco investigation laid the groundwork for another Federal prosecution and conviction of the Freeman relating to crimes associated with the Freemen group, including conspiracy to commit bank fraud and conspiracy to intimidate a Federal officer. The sentence for that conviction was 12 years in prison. The Fredericksburg tobacco dealer was sentenced to nearly 16 years in prison following his trial and conviction. Additionally, the Government was awarded property, including the defendant's residence, a colonial era estate known as "Beauclaire Plantation," which IRS has appraised at over $900,000, and $3 million in cash and substitute assets. The substitute assets seized include a registered American Quarter Horse, known as "Coosa Lad," valued at nearly $500,000, and additional real estate valued at over $150,000. Administrative action has been initiated to collect up to $42.5 million in tobacco marketing-quota penalties. Civil suits have also been filed against some warehouse operators under the False Claims Act.

Mohair Incentive Program

Although the Mohair Incentive Program was eliminated in 1996, OIG continues to investigate criminal violations of this once-important program. This program allowed mohair producers to receive Government subsidies approaching 400 percent of the amount of their actual mohair sales. Prior to its elimination, this Program was defrauded out of $1.6 million by three Texas ranchers. A fourth rancher submitted additional false claims for over $400,000 in program payments; however, the payments were not made. The producers, who were required to have actually owned the goats which produced the mohair for which they sold and received subsidy, actually purchased the mohair from other sources, resold it, and submitted bogus receipts to support their claim to USDA. All four of the defendants in this case pled guilty to charges of making false statements, and three of them have been sentenced to prison terms from 22 to 40 months and ordered to pay over $2.5 million in restitution. Sentencing is pending for the fourth. Interestingly, the Federal District Court Judge ordered the restitution to include interest on the amount of the fraud calculated, from the date the payments were received.

Adulteration, Misgrading, and Misweighing of Grain

A multinational food company headquartered in Omaha, Nebraska, pled guilty to charges of adulteration, misgrading, and misweighing of grain by the company's grain division and paid $8.3 million in fines and disgorgement of criminal profits. A significant part of the sum is being disbursed to more than 4,000 farmers who were cheated by the company's schemes to defraud. In addition, four former managers of the grain company pled guilty to misgrading grain. Two of the managers also pled guilty to wire fraud. One of the managers found guilty of wire fraud was sentenced to a prison term of 15 months, followed by probation of 2 years, and the other manager was fined $3,000 and placed on 4 months' home detention. The other two managers were fined $500 and $200, respectively, because they cooperated in the investigation and had not led the schemes. In lieu of debarment, the company signed a compliance agreement that establishes a corporate code of ethics and conduct and provides for training in ethics, as well as grading and weighing. The agreement also ensures a prohibition against adding water to grain except for processing.

Our investigation found that the company used several schemes to defraud farmers and grain buyers and increase its grain inventories and profits. Soybeans were purposefully misgraded, allowing the company to pay less to the farmer yet sell at higher rates. The company also significantly misweighed grain it sold, thereby allowing it to ship less grain than it was paid for. In addition, water was added to grain inventories, which increased the grain's weight and the company's profits when the grain was sold. The excess moisture also caused spoilage of grain in transit, prompting international complaints. Further, the company paid gratuities to federally licensed grain samplers who worked for a Government contractor. These licensed personnel then allowed the grain company to exchange poor-quality grain samples for samples of a higher quality. The samples were used to prepare "Official Certificates," which are used throughout the grain trade to market grain. End users received poor-quality grain but paid a higher price. Investigative findings of the questionable grain-handling practices prompted lawmakers to increase the level of violations of the USDA Grain Standards Act from misdemeanors to felonies. Subsequent rulemaking severely restricted the addition of water to grain. The 4-year investigation was a joint effort with FSA and the Grain Inspection, Packers, and Stockyards Administration.

FSA Oversight of Certified State Mediation Programs Needs Strengthening

The Secretary of Agriculture has the authority to help States develop certified mediation programs. These programs make a trained, impartial person available as a mediator to facilitate communication between disputing parties to promote reconciliation, settlement, or understanding among them. At the local level, mediation programs may be administered directly by the State. Since 1988, USDA has obligated $19.7 million for 20 State mediation programs.

Although grant agreements give USDA officials full access to mediation records, OIG was denied access by all four State agencies visited. State officials withheld all records that would identify mediation participants, as well as the final agreement resulting from the mediation. State officials considered such records confidential. As a result, we were unable to fully evaluate the use of Federal funds and the accomplishments of the States. It is important to note that mediation programs are available for a variety of USDA loan and payment programs, which total approximately $33 billion. Since any borrower or participant in these programs can request mediation services, $33 billion is the value of USDA funding impacted by the decision to deny OIG access to records.

Through review of the limited records that were provided, we identified $2.1 million since 1988 in excessive or questionable reimbursements for activities that did not involve mediation. These activities included financial analysis, credit counseling, and other technical assistance for individuals not in mediation. In our opinion, mediation funds should be used to reimburse expenses associated with mediating disputes involving farmers directly affected by USDA actions.

We also reported that the average cost per mediation case for FSA-administered mediation programs was $537 while the average cost for State-administered programs was $3,719 per case. In addition, we noted that the total fiscal year 1996 appropriation for the mediation program was $2 million; however, FSA obligated $3.1 million to the States and allowed them to carry forward unused amounts to the succeeding fiscal year.

We recommended that FSA (1) withhold grant funds from the four States we visited until records are made available, (2) amend regulations to specify what costs can be claimed for reimbursement, (3) recover $1.2 million in questionable and unsupported costs, (4) reduce the cost per case for the State mediation program, and (5) stop obligating more grant funds in a fiscal year than are appropriated by Congress. We are working with FSA officials to resolve the issues identified in the report.

Subsequent to the release of our audit report, OGC issued an opinion regarding USDA access to records. The opinion states in part:

—Section 1946.4 of 7 Code of Federal Regulations (CFR) requires that any State requesting a mediation grant comply with 7 CFR parts 3015 and 3016. Section 3015.24 of 7 CFR in turn provides, in part, that USDA and any of its authorized representatives "* * * shall have the right of access to any * * * records of the recipient which are pertinent in a specific USDA award in order to make audit, examination, excerpts, and transcripts."

OGC concluded that FSA should notify the grantees of the regulatory requirements and that continued failure to grant access in accordance with the regulations will be considered a material violation of the grant award under 7 CFR part 3015, subpart n. FSA has notified the grantees of the OGC opinion.

Currently OIG, FSA, and State-administered mediation officials have reached a compromise in our effort to complete a review of the mediation program, and the review is continuing in selected States. Our review objective, for this phase, is limited to determining whether the mediation program is effectively resolving USDA-related issues in accordance with applicable laws and USDA regulations and procedures. This phase is being limited since, in our earlier review, we made recommendations to FSA concerning matters eligible for funding with mediation grant funds. We continue to work with FSA officials to resolve these matters.

Tobacco and Peanut Marketing Penalties Not Assessed

The Omnibus Budget Reconciliation Act of 1993 requires that marketing assessments be collected on imported tobacco, while the Omnibus Budget Reconciliation Act of 1990 requires that producers and handlers remit marketing assessment fees for the sale and purchase of farmer stock peanuts.

Tobacco importers who do not remit the assessment promptly are subject to marketing penalties and late payment interest charges. Over the period 1994 to 1996, potential marketing penalties and interest charges approximating $123 million were not timely identified and collected. FSA's failure to identify the penalties and interest could result in a material understatement of accounts receivable for the Commodity Credit Corporation (CCC).

While peanut handlers generally remitted marketing assessments timely, FSA did not assess penalties against handlers who remitted the fees, or a portion thereof, late even though the legislation required it. Of the almost 12 million tons of peanuts marketed between 1991 and 1996, assessments were remitted late on 700,000 tons, or 5.8 percent. The unassessed late payment penalties would have totaled $46.4 million.

For tobacco, we recommended FSA (1) notify the respective importers of their liabilities and give them an opportunity for a hearing, (2) recover the net amount of marketing penalties determined due, (3) ensure that any reductions to marketing penalties are in accordance with legislated mandates, and (4) record accounts receivable in CCC's financial statements for penalties assessed. For peanuts, we recommended that penalties be assessed for late payments. FSA officials are in the process of taking corrective actions.

Improper Conservation Reserve Program (CRP) Scoring Reduces Environmental Benefits of Land Accepted

Under CRP, producers receive annual payments from FSA to take highly erodible cropland out of production and establish and maintain a vegetative cover on it. Last year, FSA opened the program to the fifteenth signup. During signup, producers designated tracts of land that were determined environmentally sensitive, and personnel from the Natural Resources Conservation Service (NRCS) reviewed the tracts and scored them according to values on the Environmental Benefits Index (EBI). One subpart of the index identifies the environmental benefits of the land, such as providing cover beneficial to wildlife, and specifies what numerical scores may be given for the different kinds of conservation practices—planting mixed grasses, legumes, etc.—that the producer established to enhance each benefit. Tracts that have been awarded higher scores are regarded as more worthy of conserving and qualify for CRP consideration ahead of tracts with lower scores. Tracts that fall below a minimum score are excluded from the program.

Our audit disclosed significant inconsistencies in the methodologies used by States when they assigned scores for various conservation factors. Specifically, producers in some States received high scores for preserving cover beneficial to wildlife or for protecting threatened and endangered species even though the required cover or the endangered species were not present on the tracts of land. Such inconsistencies in scoring can result in greater CRP consideration for cropland in one State even though its environmental benefits are no greater than those of its neighboring States.

Our review focused on two environmental benefits of land tracts offered to CRP—providing cover beneficial to wildlife and providing habitat for threatened and endangered species. Additional work was conducted in Kansas because of a complaint about that State's EBI scoring methods. Kansas, like most other States, provided little monitoring of county signups by State NRCS representatives to prevent counties from misapplying EBI criteria.

Nationwide, we reviewed CRP land offers in 55 counties in 17 States. Scoring errors and inconsistencies occurred on 47 percent of the CRP worksheets we verified. Inconsistencies occurred because States unilaterally modified EBI values, awarding 10 points, for example, for a category that allows either 15 points or no points. Errors occurred because some States developed EBI scoring software that was not al-

ways accurate and because some States entered improper values on CRP worksheets.

We recommended that FSA and NRCS (1) provide additional guidance on criteria for assigning points for the environmental benefits we found improperly scored and (2) require field offices to review and correct EBI scoring, based on the additional guidance, before the CRP contracts are signed. We also recommended that software developed for future signups be field-tested for accuracy prior to use. Specifically, in Kansas, we recommended that CRP contracts not be finalized until the offers were reviewed and corrected.

Based on a management alert we issued during our audit, FSA officials issued clarifying information and instituted a second-party review of CRP worksheets for the six counties with the largest number of land offers in each State that had CRP activity. NRCS management also issued a guidance document that addressed some scoring problems noted in our review. USDA also allowed 1 year of payment to producers whose offers were incorrectly accepted due to errors made determining EBI scoring. Due to the large error rate in the fifteenth signup, we have expanded our audit coverage into the sixteenth signup.

Borrowers With Delinquent Farm Loans Received Full Benefit From Other FSA Programs in the Past, but Offsets Are Scheduled

Farm loan borrowers whose accounts were delinquent have continued to get full Government payments from other FSA programs—for example, the Acreage Reduction Program or the Conservation Reserve Program—regardless of their delinquent debt to FSA. FSA did not offset the program payments to reduce the delinquent amounts because it did not have an automated system that could identify delinquent borrowers who were scheduled to receive other program payments. The offsetting was further complicated by procedures—inherited from the former Farmers Home Administration, that allow FSA to apply the offset only after it has "accelerated" the delinquent account—started formal foreclosure proceedings against the borrower.

During 1995 and 1996, FSA made $72.1 million in program payments to over 4,000 borrowers whose total indebtedness was over $885 million and who were at least 180 days delinquent on these debts. It had accelerated the delinquent accounts of those who received $9.7 million of this amount, and it offset only $3.1 million in payments to those borrowers with the accelerated accounts.

FSA's procedures regarding offsets were incompatible with departmental procedures. The Department does not require agencies to accelerate delinquent accounts before applying any offsets, and it gives agencies 10 years from the date the debt arose to collect the debt through the offset. FSA procedures required the acceleration and limited FSA to 6 years to collect the debt through the offset.

In response to our management alerts, FSA issued interim regulations on August 1, 1997, authorizing the agency to offset program payments to delinquent borrowers without accelerating the loan accounts and by expanding the collection period to 10 years. We concluded that, with timely implementation of the new rules prior to the final 1997 farm program payments, $34 million in program payments could be offset from borrowers whose accounts are more than 180 days delinquent.

We recommended that FSA expedite the release of all procedures to implement the new regulation and that necessary actions be taken, manually if necessary, to offset 1997 payments due delinquent borrowers. We also recommended that FSA ensure that its automated administrative offset system will (1) identify delinquent borrowers who are also receiving program payments, (2) provide for an offset of those program payments, and (3) apply the offset to the delinquent account. The agency agreed with the findings and recommendations and initiated corrective actions.

Disaster Overpayments Result from Improper Reporting and Weak Oversight

As part of our nationwide review of FSA's noninsured crop assistance program (NAP), we reviewed producers' applications in two counties in California and one county in Alabama. Producers in a designated area are eligible for payments if a natural disaster reduces their crop yields below 50 percent of the expected yield.

In California, we questioned payments in the 2 counties, totaling about $1.6 million, because 48 of 136 producers we reviewed had overstated their losses. In one of the counties, we also found that the Agriculture Credit Office made loans of $569,000 to two producers based on possible false certifications which underreported their production. In other cases, FSA made errors which resulted in overpayments of $88,000 and underpayment of $8,300.

In the one Alabama county, the county office improperly used State-assigned yields to calculate benefits rather than the producers' actual production histories. Twenty-six of the 53 producers who applied had received disaster payments from

FSA in 1 or more of the previous 4 years and had production histories on file. Using these histories, we determined the 26 producers were eligible for only about $23,000 of the $126,000 determined by FSA.

Since we found that assigning yields, rather than using actual yields, was a Statewide practice in Alabama and also occurred in other States, we recommended to FSA's national office that it base yields on actual production histories. As a result, Alabama halted payments to producers, pending national office instructions. In California, we recommended that FSA broaden the definition of "misrepresentation" to include inaccurate producer reporting that benefits the producer and that measures be taken to strengthen program controls. In all cases, we recommended recovery of overpayments and corrections of underpayment.

FSA Reacts Quickly to Needs of Endangered Livestock in Upper Great Plains

In response to severe winter storms in early January 1997, FSA implemented the Emergency Feed Grain Donation Program to provide immediate assistance to livestock producers in North Dakota, South Dakota, and Minnesota. It also implemented the Foundation Livestock Relief Payment for producers in the three States and other bordering States who needed feed to enhance the diet of foundation livestock weakened by the winter weather. FSA provided about $25 million in assistance through both programs.

We worked closely with FSA officials during the programs' implementation and provided suggestions on how to address control weaknesses and abuses often associated with emergency programs. Based on our field work in selected locations, FSA issued notices to clarify provisions on producer eligibility and the duration of available assistance.

In June 1997, Congress created the Livestock Indemnity Program to provide about $50 million in assistance for livestock and poultry losses that occurred between October 1, 1996, and June 12, 1997. We reviewed the program during the signup period and found that third-party verification statements were being accepted as evidence of losses instead of documented evidence. We also noted one State's interpretation of eligible loss conditions was inconsistent with national office guidance and noted inconsistencies in program administration between States. We made recommendations to FSA to address these issues. We are making further reviews of eligibility determinations, payment calculations, and spot-checks of livestock and poultry operations.

NATURAL RESOURCES AND ENVIRONMENT

Forest Service (FS)

A former FS employee and a self-employed aircraft broker were recently found guilty at trial of conspiring to steal 28 Government-owned airplanes—22 C–130A cargo planes and 6 P–3A submarine attack planes—valued at up to $28 million.

The Federal Property Management Regulations administered by the General Services Administration (GSA) allow excess Federal property to be transferred from one agency to another. However, under this program, title to the excess property must remain with the United States Government. Historically, the Air Force has provided used military aircraft to FS, which uses them to fight fires.

Our investigation disclosed that five airtanker-operating companies signed exchange agreements with FS in which they exchanged alleged historic aircraft for either C–130A or P–3A aircraft owned by the United States Government. The C–130A and P–3A aircraft had originally been transferred to FS from the Air Force and the Navy as excess aircraft through the GSA exchange program. Both defendants assisted the airtanker operators in facilitating the aircraft exchanges. Also, both defendants made misrepresentations to officials of GSA, the Air Force, the Navy, and other Federal agencies to accomplish these exchanges. One of the airtanker operators, who received six C–130A aircraft from FS, transferred two of the planes back to the aircraft broker. The broker then transferred these two planes back to the same airtanker operator and received $450,000. Another airtanker operator, who also received six C–130A aircraft, transferred two of them back to the broker. The broker then transferred title of the two planes to a third airtanker operator in exchange for cash payments and other benefits with a value of $600,000. Sentencing for both defendants is scheduled next month.

FS Cooperative and Reimbursable Agreements Neither Safeguard Funds Nor Identify Conflicts of Interest

FS is authorized to cooperate and share scientific information and technology with other Government agencies, colleges and universities, businesses, and private landowners. During fiscal years 1994 and 1995, FS awarded $70.3 million in research grants and agreements to colleges and universities.

We reviewed 33 grants and agreements awarded to 23 recipients by 7 FS research stations in fiscal year 1994. More than one-third of the recipients in our sample did not always comply with Federal assistance regulations, Federal cost principles, or the terms of specific grants and agreements. Noncompliance included not providing sufficient resources to meet the agreement, failing to satisfy cost-share requirements, not obtaining FS prior approval for large purchases of equipment, and not maintaining adequate records to support claims.

We recommended that FS (1) perform periodic national reviews of research grants and agreements and (2) require research stations to periodically review a sample of reimbursement claims from cooperators. FS officials have generally agreed with our findings and recommendations and are developing an acceptable corrective action plan.

Controls Over USDA Environmental Hazardous Cleanup, Abatement, and Prevention Efforts Need Further Assurance Against Liabilities From Land Acquisitions

The Hazardous Waste Management Program was established as a separate USDA appropriation to bring its agencies' past and current actions into compliance with Federal, State, and local environmental standards. Departmental policy provides for the initiation of agricultural and forestry programs that abate, control, and prevent pollution. OIG has assisted the agencies' efforts toward achieving environmental compliance for the facilities they own and operate by reviewing the adequacy of the individual policies, procedures, and actions they have adopted for meeting these standards and requirements.

Over the past 6 years, OIG has reviewed the progress being made in USDA's management and disposal of hazardous chemical, biological, and radioactive materials and provided recommendations to make these efforts more effective and efficient. Eleven USDA agencies are involved in the purchase, exchange, assumption, or sale of lands and perform hundreds of transactions per year. Our immediate concern is to help these agencies avoid the accumulation of further environmental liabilities in the acquisition, management, and disposal of properties under their stewardship.

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

Water Quality Inventive Projects (WQIP) Need Clearer Focus

The goal of WQIP is to provide incentive payments to reduce agricultural pollutants through environmentally and economically sound management practices. We found that funding of State and locally identified priority areas did not always increase conservation benefits on the most vulnerable lands. In addition, inconsistencies existed in the methodologies followed by States and local areas to identify and rank prospective projects and to prioritize requests to enroll land. Practice components were not always adequately planned or the most effective for improving water quality because plans did not always address all water quality problems identified, and incentive payments were approved for practices previously implemented or required to comply with the highly-erodible-land provisions.

We recommended that NRCS coordinate with other conservation partners in developing the focus for the Environmental Quality Incentives Program (EQIP) and establish whether EQIP should address all existing resource concerns. EQIP, which was established by law in 1996, consolidated WQIP and three other USDA conservation programs into one program. We also recommended that NRCS develop policy and guidance for EQIP to promote total resource management planning and to prohibit payment for practices that were previously implemented or required to comply with highly-erodible-land provisions. NRCS officials agreed to implement our recommendations.

CONSUMER PROTECTION

FOOD SAFETY AND INSPECTION SERVICE (FSIS)

FSIS User Fees Did Not Fully Cover Cost of Export Inspections

In addition to the basic meat and poultry inspections performed by FSIS, products for export are reinspected to ensure they comply with meat and poultry regulations and specific requirements of the importing country. FSIS performs an estimated 450,000 reinspections of products to be exported which were previously inspected under the normal inspection process. FSIS does not collect user fees for these reinspections.

FSIS could offset the Government's costs of providing export inspection services by collecting additional user fees. For certain services, such as export reinspection and preparation of certain export certificates, FSIS would need congressional au-

thorization to collect user fees. If FSIS were to obtain this authority, some export inspection functions could become self-sufficient, thereby making an estimated $13.7 million of appropriated funds available annually for other inspection activities. In other areas where user fees are currently authorized and charged, FSIS did not charge for the full cost of the services provided. We estimated that FSIS could collect an additional $921,000 annually if such fees were adjusted to reflect all associated FSIS costs.

We recommended that FSIS (1) seek statutory authority to assess, collect, and retain user fees for all export inspections/reinspections and for the preparation of the export certificates where such authority does not currently exist and (2) increase the user fees currently authorized and charged for products to be exported to cover the full costs of the services provided. FSIS management agreed with the reported findings and is taking corrective actions.

FSIS Needs To Strengthen Policies and Procedures Over the Progressive Enforcement Action System

FSIS developed the Progressive Enforcement Action system as a tool to monitor meat and poultry plants with continuing food safety problems and bring them back into compliance. However, the current system does not permit FSIS to suspend or withdraw inspection when contaminated products or conditions that may compromise food safety are first detected, even though such authority is provided for in the law and FSIS regulations. The Progressive Enforcement Action system requires inspectors to develop supporting documentation proving noncompliance before they can suspend or move to withdraw inspection. The four plants we reviewed produced 212 million pounds of products under conditions that could have caused contamination. Products included full carcasses of beef and poultry, and poultry for slaughter. FSIS neither took action to suspend inspections of the plants we reviewed nor established specific timeframes during which plants must complete corrective actions. Currently, plants are allowed to remain under progressive enforcement for extended time periods while continuing to produce products under conditions which do not meet food safety standards.

Further, the current system places the responsibility for ensuring plant compliance on FSIS inspectors rather than on plant owners/managers. To comply with requirements contained in the Progressive Enforcement Action guidelines, inspectors must spend an inordinate amount of their time performing inspections and documenting the results. Plant management is required to provide an action plan but is not primarily responsible for ensuring compliance. FSIS' present grant of inspection does not provide for specific performance expectations or standards and does not establish the consequences or penalties for noncompliance.

We recommended that FSIS improve progressive enforcement by developing and implementing procedures to ensure that (1) inspectors refuse or withdraw inspection when conditions that may lead to adulterated products are first detected and (2) specific timeframes are developed for plant management to complete corrective actions in noncomplying plants. We further recommended that FSIS revise (1) its progressive enforcement policies to require plant owners/managers to assume primary responsibility for establishing permanent corrective actions and (2) the grants of inspection to make plant owners/managers responsible for quality of plant operations and compliance with regulations by specifying expected plant performance levels and repercussions for noncompliance.

FSIS management generally agreed with the reported findings and pointed out that publication of the Pathogen Reduction and Hazard Analysis and Critical Control Point (HACCP) final rule has changed FSIS enforcement strategies. FSIS now has specific regulatory requirements for plant-developed and -operated systems for process control and sanitation to prevent direct contamination or adulteration, and these preventive measures are a condition of receiving inspection. Compliance with procedures contained in the Pathogen Reduction and HACCP final rule should address the type of problems we identified.

GRAIN INSPECTION, PACKERS, AND STOCKYARDS ADMINISTRATION (GIPSA)

Investigative Techniques Lacking Against Anticompetitive Practices in Meat Packing Industry

The Packers and Stockyards (P&S) division of GIPSA is responsible for enforcing Federal laws against anticompetitive practices in the meat packing industry. Recent changes in the meat packing industry have resulted in fewer companies controlling an ever-increasing share of the market. This has raised concern among livestock owners and others who depend on the sale of cattle to meat packers at open-market prices. In 1995, the price livestock owners received for cattle decreased sharply

while the major meat packers earned record profits. The perception among livestock owners was that the meat packers were manipulating the price of cattle. The Secretary of Agriculture requested that we assess GIPSA's efforts to monitor and investigate anticompetitive practices.

P&S has performed few investigations of anticompetitive practices in the last few years which have been litigated successfully by OGC. This occurred partly because of the type of evidence available and partly because P&S has not kept pace with the techniques needed to monitor an industry that has changed. The evidence collected through traditional investigative methods is no longer sufficient, by itself, in litigating anticompetitive cases. Additional evidence from economic analysis is now needed, but P&S does not deploy sufficient economic resources in anticompetitive investigations to provide this evidence.

P&S needs to deploy its economists better and obtain additional economic and statistical resources to prepare complex economic models that can demonstrate the adverse effects, if any, of industry activities on open and free competition in the marketplace. P&S also needs to integrate legal expertise into its investigations and consult with departmental attorneys at the beginning of an investigation to ensure that the evidence necessary to litigate a case is collected. Other Federal agencies use teams of attorneys and economists to investigate antitrust violations.

We concluded that P&S needs to restructure its organization, both to place more of its resources in the regions and to redirect staff efforts toward monitoring of the meat packing industry. P&S has several economists on staff but has placed only one econometrician at the full disposal of its investigative staff. P&S' economists should be located at the regional offices, where investigations of anticompetitive practices are performed and where market data is more readily available.

We presented a number of options to P&S to strengthen its operations: (1) reorganize its national and regional offices; (2) integrate its economics staff into the investigations of anticompetitive practices; (3) assess staff qualifications and obtain additional staff with economic, statistical, and legal backgrounds; (4) transfer its economic research activities to another USDA agency; (5) develop procedures to consult with OGC before initiating and during anticompetitive practice investigations; and (6) retain the services of a manager with expertise in all areas of directing anticompetitive investigations or request the U.S. Department of Justice (DOJ) and/or the Federal Trade Commission to provide a manager, on detail, to assist in the reorganization of P&S' functions related to anticompetitive practice investigations.

Since it will take several, if not all, of the above options for P&S to develop an effective investigative staff, the Department may want to consider requesting legislative action to transfer USDA's responsibilities for performing anticompetitive practice investigations to another Federal agency.

Another example of our activity in the health and food safety arena includes:

—In Oklahoma and Texas, OIG and Food and Drug Administration agents are currently conducting investigations involving the adulteration of milk. To date, 12 dairymen and milk truck drivers have been convicted for conspiring to add water and salt to raw milk. It was also found that one driver pumped water directly out of a 55-gallon barrel, which was exposed to insects, bird droppings, and other outdoor elements, into his milk container truck. By adding salt to the water, these individuals evaded quality control detection and defrauded the Associated Milk Producers Incorporated (AMPI), AMPI cooperative members, and the general public. Criminal charges are pending against other identified drivers, and additional investigations involving several other dairymen and drivers are ongoing.

AGRICULTURAL MARKETING SERVICE (AMS)

More Measures Needed To Ensure Dairy Processing Plants Meet Sanitation Standards

AMS has improved its operations by implementing additional monitoring, training, supervising, and reporting measures related to sanitation in dairy-processing plants. However, improvement is still needed to ensure that regulatory agencies are notified of sanitation deficiencies, and increasingly stiffer penalties are needed for dairy processing plants with repeated sanitation deficiencies.

AMS neither reported serious sanitation deficiencies to FDA if the conditions could be corrected quickly nor reported plants which were denied participation in the inspection program because the initial inspection disclosed serious unsanitary conditions. AMS' policy was to notify FDA only when it had withdrawn inspection services from a plant because of serious unsanitary conditions.

We identified three instances where plants were repeatedly ineligible because of unsanitary conditions and appeared to implement only temporary fixes in order to

obtain an approved status. Although the deficiencies were corrected sufficiently during inspections, the corrections were apparently only temporary. Though relatively few plants have this problem, for those that do, AMS needs to implement a system whereby plants are sanctioned for repeatedly failing to maintain acceptable standards or develop procedures to notify regulatory agencies of plants with repeated violations.

We recommended that AMS report all significant sanitary deficiencies identified during plant inspections, regardless of a plant's status, to FDA. We further recommended that AMS develop procedures to notify regulatory agencies when plants have repeated sanitary deficiencies.

AMS officials supported our conclusions and agreed to report all significant unsanitary conditions to FDA, State regulator agencies, and industry trade associations. They also agreed to develop procedures to notify regulatory agencies when plants have repeated sanitary deficiencies.

INSURANCE

RISK MANAGEMENT AGENCY (RMA)

New Initiatives Under the Federal Agriculture Improvement and Reform (FAIR) Act

The FAIR Act authorizes new revenue insurance programs. In 1995, the Federal Crop Insurance Corporation (FCIC) had already approved, for two crops in two States, the Crop Revenue Coverage (CRC) program, a privately developed insurance program that offered alternative coverage to FCIC's multitiered crop insurance. The FAIR Act also provided for phasing in of a single delivery system for catastrophic risk (CAT) coverage. In 1997, this involved transferring over 108,000 CAT policies to 15 private insurance companies in 14 States. In May 1997, the Secretary approved the transfer of all remaining policies. For both programs, FCIC reinsured companies that would service the policies. Through various interim reports, we provided RMA with recommendations to strengthen controls over these new activities. Regarding CRC implementation, we recommended that RMA develop regulations for administering privately developed programs. We also recommended that FCIC amend or establish new reinsurance agreements with the companies to shift additional risk to the private sector and reduce administrative expense reimbursements for CRC in line with other FCIC policies.

Our reviews of the transfer of CAT policies in the first 14 States found a lack of interest by local agents in servicing policies and an unawareness of special provisions to forgo the $50-per-crop fee for producers with limited resources. For future transfers, we recommended that RMA determine the availability of agents in "local" areas and whether this is adequate. It should also measure the effectiveness of the transfer process in the first 14 States. We also recommended that RMA require reinsured companies to provide information to limited-resource producers on fee-waiver requirements. RMA agreed with our recommendations.

Crop Insurance for Florida Fresh Market Tomatoes Was Not Properly Managed

We audited the 1996 Dollar Plan Fresh Market Tomato Crop Insurance program in Florida and concluded that RMA should take sanctions against reinsured companies in Florida because their servicing of claims filed under the program was poorly managed. All seven indemnity payments we reviewed were improperly made, resulting in questionable indemnity payments of almost $1.5 million. The companies paid indemnities even though the insureds had (1) abandoned their crops because of low market prices, (2) claimed against losses that occurred after the reinsurance coverage period had ended, (3) planted crops on converted wetlands they had promised to restore to their natural state, and (4) failed to report all production.

We found that the practices and procedures used in administering the insurance program for fresh market tomatoes allow indemnities to be paid to producers who did not experience a loss of commodity but, instead, suffered financial losses due to low market prices. We met with OGC officials and discussed the legality of paying indemnities based on low market prices and no loss of commodity. OGC officials verbally advised us that, to qualify for an indemnity, the insured must suffer a quantity or quality loss of a commodity caused by an insurable peril. We requested a formal, written opinion.

We also found two reinsured companies' sales agents were employed by the policyholders to whom they sold policies that resulted in claims. The agents involved in the conflict of interest received almost $400,000 in commissions, and one of the policyholders received over $2.4 million in indemnities on his claims.

We recommended that RMA officials develop a plan of action to ensure that reinsured companies comply with program regulations in their management of the Fresh Market Tomato Crop Insurance Program. In addition, we recommended that

RMA obtain data on all cases where indemnities were paid on fresh market tomato claims where there was no commodity loss and, based on the results of OGC's formal opinion, recover any indemnities that should not have been paid. Other recommendations included one in which we asked RMA to determine what sanctions should be taken against the reinsured companies and the sales agents involved in the conflicts of interest. RMA management generally agreed with the reported findings and is addressing the recommendations.

Errors in Establishing Yields and Adjusting Claims Resulted in Incorrect Indemnity Payments

Our review of 12 California crop insurance claims for 1995 and 1996 identified errors in the calculation of indemnity payments for 8 of the 12 claims. Sales agents, loss adjusters, insured producers, and FSA personnel misstated historical yields, miscalculated appraised production, and inconsistently established insurable acreage and production-to-count. It is to the producer's advantage to overstate historical yields and understate production during a loss year; an overstated historical yield will increase the amount of actual production that can still qualify for indemnities. Of the eight claims we found in error, indemnities for seven were overpaid by approximately $125,000, and the indemnity for one was underpaid by approximately $9,500.

We also reviewed the 1995 claims of one cotton producer in Mississippi. The audit identified errors made by the reinsured company in calculating indemnity payments and premiums. In adjusting the loss claim, insurance company officials (1) overstated the number of acres affected by the disaster by 60 acres and (2) understated the producer's prior yield by 157 pounds per acre. The errors resulted in overpaid indemnities of approximately $32,000; underpaid indemnities of $4,400; and overpaid premiums of just over $1,000.

In these two audits, we recommended that RMA recover overpaid indemnities totaling approximately $152,000; pay $14,000 to the underpaid producers; and require the reinsured company to credit the insured's account for the $1,000 premium overpayment. RMA should also ensure that proper adjustments are made to historical yields for policies where errors were identified by our review. RMA management agreed with the reported findings and is implementing corrective actions.

MARKET DEVELOPMENT

FOREIGN AGRICULTURAL SERVICE (FAS)

During this past year, as a result of an OIG investigation, the Government concluded a global settlement with a prominent international grain company in New York and its foreign affiliate. As agreed to by the parties, the grain company paid $25 million to the United States Government in settlement of any potential civil claims, and its affiliate paid a $10 million fine after pleading guilty to a criminal charge of conspiracy. In addition, three associated entities agreed to permanent debarment from participation in any Federal programs.

This settlement represented the culmination of a series of investigations conducted by OIG special agents since 1989 into fraud related to USDA's General Sales Manager 102 and 103 Export Credit Guarantee Programs, which were administered by FAS on behalf of CCC.

In 1989, two employees of the Banca Nazionale del Lavoro (BNL), Atlanta, Georgia, branch disclosed to the U.S. Attorney's Office that BNL branch management issued unauthorized loans to foreign governments and exporters. Repayment of some of those loans was guaranteed by CCC under Export Credit Guarantee Programs. The guarantees enabled foreign entities that otherwise could not obtain credit to purchase U.S. farm commodities and products. If the foreign entity defaulted on its loan, CCC paid the holder of the guarantee 98 percent of the unpaid principal and interest.

OIG initiated an investigation after inquiry with FAS revealed that BNL held CCC loan repayment guarantees exceeding $1.6 billion. The USDA investigators were joined by agents from the U.S. Customs Service, FBI, and IRS, and examiners from the Federal Reserve. The team included Assistant U.S. Attorneys in the Northern Judicial District of Georgia, and various divisions of DOJ's national office, who worked closely with the agents.

In 1991, a Federal grand jury in Atlanta had handed down a 347-count indictment. Named in the indictment were a Turkish-owned corporation, its manager, a bank owned by the Iraqi Government, four Iraqi Government officials, and two former officers and an employee of the BNL Atlanta branch. The indictment alleged that officials of the BNL Atlanta branch, without authority and in disregard of BNL internal policies and procedures, issued more than $4 billion in loans and credit ex-

tensions to the Government of Iraq. Approximately one-half of those loans involved USDA programs. The ten defendants were charged with conspiracy, mail and wire fraud, money laundering, false statements to USDA, falsification of documents presented to USDA, and other counts.

The Turkish company named in the indictment pled guilty to 20 counts of the indictment, paid $5 million in restitution to BNL and a $1 million fine to the U.S. Treasury, and agreed to voluntary permanent debarment from participation in all U.S. Government-funded programs. The three BNL employees named in the indictment pled guilty to various charges. Three additional BNL employees, not named in the indictment, also pled guilty to various charges. The Turkish company's manager and the four Iraqi Government officials remain fugitives, with an unconfirmed report that one of the Iraqi officials has died.

The BNL investigation resulted in numerous spinoff investigations. One of those spinoff cases investigated by the USDA agents resulted in a U.S.-based trading company pleading guilty to charges that it conspired to make false statements to CCC. The trading company paid over $8 million in restitution to CCC and a maximum fine of $10,000. The responsible division of the company and three employees agreed to debarment from U.S. programs for periods up to 3 years.

The USDA portion of these investigations resulted in $38 million of restitution and over $11 million in fines. These investigations also developed sufficient evidence to allow FAS to cancel $500 million in additional CCC guarantees requested by Iraq for 1990, saved the American taxpayers even more losses, and led to the debarment of seven parties from participation in USDA and U.S. governmentwide programs.

Changes Are Needed To Improve Delivery and Effectiveness of Humanitarian Aid

FAS and CCC provided $81 million to the Russian Federation and the Kyrgyz Republic to establish joint commissions. We found that the joint commissions did not operate efficiently and impacted embassy workloads adversely, and funds were misspent. As recommended, the U.S. Department of State issued a protest to the Government of the Russian Federation resulting in the return of over $6 million to the joint commission from the Russian tax authorities, and the Government of the Kyrgyz Republic agreed to use the funds owed to support the activities outlined in the original agreement. The joint commissions are being terminated.

Commodities Donated to Russia Mismanaged

A U.S. private voluntary organization that was sponsoring the distribution of donated USDA commodities under the Section 416(b) Program was negligent in its sponsorship. It provided little or no management oversight of overseas operations, essentially abdicating its responsibilities to its Russian agent and the Salvation Army.

We found the sponsor's Russian agent misappropriated commodities valued at $1.5 million. Another $653,000 in commodities could not be accounted for, and $2 million in commodities would have ended up "in the streets" of Moscow if the Salvation Army had not paid $55,000 of its own money to secure storage space. Also, contrary to its agreement, the sponsor did not use half of the approximately $3.6 million from commodity sales to support humanitarian projects in Russia.

FSA officials were unaware of the problems because the sponsor did not provide adequate logistical reports nor did the sponsor fully comply with its plan of operation and its project proposal. We concluded the sponsor was negligent in its management of the sale and distribution of $19.6 million in USDA commodities and that it should be debarred from further participation.

FAS officials agreed to require the sponsor to make a full accounting of all commodities and repay USDA for any misappropriated and unaccounted-for commodities. Although they would not debar the sponsor, they agreed to keep the sponsor out of any new programs until all issues raised in the audit are fully resolved.

RURAL DEVELOPMENT

RURAL BUSINESS-COOPERATIVE SERVICE (RBS)

Intermediary Relending Program (IRP) Borrowers Used Loans for Ineligible Purposes

RBS provides IRP loans at 1 percent interest for up to 30 years to intermediary relenders, who reloan the funds at low interest rates to ultimate recipients in rural areas—those areas with populations less than 25,000. Relenders use the income from the recipient loan repayments to cover operating expenses, make loan payments to RBS, and make additional loans. Loan repayments from the recipients are known as second generation funds.

We questioned loans to 21 recipients, totaling almost $2 million, because (1) relenders made ineligible loans and loans in cities with populations of 25,000 or more, (2) relenders used second generation funds for purposes not in the loan agreement or work plan and for relending in urban areas, and (3) conflicts of interest existed between relenders and ultimate recipients. In addition to the loans we questioned, we reviewed the relenders' annual reports and identified other possibly ineligible or inappropriate loans, totaling $1.6 million.

Relenders requested and received IRP advance funds from RBS far exceeding the amount necessary to cover a 30-day period. As a result, advance funds were held for periods ranging from 4 months to almost 2 years before being used. Also, relender IRP loan accounts often exceeded the federally insured amount of $100,000.

In addition, relenders held excessive amounts of IRP funds and were not loaning them timely. Fifteen relenders had rural business loans, totaling $17.7 million which closed in 1993 and 1994 but had requested advances of only $1 million or 6 percent. Seven of the 15 relenders, with loans of $7.7 million, had made no drawdowns of loan funds to reloan to ultimate recipients.

We recommended that RBS (1) recover the funds used for ineligible purposes, (2) revise IRP regulations to state clearly that second generation funds are for rural development and for purposes that meet the eligibility requirements for initial loans, (3) clarify regulations to provide detailed guidelines for making conflict-of-interest determinations, (4) improve procedures for more efficient use of program funds, and (5) improve reporting and monitoring procedures.

RESEARCH, EDUCATION, AND ECONOMICS

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES)

Schedule A Extension Appointees' Rights Need Clarification

There are approximately 8,000 CSREES Schedule A appointees working nationwide in the State Cooperative Extension System (CES). The appointees receive Federal benefits including participation in the Federal Health Benefits program and Civil Service retirement plan. Our review of adverse actions taken against two of these appointees by one State university CES director disclosed that the universities are not always aware that protection, such as counseling and appeals procedures, apply. In this case, the university offered no protection and stated its own policy allowed CES to dismiss the appointees without taking any such actions. OGC provided CSREES with an opinion that these positions fall within the due process requirements of the Merit Protection System. The Merit Systems Protection Board is currently reviewing an appeal by the individuals. OIG continues to support action by CSREES that will inform all CES offices of the appointees' current status and direct them to seek the agency's advice before taking actions that would invalidate these appointments.

EMPLOYEE INTEGRITY

Investigation of serious misconduct by USDA employees remains a high priority for OIG. During fiscal year 1997, OIG issued 82 reports of investigation concerning serious breaches of employee integrity by USDA employees. Our investigations resulted in 21 convictions of current and former USDA employees and 67 personnel actions, including reprimands, suspensions, removals, resignations, and alternative discipline. For example:

—In Kentucky, 12 people, including the FSA County Executive Director (CED), a program assistant, and the FSA building landlord, pled guilty to defrauding three FSA programs of approximately $850,000 over a 9-year period. All 12 defendants were sentenced to terms ranging from probation to 57 months in jail and were ordered to pay fines and restitution totaling approximately $607,000. Forfeiture of $246,350 was ordered against the CED and the building landlord, and both of the FSA employees have been dismissed. The investigation also prevented an additional $15,500 in funds from being issued by FSA. The multifaceted scheme involved the Feed Grain, Disaster, and Tobacco Programs. The two FSA employees falsified documents, enabling the coconspirators to receive payments they were not entitled to, and, in return, approximately half the proceeds were given to the CED. The numerous checks were made payable in the names of the various coconspirators and to fictitious names. Of the 12 who pled guilty, only 1 was a farmer. In addition, the CED and the building landlord conspired to steal Burley Tobacco Marketing Cards and tobacco poundage quotas from various farms. The proceeds were laundered through a business account belonging to the building landlord. We were assisted in this investigation by the FBI.

—A Texas FSA program assistant who was charged with theft and embezzlement of more than $945,500, confessed and pled guilty, and was suspended without pay pending conclusion of the criminal action. The employee had created numerous false loans, altered several CCC checks to bear her name, forged the signatures of two FSA county supervisors on the CCC checks, and deposited several CCC loan and program payment checks into her personal bank account. Our investigation determined the employee used some of the fraudulent loans to pay off other fraudulent loans in order to keep the scheme active. The actual dollar loss to the Government was approximately $286,400. Sentencing is pending.

ADMINISTRATION

The Department's Backlog of Discrimination Complaints Has Increased; Greater Technical Assistance is Needed for Loanmaking and Loan-Servicing

As requested by the Secretary, we reviewed the backlog of complaints made by disadvantaged and minority farmers. We issued a report in February 1997 that detailed the staffing problems, obsolete procedures, and lack of direction from management that resulted in a backlog of 530 civil rights complaints within the Department. During the second phase of our work, we found that the backlog had increased from 530 to 984, as of August 1997. In FSA alone, the backlog nearly doubled, increasing from 241 to 474.

Although an ad hoc team was formed in April 1997 with the goal of eliminating the backlog by June 1997, the Office of Civil Rights (OCR) found that the complaints had never been properly investigated. As a result, the ad hoc team was disbanded without accomplishing its goal. We believe additional efforts are needed by ad hoc teams, under the direction and control of OCR, to help address the backlog of complaints. Further, we think the task of performing preliminary inquiries on FSA complaints should be performed by OCR investigators, who can be more objective and independent than FSA employees in performing the task.

The Secretary also asked us to review a broad range of issues concerning program participation by minorities. For this review, we selected 11 States and 33 counties to determine if FSA provided sufficient technical assistance to help minority farmers apply for and receive farm credit loans and if FSA processed minority farm loan applications and serviced minority accounts in the same manner as for nonminorities. Our review disclosed the following.

—FSA needs to provide greater technical assistance during the loanmaking and loan-servicing processes. One of the greatest frustrations to applicants is the extent of the information needed to complete the multiple documents for financial assistance. Statewide data for the 11 States reviewed showed that it took minorities and nonminorities about the same number of days, on average, to get their applications processed from receipt to loan closing. However, in certain locations, it took minorities longer than nonminorities to complete an approved application from receipt to completion status. At certain locations, disparities were noted in the number of multiple servicing decisions provided to nonminority farmers compared to the number provided to minority farmers. In those locations, the percentage of accounts that were delinquent was higher for minorities than for nonminorities.

—FSA could improve its relations with the minority community by better targeting its outreach efforts, upgrading the status of its minority advisors, and increasing its work force diversity at the local level. The field offices visited used traditional means to reach out to minority farmers, relied on 1890 Land Grant colleges to promote their programs for them, or were satisfied with the status quo and awaited guidance from headquarters.

County officials told us that outreach has been a pointless exercise in recent years because funding for loans has been unavailable. However, we found that during fiscal years 1992 through 1996, $557 million in available loan funds nationwide was allowed to expire and was never obligated. Most of these funds, approximately $542 million, were available in fiscal years 1992 and 1993.

—Concerning FSA's fund allocating decisions, the agency needs a recordkeeping system to account for its unspent direct operating loan funds which are redistributed to States from a national reserve account. FSA's current practice of "pooling" and redistributing its unspent direct operating loan funds does not always follow the normal "first-come, first-served" procedure. We also believe that socially disadvantaged applicant (SDA) direct operating loan funds should be "pooled" along with non-SDA funds that are sent to the national reserve account for redistribution. Pooling of SDA funds, however, will require a legislative change.

The Secretary also asked us to determine the degree of participation in farm credit programs by minority farmers. We attempted to make direct correlations between FSA's direct loan portfolio and Government census data but were unable to make any meaningful correlations. Neither the general population census or the agricultural census identified the number of individuals in the business of farming. Further, the FSA portfolio itself may contain borrowers who are still indebted to FSA but are no longer farming.

We did compare the applications received and approved from minority and nonminority farmers for the sites visited. We found that, during fiscal year 1996, the loan service centers that serviced the 33 targeted counties received 1,416 applications for direct loans; 317, or 22 percent, were submitted by minority applicants and 1,099, or 78 percent, were submitted by nonminority applicants. A total of 190, or 60 percent, of the minority applications were approved, whereas 729, or 66 percent, of the nonminority applications were approved.

We recommended that the Secretary seek changes to legislation which will allow FSA to "pool" SDA direct operating loan funds and allocate the funds to States instead of allowing them to expire. We also recommended that the Secretary (1) convene ad hoc teams to help address the backlog of civil rights complaints in the Department and (2) revoke the delegation of authority that granted FSA responsibility to conduct preliminary inquiries and return this authority to OCR.

We also recommended that the Secretary direct FSA to provide greater technical assistance to farmers for the entire application process and throughout loan-servicing, establish effective methods of outreach, and develop standards and benchmarks by which to evaluate outreach performance.

The Secretary has requested the Acting Assistant Secretary for Administration to work closely with OIG to ensure that the recommendations are promptly implemented.

ACCOUNTING, FINANCIAL, AND INFORMATION MANAGEMENT

Financial Statement Audits

As required by the Chief Financial Officers Act of 1990 and the Government Management Reform Act, we completed seven financial statement audits. We issued unqualified (clean) opinions on the fiscal year 1996 financial statements of the Federal Crop Insurance Corporation and the Rural Telephone Bank. Audits of the Rural Development mission area and FNS resulted in qualified opinions. Rural Development received a qualified opinion because we were unable to assess the reasonableness of its estimated loan subsidy costs for loans obligated after fiscal year 1991. FNS received a qualified opinion because we were unable to assess the reasonableness of its gross, non-Federal accounts receivable for the Food Stamp Program and the related account balances, and notes to the financial statements. We issued a disclaimer of opinion on FS, CCC, and USDA consolidated statements for fiscal year 1996.

FS received a disclaimer because it was not able to produce auditable financial statements in a timely manner for the year. We are working with FS in a coordinated effort towards correcting weaknesses addressed by our prior audit reports. Corrective action plans have been developed, and significant progress has been achieved in cleaning up invalid accounting data. Through consulting services and monitoring reviews, we continue to help FS personnel implement applicable accounting standards and improve accountability.

CCC received a disclaimer of opinion due to a scope limitation resulting from restrictions imposed on our access to necessary records. Our initial review of FSA's mediation program indicated a variety of program abuses. When we attempted to determine the scope and materiality of irregularities and expand our review to three additional State-administered programs, officials in the States denied us access to the mediation records needed for our assessment. FSA's management asserted that the records available for our review in its State offices were sufficient when, in fact, they were not and did not aggressively assist us in resolving the encumbrance. Because management within FSA has a significant role in CCC's internal control structure, the actions taken to deny our access to records needed to assess compliance with applicable laws and regulations caused us to question the representations by CCC's management.

The USDA consolidated statements received a disclaimer of opinion because the Department could not provide assurance that its consolidated statements were presented in accordance with applicable accounting principles. This lack of assurance was primarily due to (1) FS' inability to provide the Department with complete, auditable financial statements and (2) the Department's inability to provide assur-

ance that, as a whole, its internal control and financial management systems comply with requirements under the Federal Manager's Financial and Integrity Act.

INFORMATION RESOURCES MANAGEMENT

Department Progressing with "Year 2000" Conversion

The "Year 2000" date conversion crisis poses a significant challenge to all users of affected information technology. Every organization, whether Federal or private, must ensure that its information systems are fully Year 2000 compliant well before December 31, 1999, or risk catastrophic failure of those systems. The Office of the Chief Information Officer (OCIO) serves as the Department's focal point for addressing Year 2000 issues.

We initiated a review to assess the readiness of USDA agencies and service centers to achieve Year 2000 computer compliance. This review will encompass a determination as to whether agencies have (1) established an overall strategy; (2) prioritized the conversion or replacement of certain systems and/or hardware, including system interfaces; (3) a strategy to convert, replace, or eliminate certain hardware and software, including operating systems software and application software; (4) a strategy to test, verify, and validate converted or replaced systems; (5) devoted sufficient resources to accomplish the plan and prioritized critical systems and activities; and (6) a contingency plan for critical systems and activities.

Generally, we have found the agencies we have examined thus far have initiated actions to address their individual Year 2000 conversion projects. We have, however, found areas for improvement at four USDA agencies visited and have reported those matters to them. For example, USDA agencies, under a departmentwide contract, purchased a large number of personal computers which were found to be Year 2000 incompatible. The particular vendor sold various types and configurations of computers, totaling approximately $31.6 million, to 10 USDA agencies. These findings and others have been provided to the affected agencies in interim reports, and the agencies have responded to our recommendations. Our audit of the Year 2000 issue continues, and we will issue a report early in 1998.

On a personal note, I am pleased to report that OIG is Year 2000 compliant.

CONCLUSION

This concludes my statement, Mr. Chairman. As you can see, the work of OIG is far-reaching and expansive. I appreciate the opportunity to appear today and present this information, and I hope that my comments have been helpful to you and the Committee. I will be pleased to respond to any questions you may have at this time.

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1998

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

NONDEPARTMENTAL WITNESSES

The following testimonies were received by the Subcommittee on Agriculture, Rural Development, and Related Agencies for inclusion in the record. The submitted materials relate to the fiscal year 1999 budget request for programs within the subcommittee's jurisdiction.

PREPARED STATEMENT OF THE AD HOC COALITION

Mr. Chairman, Members of the Subcommittee, this statement is respectfully submitted for the hearing record on behalf of the ad hoc coalition[1] supporting fiscal year 1999 appropriations of not less than $244.5 million for title I of Public Law 480, the same level as provided in the current fiscal year.

The ad hoc coalition also strongly supports the administration's request that $109 million of CCC funds be used to support Food for Progress in fiscal year 1999, and that the program level for Public Law 480, title III, be maintained at $30 million for the fiscal year. The coalition also supports full funding for title II at the level requested by the Administration. Using carryover funds, title I programs can be increased by maintaining appropriations of budget authority at fiscal year 1998 levels.

In its fiscal year 1999 budget, the Administration without explanation recommends a title I program level of only $112 million, a drastic decline to less than one-half of that established for the current fiscal year. While acknowledging the importance of title I in promoting long-term markets for U.S. agriculture, the Administration fails to recommend the resources required to do the job. At a time when U.S. agricultural exports are declining, the Department should increase its efforts, with strong Congressional support, to alleviate hardships in friendly countries and promote new markets for our farmers.

LONG-TERM SIGNIFICANCE OF PUBLIC LAW 480

Mr. Chairman, the title I program has an illustrious history. From enactment in 1954 until the mid-1960's, title I shipments accounted for about 20 percent of the annual value of all agricultural exports. Until foreign sales dramatically increased in the 1970's, title I shipments continued to represent more than five percent of all agricultural exports. As recently as fiscal year 1990, moreover, title I export values regularly exceeded $700 million. Only in recent years has the U.S. commitment to this program eroded substantially, to a low of $202 million in title I credit sales in fiscal year 1997.

Under the leadership of the Agriculture Appropriations Subcommittees of the Congress, funding for title I was modestly increased in fiscal year 1998, and the Ad-

[1] The ad hoc coalition is composed of the USA Rice Federation, the National Association of Wheat Growers, the National Council of Farmer Cooperatives, the American Soybean Association, the American Maritime Congress, the Maritime Institute for Research and Industrial Development, the Transportation Institute, Gulfcoast Transit Company, and Liberty Maritime Corporation.

ministration's estimated program level for this fiscal year currently stands at $245 million. This funding will permit the shipment in fiscal year 1998 of 1.2 million metric tons of grain equivalent, up from a low of 900,000 metric tons in fiscal year 1997.

Mr. Chairman, the export subsidy reduction commitments established in conjunction with the Uruguay Round Agreement on Agriculture severely restrict U.S. flexibility in agriculture export market development. Those commitments curtail the use of the Export Enhancement Program and similar strategies that might be implemented in the future. But Food for Peace is exempt from the Uruguay Round restrictions: Public Law 480 remains one of the principal programs for penetrating new overseas markets, for establishing trading relationships that will surely become essential to the economic survival of our agricultural sector.

In the two decades following World War II, Food for Peace was instrumental in securing long-term, stable markets for American food and fiber. In fiscal year 1996, U.S. agricultural exports reached a record value of $59.8 billion, representing more than 25 percent of total farm cash receipts for crops and livestock. In that year, the U.S. share of the global agricultural export market reached 23 percent, an increase of more than one-third in a single decade. But the record level achieved in fiscal year 1996 was no more than a snapshot of conditions at a given moment in time. The current picture is troubling: pessimistic forecasts for agricultural trade in fiscal year 1998 require enhanced effort, a renewed dedication to the principles of market development.

FISCAL YEAR 1998 OUTLOOK FOR U.S. AGRICULTURAL TRADE

Mr. Chairman, the Foreign Agricultural Service on February 27, 1998, reported that fiscal year 1998 agricultural exports are forecast to decline by $1.3 billion from fiscal year 1997 levels, and that exports will fall $3.8 billion below the record established in fiscal year 1996. The reasons for the falloff in U.S. foreign sales are increased competition in corn markets, weaker prices for grains and soybeans, and reduced Asian demand due to the current financial crisis.

Agricultural export volume is forecast to reach 149.2 million metric tons in fiscal 1998, up 1.9 million tons from 1997 but about 20 million tons below the record established in 1995. In terms of bulk commodity sales, the value of U.S. exports in fiscal year 1998 is expected to fall $1.6 billion to $22.5 billion, largely due to lower prices and export volumes for corn, and lower wheat and soybean prices. According to FAS, increased export competition from China and Eastern Europe is reducing U.S. corn sales, while South American competition is being felt in the world soybean market.

In the former Soviet Union and other emerging market economies, important new opportunities for sales of U.S. agricultural commodities will emerge in coming years: The United States must compete aggressively for these markets. For the duration of the current economic crisis in East Asia, America must maintain export volumes and market share.

The Foreign Agricultural Service of the U.S. Department of Agriculture, in administering Food for Peace, will be instrumental in protecting existing markets and developing potential new markets. Through sustained title I funding, Congress must give the Department the tools it needs to do the job.

USDA SHOULD BE DIRECTED TO USE TITLE I RESOURCES

Mr. Chairman, the ad hoc coalition strongly recommends a fiscal year 1999 appropriation for title I of Public Law 480 of not less than $244.5 million, the level provided in fiscal year 1998. Using carryover funding from prior fiscal years, increased program levels can be achieved without diverting resources from other worthwhile programs of the Department.

On February 26, 1998, the Foreign Agriculture Service announced its revised Second Quarter country allocations for title I funded programs in the amount of $227.8 million. This is substantially below the Department's established program level of $245 million for the current fiscal year. The newly independent states of the former Soviet Union, together with a number of Eastern European countries, are prime candidates for increased concessional credit sales under title I of Public Law 480. The Department of Agriculture should be encouraged to promote this program throughout the world, both for humanitarian reasons today and for the development of foreign markets in future years.

Mr. Chairman, the ad hoc coalition respectfully requests report language accompanying the fiscal year 1999 funding bills which would direct the Department of Agriculture to increase title I country allocations and make full use of the resources available for this worthwhile program. Working closely with the representatives of

recipient countries, we are confident that USDA can restore title I program levels to those most recently achieved in fiscal 1996.

CONCLUSION

Mr. Chairman, the administration has long acknowledged the importance of title I of Food for Peace as a program to promote long-term markets for U.S. commodities, and to alleviate hardship in friendly countries. But the administration suggests a title I program level for fiscal year 1999 of only $112 million, a drastic decline to less than half that established for the current fiscal year.

With enactment of the 1996 farm bill, Government price supports and producer payments are being phased down. As a result, agricultural producers have become increasingly dependent on export markets to sustain a healthy economy. The title I, Public Law 480 program, coupled with the other export programs, have become of even greater significance than ever before in meeting this objective, sustaining the many allied industries dependent upon a healthy agricultural economy, as well as providing valuable humanitarian assistance to developing countries.

The members of the ad hoc coalition respectfully request an appropriation of not less than $244.5 million for the title I program and committee report language directing the Department of Agriculture to establish a program level for the title I program that makes full use of this appropriation and the carryover funds. The need is there. We also request that the Agriculture Appropriations Subcommittees of Congress closely monitor the performance of the Department in fulfilling this objective over the course of the fiscal year.

Our farmers and the U.S. maritime transport system depend upon Congress to set the standard, and upon the Department to meet that standard, as we enter an era of uncertainty and volatility in trading relationships. The title I program of Food for Peace must be preserved and effectively employed to promote American interests in an environment of uncertain markets and increasing global competition.

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF RETIRED PERSONS

The American Association of Retired Persons appreciates this opportunity to comment on appropriations next year for various programs which benefit the low income elderly in rural America. Initiatives such as Section 515 Rural Housing Loans and Section 504 Very Low Income Home Repair Grants and Loans make a real difference in the quality of life for many elderly Americans.

AARP's recommendations may be summarized as follows:

—Provide at least current funding for Section 504 Very Low Income Home Repair Grants and Loans;
—Maintain Section 515 Rural Housing Loans at current level;
—Provide the Administration's recommended increase for Section 521 Rental Assistance; and
—Provide sufficient resources for Food Stamp outreach activities.

POVERTY AMONG RURAL OLDER PEOPLE

Some of the nation's most persistent economic, housing, and health problems are concentrated in rural areas among older people. In 1996, older people living in nonmetropolitan areas had a poverty rate over 13 percent, compared with approximately 9 percent for those living in other areas. Poverty increases with age, rising to a rate of more than 25 percent for rural Americans who are 85 and above.

Economic problems are particularly severe among older minorities and among rural women living alone. When these factors are combined, poverty is nearly universal. According to the 1995 American Housing Survey, 36 percent of all nonmetropolitan households consisted of older women living alone. Especially hard hit are older minorities living in areas where poverty is highly concentrated. Among rural Americans age 65 and older, the poverty rate in 1996 was 34 percent for Hispanics and nearly 40 percent for those of African descent. Poverty rates are higher among elderly households in the southern U.S.—23 percent—compared with approximately 17 percent in other parts of the country.

The Association urges special attention to the plight of older migrant and seasonal farmworkers. Working and living conditions, which are generally bad for farmworkers of all ages, are abysmal for older workers. Earnings for those over age 65 continue to be far below the poverty threshold, and many receive no Social Security or other benefits. Not surprisingly, farmworkers often experience problems characteristic of the elderly before reaching their fiftieth birthday. Disability levels are

disproportionately high. Unfortunately, access to needed services has often been blocked by prejudice, language barriers, and a lack of outreach activities.

RURAL HOUSING

One result of high rates of rural impoverishment is a striking concentration of housing problems among rural older people. Data from the 1995 American Housing Survey indicate that 39 percent of older households living in moderately or severely inadequate housing reside in rural areas, though only 28 percent of all older households live in rural areas. To address the needs of these older households and other vulnerable populations, it is critical that federal housing programs targeted to rural America be continued and strengthened.

For Section 515 Rural Housing Loans, AARP urges at least a freeze next year at the existing $150 million loan level. We also support the Administration's recommended increase in Section 515's companion program: Section 521 Rental Assistance (from $541.3 million to $583.3 million). Loans made under the Section 515 program have decreased substantially over the past few years—down from more than $500 million in fiscal year 1994 to the current $150 million. Demand for both new construction and rehabilitation far exceeds available resources.

The Administration's recommended $50 million cut next year for Section 515 would push funding to the bare minimum required to continue a national program. Trade-offs will be necessary between badly needed new construction and rehabilitation loans to maintain current stock. Section 515 is the only federal program to target funds directly to rural areas for rental housing production. Half of these loans have historically gone to provide housing for the elderly poor and disabled tenants of all ages. More than half of older renters living in rural areas spend at least 30 percent of their income on housing. Given the extreme poverty which exists in many rural areas, the availability of such housing is vital for many families.

AARP recommends that more emphasis be placed on the development of congregate facilities and on the retrofitting of existing Section 515 projects. Because of the scarcity of social services in many rural communities, congregate housing projects which provide nonmedical assistance such as meals, housekeeping and transportation can be especially crucial to the independence of frail older residents.

AARP further recommends that greater attention be given to initiatives which provide affordable housing to remote rural areas and areas with large concentrations of underserved populations such as older and disabled farmworkers. We also support funding for the program for migrant workers and rural homeless people. Migrant workers tend to be older than other farmworkers and are more likely to be minorities with extremely low incomes. Farmworker housing very often has no heat or running water, creating barely tolerable living conditions for most families and a health-threatening situation for older persons.

The Association appreciates the Subcommittee's continued support of the Section 504 Very Low Income Home Repair Program. Funds are used to remove safety and health hazards for the elderly poor or to install basic necessities such as indoor plumbing. We support the $25 million assumed in the Administration's budget for Section 504 grants, contingent upon congressional approval of the funding request for Rural Housing Assistance. We recommend that Section 504's loan component be maintained at the existing $30 million. The Administration recommends a $5 million reduction. The Very Low Income Home Repair Program makes a tangible difference in the quality of life for elderly Americans. Cuts made here really do hurt those most in need.

FOOD STAMP OUTREACH ACTIVITIES

Many older people in rural areas also suffer from nutrition-related health problems because they are economically unable to maintain a good diet. All too often, these individuals are forced to limit food purchases in order to manage the increasing costs of other necessities such as medical care, housing, and energy.

Food Stamp benefits can be a lifeline for such families but participation rates remain low due to a lack of information about the program or distance from Food Stamp offices. The social and physical isolation of rural older people makes outreach activities difficult but all the more critical. We urge the Subcommittee to provide sufficient resources for outreach activities next year.

Thank you again for the opportunity to present our views on rural housing and food stamps. We look forward to working with the Subcommittee to improve the lives of rural Americans of all ages.

PREPARED STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

FARM BILL IMPLEMENTATION

Farm Bureau supports continuation of the principles of the Federal Agriculture Improvement and Reform Act (FAIR).

Full implementation of the FAIR Act should not be compromised. As you know, the FAIR Act set agriculture on a seven-year course that reduces income supports by establishing a hard cap on total spending regardless of prices or the volume of production. Agriculture's support for the FAIR Act was based upon the promise and assurance given that it was a seven-year contract between the federal government and agricultural producers. Accordingly, any change in current policies and programs would represent a violation of that agreement.

Farm Bureau believes in free and open movement of markets and prices. We oppose the Administration's program to extend non-recourse crop loans for an additional six months. While an extension would be budget neutral when market prices are well above loan rates, the potential for high costs exists if producers store their crops under loan for an extended period of time causing burdensome supplies to depress market prices.

We support the Commission on 21st Century Production Agriculture and urge sufficient funding to ensure that the Commission will be able to conduct a thorough evaluation of the effectiveness of the FAIR Act and potential agricultural policy alternatives. In just four years, Congress will again need to address agricultural policy and the recommendation of the Commission will be important to that activity.

RISK MANAGEMENT

Farm Bureau places a high priority on the development of risk management tools to supplement or provide an alternative to traditional crop insurance.

The expansion of risk management programs is of importance to farmers and ranchers. Farm and ranch income is increasingly at risk due to the phase-out of traditional price and income support programs. New and innovative tools to manage risk are needed by farmers everywhere.

We support the continued expansion of new risk management tools that may be offered by private companies and reinsured by the federal government. To the extent that those programs are actuarially sound, we believe they should be expanded to cover as many crops as is feasible.

CONSERVATION PROGRAMS

Farm Bureau places a high priority on funding for voluntary incentive-based conservation programs.

Conservation funding is an integral component of the nation's overriding food and natural resource policy. Farmers and ranchers respond to positive incentives that enable them to: improve soil, water and air quality; reduce erosion; provide additional wildlife habitat; and increase green space. Because conservation projects can be very costly to implement, priority should be given to initiatives that provide education, technical assistance, training and financial assistance to accomplish the nation's farm and resource policy objectives.

We oppose all user fees for conservation programs. Conservation programs are often costly to implement and benefit everyone, not just farmers and ranchers. Public policy should encourage farmers and ranchers to increase conservation efforts, not place additional impediments to their efforts.

We are concerned that while the Administration has proposed increasing the National Resource Conservation Service (NRCS) budget, the net effect may be a decrease in NRCS staff that work directly with farmers and ranchers because the Administration budget does not provide funding for increased NRCS workload and administrative costs. Congress should appropriate funds so that programs which benefit farmers and ranchers and the environment are maintained and expanded.

The Environmental Quality Incentive Program (EQIP) is an important program that strives to improve water quality. The program should be available to all producers, regardless of size of operation. We support increased funding for EQIP, but it should not come at the expense of other agricultural programs or through user fees, including user fees for NRCS technical assistance.

Farm Bureau continues to be a strong supporter of the Conservation Reserve Program (CRP). We are concerned that increased emphasis on the Conservation Reserve Enhancement Program will detract from the traditional CRP program and its goals. The focus of the program should not be broadened to the point that it loses its effectiveness in meeting soil conservation and water quality goals.

We support continued funding for the Forestry Incentive Program (FIP) at $6 million. Private forestry is an important part of American agriculture and makes a strong economic contribution to the nation's economy. FIP has played an important role in reforestation efforts and is strongly supported by the agricultural community and maintains strong congressional support.

Farm Bureau continues to support the goals of the Grazing Lands Conservation Initiative. The program allows farmers and ranchers to accomplish further conservation and environmental gains without compromising net farm income by providing technical assistance.

FOOD SAFETY AND INSPECTION

Farm Bureau supports the modernization of food safety and inspection programs.

No group is more concerned about food safety than farmers and ranchers. USDA programs that keep food safe as it moves from farm to market and those that monitor the safety of consumer ready products are very important.

Meat and poultry inspection is a public health function mandated by public law which should be paid from the general fund. We oppose user fees to finance federally-mandated meat and poultry inspection. In general, user fees are not passed onto the consumer, but rather are passed downward to producers in the form of lower prices paid for livestock. If the fees are passed onto consumers, they would be a food safety tax.

Farm Bureau supports adequate funding to implement Hazard Analysis Critical Control Point (HAACP) meat and poultry inspection reforms. We are concerned about the impact on smaller processors and ask that an unreasonable burden not be placed on these plants.

Farm Bureau supports USDA funding for the Pesticide Data Program (PDP). PDP provides valuable pesticide residue information to the Environmental Protection Agency so that chemical registration decisions can be made on actual pesticide residues rather than on presumed maximum possible residue levels. This program should remain within USDA because it has the scientific expertise and working agreements with state agencies to effectively administer this program.

Improper implementation of the Food Quality Protection Act may force the unnecessary and unwarranted cancellation of essential crop protection products. The USDA Office of Pesticide programs should provide advocacy for farmers' continued access to safe and effective crop protection products, and must be adequately funded to perform this important task.

Key functions of the office must include assisting EPA in establishing accurate data for risk assessments where current data is inaccurate or incomplete. USDA must be a full partner with EPA in all key implementation policy decisions. To reduce disruption of U.S. agricultural producers, USDA should conduct an economic impact analysis of proposed EPA implementation strategies, including EPA's proposals relating to risk assessments for organophosphate and carbamate.

Also important is funding for USDA to update its database on human food consumption patterns. The Food Quality Protection Act requires EPA to evaluate the total risk associated with pesticide use. To do this, accurate information on human diets is needed. Funding to keep this information current should be a priority.

The Food Animal Residue Avoidance Database (FARAD) has been an invaluable tool for veterinarians and producers in assuring the proper use of animal health products. It is an important cog in our overall food safety assurance effort. Funding is needed to allow it to continue to operate.

AGRICULTURAL RESEARCH

Farm Bureau places a high priority on funding for research which is focused on food and production agriculture.

Agricultural research, education and extension activities should be focused on improving the performance of the food and agriculture sector. The benefits of this research will accrue not just to agricultural producers, but also to the general public. The food and fiber needs of a growing world population can be met only if there is a sharp focus on securing answers to questions challenging production agriculture.

Innovative research depends upon the availability of modern facilities. Many of the major Agricultural Research Service facilities were constructed prior to 1960 and are now functionally obsolete and in of need major modernization to bring them up to current health and safety code requirements. A total of $35.9 million is needed in fiscal year 1999 to update and modernize numerous facilities nationwide.

Increased funding for the National Research Initiative Competitive Grants Program and the Food Genome initiative are important.

Farm Bureau supports allowing the Agriculture Research Service to regain ownership of the National Swine Research Center. This center will conduct essential research to resolve the odor and water quality issues facing the pork industry and will integrate production issues with nutrient management.

Increased funding for the National Research Initiative Competitive Grants Program and the Food Genome initiative are important.

INTERNATIONAL MARKET DEVELOPMENT

Farm Bureau supports programs to maintain and expand foreign markets for agricultural products.

Farm Bureau places a high priority on export promotion programs, especially given the current Asian economic crisis. Foreign sales continue to provide a market for 30 percent of U.S. agricultural production. Passage of the 1996 farm bill has increased the significance of overseas markets to farm and ranch profitability as farmers and ranchers become more dependent on exports to expand their incomes.

The Market Access Program (MAP) supports the development, maintenance and expansion of commercial agricultural export markets by partially reimbursing participating organizations for the costs of carrying out foreign market development activities in designated countries. This program is more important than ever because the FAIR Act phase out of commodity programs increases the importance of export markets and because new markets must be found to make up for export markets lost due to the Asian financial crisis.

Maximum funding for the Market Access Program (MAP), the Foreign Market Development Program, the Export Enhancement Program (EEP) and Dairy Export Incentive Program (DEIP) are critical to maintaining and expanding foreign export markets. Funding provided for EEP and DEIP should be $320 million and $82 million, the maximum allowed. Stable funding for MAP, at $90 million, will allow that program to continue to expand markets.

Farm Bureau also supports stable funding for Public Law 480 programs which finances sales of agricultural commodities to developing countries for dollars on credit terms or for local currencies. The needed appropriation for Public Law 480 grants I and II is estimated at $949 million for fiscal year 1999.

The Overseas Private Investment Corporation (OPIC) should be funded at no less than last year's levels to guarantee access and investment in developing counties and territories. Because OPIC targets emerging markets for American products, the program provides access to markets with the greatest potential for growth.

We support the flexibility to maximize the use of available resources by allowing funds not utilized for direct export subsidies to be made available for other GATT-allowed or ''Green Box'' programs (including market development, research and promotion).

Last year's appropriations bill prohibited the use of MAP funds for promotion of mink in international markets. We believe that no agricultural commodity should be discriminated against in allocation of MAP funding. The only criteria should be the potential to increase sales of agricultural products and the availability of funds.

ANIMAL AND PLANT HEALTH

Farm Bureau places a priority on programs that protect plant and animal health.

The Animal and Plant Health Inspection Service (APHIS) must be adequately funded to meet the high demands of protecting the nation's agriculture industry and its role in maintaining consumer confidence in the safety of the U.S. food supply.

APHIS must have state-of-the-art diagnostic and processing procedures to ensure plant and animal health and to guarantee the safety of agricultural imports and exports. Funding for diagnostic tests, vaccine development, disease surveillance and emergency preparedness must be increased as we increase international trade. Important to this effort is funding for such programs as Animal Health Monitoring and Surveillance.

Farm Bureau continues to support eradication of the boll weevil and requests full funding to provide a 30 percent match with producer funding. USDA should continue to work with the Boll Weevil Eradication Program to collect funds from farmers, certify cotton acreage, assist in conducting referendums and make maps available. We also ask for increased availability of low interest revolving loan funds to facilitate expansion of the program.

The President's operating budget for APHIS Wildlife Services is $26.1 million, a reduction of $2.5 million from fiscal year 1998. These cuts would reduce levels of animal damage control funding in 28 states. We recommend funding at the fiscal year 1998 level of $28.6 million.

The President's budget for Wildlife Services Methods Development (Research) is $9.7 million, a reduction of $855,000 from fiscal year 1998. If this level of funding were adopted, one of the casualties would be the National Trap Testing Program which tests trap types to determine the most humane design while maintaining efficiency. Funding should remain at the level of fiscal year 1998 of $10.2 million.

Congress authorized the construction of a $37.7 million Wildlife Services Wildlife Research Center in Fort Collins, Colorado. A appropriation of $20.5 million should be provided to complete this project.

The present Wildlife Services Management Information Reporting System is outdated, uses obsolete hardware and is limited in the amount of data it collects. Funding of $700,000 should be provided to for implementation of a new system.

With the expansion of wolf numbers and areas where they are dispersing, the Wildlife Services wolf management budget should provide $275,000 in new funding for the increased workload.

The Berryman Institute for Wildlife Damage Management at Utah State University is the nation's premier academic institution in this field. The institute needs to improve its capabilities in social science research, expand continuing education programs and begin publishing a quality journal on wildlife damage management. We recommend an increase in Wildlife Service funding of $236,000 for the Berryman Institute.

The President's budget would require states and other cooperators to pay at least 50 percent of the Wildlife Services program costs in each state. Animal damage problems don't lend themselves to a "one-size-fits-all" approach and instead should include flexibility for cost-sharing mechanisms.

AGRICULTURAL CREDIT

Providing farmers and ranchers with a variety of credit at the lowest possible interest rates is important to Farm Bureau.

For the past 10 years, Farm Bureau has supported the shift away from direct USDA operating and farm ownership loans to loans provided by private lenders and guaranteed by USDA. This is consistent with making maximum use of limited USDA funds and ensuring that the loans will be creditworthy over the long term. We oppose the Administration proposal to increase funding for direct operating and farm ownership loans.

USDA ADMINISTRATION

Farm Bureau believes that USDA should monitor domestic and international agriculture affairs and provide an accurate source of agricultural data.

We support funding for Packers and Stockyards Administration programs. Expenditures to enable electronic submission of industry data, to increase poultry compliance activities, to monitor and analyze packer market competition and implications of structural change and behavioral practices in the meat packing industry are important.

The Administration's budget includes $500,000 for the first-ever census for the aquaculture industry. It would survey all farms that report in the 1997 agricultural census at least $1,000 of aquaculture sales. Aquaculture is a billion-dollar industry, but information on the industry is very incomplete and a census would be of great value.

PREPARED STATEMENT OF RUTH GOLDSTEIN, FEDERAL POLICY PROGRAM MANAGER, AMERICAN FARM TRUST

Dear Mr. Chairman: I write regarding the fiscal year 1999 appropriations for USDA natural resource conservation and research programs under NRCS, CSREES, and ARS. I'd like to request that this letter be made a part of the record.

American Farmland Trust is a 30,000 member, private, non-profit organization founded in 1980 to protect our nation's farmland. AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment.

Land protection and natural resource conservation must go hand in hand. USDA must be able to protect our nation's farmland through the Farmland Protection Program; ensure a vital natural resource base through conservation technical assistance and voluntary programs such as WRP, CRP, WHIP and EQIP; and identify ways to produce safer, healthier food and maintain America's working landscapes through the Sustainable Agriculture Research and Education programs. USDA conservation and research programs have the potential to work together to address the

long-term sustainability of our natural resource base and the availability of this base for agricultural production.

NATURAL RESOURCES CONSERVATION SERVICE

Farmland Protection Program.—We strongly support funding of the Farmland Protection Program at $50 million per year through fiscal year 2002. Every minute of every day America loses two acres of farmland to sprawling development. This is the land that produces three-quarters of our fruits and vegetables and more than half our dairy.

States have taken the lead in addressing this national problem through voluntary purchase of development rights (PDR) programs, which are so popular with landowners that there is typically a six-year waiting list. Eighteen states and dozens of local governments have spent $900 million to protect more than a six hundred thousand acres of important farmland.

The FAIR Act directed USDA to implement a new $35 million Farmland Protection Program to support these state and local farmland protection efforts. The FPP has thus far helped protect nearly 82,000 acres of farmland on more than 230 farms. Moreover, it has generated a substantial amount of new farmland protection activity at the state and local level.

The last of the $35 million will be disbursed by the end of fiscal year 1998. We urge the subcommittee to request $50 million for fiscal year 1999 to continue the Farmland Protection Program and continue its success.

America's Private Land Conservation (Conservation Technical Assistance).—The America's Private Land Conservation account (formerly Conservation Technical Assistance) allows NRCS to provide basic technical conservation services to private agricultural landowners across the country. NRCS employees work with producers to create farm-wide conservation plans; design and build grassed waterways, sediment retention ponds, and stream-side buffers; collects and analyze soil quality data for nutrient management and erosion control; and design and establish wildlife habitat or manure management systems. NRCS works with communities and conservation districts to share information about conservation opportunities and technologies. These services are critical both to all producers regardless of whether they participate in cost-share programs like EQIP, WHIP, CFO, WRP and FPP.

The Administration's fiscal year 1999 request for the APLC account will limit the availability of general technical assistance services. Limitations on EQIP's technical assistance funds means the agency will have to supplement EQIP funding with $27 million from the America's Private Land Conservation account. (Technical assistance funding under EQIP is limited to 10 percent of the total instead of over 19 percent needed by NRCS to effectively carry out the program.) In addition, over $43 million of the APLC account is earmarked for specific activities. This reduces the availability of funds for general technical assistance activities discussed above.

We support funding for the APLC at $616.110 million (an increase of $27 million over the Administration's fiscal year 1999 request of $589.110) to meet the conservation needs of producers across the country.

Conservation Farm Option.—The Conservation Farm Option provides a voluntary approach to implementing full-farm conservation. Six regional pilot programs, authorized by section 335 of the 1996 FAIR Act, will be conducted for the purpose of soil and water conservation; water quality protection or improvement; wetland restoration, protection and creation; wildlife habitat development or protection, or other similar conservation purposes. CFO provides an opportunity to achieve multiple, targeted conservation benefits on farmland. AFT supports the Administration's fiscal year 1999 request of $25 million for the Conservation Farm Option.

Wetlands Reserve Program.—The Wetlands Reserve Program, authorized by the 1990 FACT Act, is an example of the kind of incentive driven approach to wetlands protection and restoration that should be a centerpiece of national agricultural policy. AFT supports the Administration's $127.741 million request for fiscal year 1999.

Environmental Quality Incentives Program.—EQIP provides technical and financial assistance to landowners for changes in cropping and grazing systems, and manure, nutrient and pest management. Land management practices such as installing riparian buffer strips, are eligible for assistance. AFT supports the Administration's fiscal year 1999 request for $300 million to help farmers voluntarily address water quality, soil erosion, and wildlife habitat needs.

Wildlife Habitat Incentives Program.—WHIP is a positive step towards helping landowners continue to sustain healthy wildlife populations on private agricultural land. We support the Administration's request for $20 million for the WHIP program.

AGRICULTURE RESEARCH SERVICE

Healthy, well-managed grazing lands can be instrumental in maintaining healthy watersheds across the country. ARS soil, water, plant and animal sciences strengthens our understanding of how grazing systems impact water quality and provides tools for reducing impacts on watersheds. We support the Administration fiscal year 1999 budget request for a $7.5 million increase for Environmental Quality and Natural Resources research.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE

Sustainable Agriculture, Research and Education.—Sustainable Agriculture, Research and Education (SARE) funds high quality, farmer involved research and education on economic, agronomic, and environmental aspects of sustainable agriculture farming systems. Professional Development Grants (Chapter 3) fund outreach and education workshops for natural resource professionals, soil and water conservation districts, RC&D's, NRCS, and extension personnel on community development, whole farm planning, and farmland protection. We support the Administration's fiscal year 1999 request for $10 million for SARE and $3.3 million for SARE Chapter 3 Professional Development Grants.

Renewable Resources Extension Act.—American Farmland Trust is pleased to see the Administration has requested renewed funding for the Renewable Resources Extension Act program (RREA), and we applaud the action of this subcommittee in restoring that program in spite of the Administration's request to eliminate it last year. American Farmland Trust supports this program which helps to train natural resource professionals regarding the impacts of increasing suburbanization on ranch and forestlands. We support the Administration's fiscal year 1999 request for $3.4 million dollars for the RREA program.

Thank you for the opportunity to share the views of American Farmland Trust.

PREPARED STATEMENT OF KIM M. WARDENSKY, AMERICAN FEDERATION OF STATE, COUNTY, AND MUNICIPAL EMPLOYEES AND STEVEN M. HOLLIS, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

I. SOME OF PRESIDENT'S BUDGET REQUESTS SHOULD BE SUPPORTED, AS FOLLOWS

We urge Members of Congress to support, or increase, the following items in the President's fiscal year 1999 Budget:

Farm Operating Loans, Direct, $500 Million Program Level

This increased funding level for the direct operating loan program was recommended by the Civil Rights Action Team and the Small Farms Commission. It is projected to support operating loans to approximately 11,580 farmers, with at least 12 percent targeted to socially disadvantaged farmers. The share of direct loans made at the reduced interest rate for limited resource borrowers would be continued at current levels, approximately 40 percent.

Farm Ownership Loans, Direct, $85 Million Program Level

This increase was also recommended by the Civil Rights Action Team and Small Farms Commission. It is projected to support about 1,000 small farmers to either acquire their own farm or to save an existing one—nearly 500 more than in 1998. Roughly 60 percent of these loans are provided to limited resource borrowers, with at least 18 percent targeted to socially disadvantaged farmers.

Rural Housing Loans, Single-Family, Direct, $1 Billion Program Level

The single family housing direct loan program provides subsidized loans for the purchase of modest housing in rural areas. Nationally, the average income of a direct loan borrower is about $17,000, which is about 55 percent of area median income.

Water and Waste Disposal Loans, $839 Million Program Level

Water and Waste Disposal Grants, $500 Million Program Level

Continuation of the program at these levels is consistent with the President's Water 2000 Initiative which was designed to help ensure that all rural households have access to clean running water by the year 2000.

Farm Labor Housing Loans, $32 Million Program Level

Farm Labor Housing Grants, $13 Million Program Level

These increases were also recommended by the Civil Rights Action Team. They would provide for the construction of 658 new units and rehabilitation of 199 existing units of housing for farm workers.

Rural Development Salaries and Expenses, $527 Million Program Level

This increase of $18 million over the fiscal year 1998 levels is absolutely imperative. Unless Congress supports this request from the President's Budget proposal, there will be RIF's in Rural Development within the next few months. Congress must support the increase in Salaries & Expenses for Rural Development for the following reasons:

(a) The ill-housed rural poor, and the small rural community infrastructure needs, must not be expected to continue to bear a disproportionate share of the sacrifice necessary to achieve a balanced budget. These programs are crucial to rural America and provide an invaluable service to minorities and socially disadvantaged citizens.

(b) The President's budget proposal would reduce overall USDA staff by 14.3 percent during the period from 1993 through 2002, but proposes to reduce the Rural Housing staff by 33 percent over this same period. It will be impossible for Rural Development to perform its mission if these additional disproportionate cuts are allowed to stand.

Section 2501 Socially Disadvantaged Farmers Outreach Program, $1 Million

The Outreach and Technical Assistance program is the most effective tool developed to carry out the mission of USDA as the technical provider for small farmers. For a very small investment, the program has significant multiplier effects in the small and poor communities where there exist few other possibilities for sustainable economic development. It also serves as a small token of relief for the many deficiencies in the service provided to these farmers by the Department

II. ONE OF PRESIDENT'S BUDGET REQUESTS MUST BE INCREASED, AS FOLLOWS

We urge Members of Congress to increase the funding for the Section 515 Rural Rental and Cooperative Housing program by at least $50 million over the President's Fiscal Year 1999 Budget request, to at least maintain the Program Level at the 1998 level of $150 million.

The President's proposal to reduce funding below the 1998 level of $150 million would end this program as a national program. We would not be able to fund even one project in each State. Rural Development area offices have a backlog of applications on hand that need funding. Multi-Family Housing helps senior citizens and others on fixed low incomes with many medical expenses.

We urge the Committee to direct USDA to place a priority, in the use of these limited funds, on rehabilitation of existing units rather than new construction. Unless this is done, the Rural Housing Service will become known as the nation's largest slum landlord.

III. SOME OF PRESIDENT'S BUDGET REQUESTS SHOULD BE DECREASED TO OFFSET THE INCREASE NEEDED IN THE SECTION 515 RURAL RENTAL AND COOPERATIVE HOUSING, AS FOLLOWS

Export Enhancement Program: Fiscal Year 1997, $0; Fiscal Year 1998, $150 Million; Fiscal Year 1999, $320 Million

The Export Enhancement Program subsidizes American grain companies to enable them to dump wheat, corn, and other grains into international markets at below market prices.

This undermines self-sufficient farming in these other counties and provides direct payments to such corporations as Cargill, Continental Grain, Louis Dreyfus, Bunge Corporation, and others. There are better uses for our tax dollars.

IV. USDA REORGANIZATION AND STREAMLINING INITIATIVES

Our labor unions appreciate the recognition by the leadership of this Subcommittee that we can only create a USDA that "works better and costs less" if we make sure the proposed changes, in their implementation, will enhance, rather than harm, the ability of the front-line workers to serve the public in the most effective and efficient manner. Unfortunately, we must report to Congress that the Department has failed to adopt this common sense approach.

ADMINISTRATIVE CONVERGENCE—READY, SHOOT! AIM?

AFSCME and AFGE urge Members of Congress to block implementation of Secretary Glickman's proposal for "Administrative Convergence", still scheduled for October 1, 1998, until the following problems are worked out:

1. Information Technology (IT) and Financial Management (FM) Workload Has Increased, yet Secretary Glickman proposes to decrease IT and FM Staff?

(a) Attachment 1 shows, for rural Development, that the Information Technology workload, measured in terms of lines of code, has increased from 4 million to 11 million since 1993, while IT staffing for Rural Development in St. Louis, Missouri, and Washington, D.C., has already been reduced by over 30 percent since 1993! Attachment 2 documents where administrative staffing reductions have been accomplished since 1993. The Rural Development staff in St. Louis, Missouri, and Washington, D.C., has already been cut to the bond. Further cuts would jeopardize program viability. For example, Rural Development's ability to make all its software Year 2000 compliant would be placed in great jeopardy. NRCS and FSA (Kansas City and Washington) have done much less streamlining.

(b) The Congress and the Administration have actually increased the Information Technology (IT) and Financial Management (FM) workloads, in Rural Development and in the Ag Credit/Farm Loan Programs, by placing greater controls over fraud, abuse, the integrity of loan making, etc. If IT and FM staffing is reduced too much, or too soon, the very management controls which have been placed on these programs to improve accountability will not be implemented in a proper, timely, manner.

(c) To accomplish the "business reengineering" proposed by the Service Center Implementation concept—a Common Computing Environment and better business and financial practices and supporting computer systems—also means more work, not less, for IT and FM support employees.

To proceed with further staff reductions before there is a reduction in work requirements can only lead to greater problems with the integrity and effectiveness of program delivery.

2. Contracting Out Will Cost More and Produce Lower Quality Results.

In 1993, the House Agriculture Committee nearly passed to the USDA Reorganization Bill that would have required the Department to do such cost comparisons of current and future service contracts. The amendment was withdrawn based on the Department's promise to establish such an in-house procedure. This has not been done. Attachment 3 documents, from USDA's own figures, the continuing overreliance on commercial support contracts for Information Technology.

We urge the Appropriations Committee to require the Department to conduct cost comparisons on all current and future commercial service contracts. This includes instructing USDA to abandon FTE controls and "fee for service" proposals which require, or even allow, the hiring of contractors to do the work that can be more cost effectively performed by Federal employees. No more Federal employees should be laid off so long as contractors are working for the Department performing work that Federal employees could perform at better quality and less cost.

3. Streamlining the middle management bureaucracy.

There should be an upfront requirement that supervisory ratios within the proposed Support Service Bureau will be less than 1:15, as mandated by the National Performance Review. We are not opposed to consolidating multiple administrative support and IT organizations into a Departmentwide organization, but only if the unnecessary management bureaucracy is dramatically reduced.

4. County Office Administrative Functions Must Be Included.

The GAO/RCED–97–214 Report emphasizes that about two (2) staff years of effort per County Office is being devoted to the activities associated with keeping the offices open and functioning. These duties include obtaining and managing office space, paying utilities, computer administration, and processing payroll. It is not possible to honestly and successfully streamlining administrative functions unless all administrative activities are included in the streamlining effort.

5. Damage to Civil Rights and Work Force Diversity.

Current plans for Administrative Convergence would cut 1,800 jobs in Washington, St. Louis, and Kansas City—where the percentage of minority participation in the work force is greatest. In response to the obvious Civil Rights implication of this proposal, FFAS representatives have indicated they will find some way to transfer minority employees to the State level, presumably bumping out current non-minority employees. Do Members of Congress want to deal with these constituent complaints?

6. Damage to Servicing of USDA Loan Programs.

Secretary Glickman's plan for Administrative Convergence would cut many of the centralized loan servicing staff supporting RD and FSA loan portfolios by lumping them into the "administrative" Financial Management category. These program servicing positions must be excluded from Administrative Convergence.

USDA should build on the widely heralded Rural Housing Centralized Servicing Center and DLOS initiative in St. Louis. It makes no sense to provide centralized servicing and debt collection for Rural Housing in St. Louis, and then to duplicate those functions, in Kansas City or the Field, for the farm loan programs and farm loan debt.

7. Compliance With the Intent of Congress.

Administrative Convergence should comply with the intent of the Congress before it is implemented. In 1994, the House Agriculture Committee included the following report to Section 105 of the House bill, which became Section 216 of Public Law 103–354 (7 USC 6916), Improvement of Information Sharing:

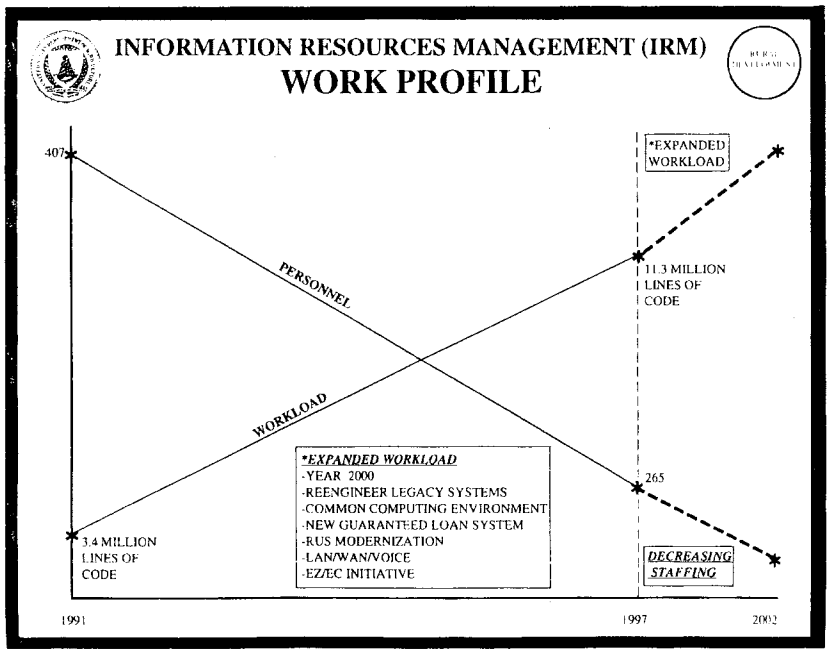
> The Committee intends that the Department fully retrain and use the employees who are currently responsible for developing and implementing its program delivery, accounting, and administrative computer systems to update and improve the Department's computer systems, and to provide support for the new systems * * * the Committee intends that the Department maintain and enhance the current automation, accounting, and administrative support centers in St. Louis, Kansas City, Washington, and Ft. Collins as "centers of excellence" in support of multiple programs and agencies. In particular, (FmHA) service center in St. Louis should continue to provide automation and accounting support for the farm credit programs that are being transferred to the ASA, as well as for the programs of the Rural Community and Economic Development mission area.

In the House Report on the Fiscal Year 1997 Agriculture Appropriations Act, your Committee reaffirmed this direction that the Department maintain Farm Service Agency automation and accounting support for the farm loan programs in St. Louis, Missouri. We urge the Appropriations Committee to enforce the previously stated intent of the Congress, as contained in these authorizing and appropriations reports.

IN SUMMARY

We urge the Committee to strengthen the oversight role of the Committee which was envisioned in Section 727 of the Fiscal Year 1998 Agriculture Appropriations Act by adopting language in this year's act as recommended in Attachment 4.

[ATTACHMENT 1]



[ATTACHMENT 2]

ADMINISTRATIVE STAFFING REDUCTIONS, 1993–98

Administrative staffing (IRM, FM, PM, HRM)	SL	KC	DC	Other	Total agency staff years (For comparison purposes)	
					Federal	Non-Federal
Fiscal year 1993:						
Farm Service Agency	147	953	600	(1)	7,490	14,953
Rural Development	690	.....	402	(1)	9,347	.....
Natural Resource and Conservation Service	.....	.....	(2)	1,444	13,280	.....
Fiscal year 1998 (Current):						
Farm Service Agency	110	860	491	(1)	5,877	11,229
Rural Development	492	.....	277	(1)	7,360	.....
Natural Resource and Conservation Service	.....	.....	(2)	1,204	12,048	.....
Percent reduction (1993–98):						
Farm Service Agency	−25	−10	−18	.....	−22	−25
Rural Development	−29	.....	−31	.....	−21	.....
Natural Resource and Conservation Service	.....	.....	.....	−17	−9	.....

[1] There are also hundreds of administrative (IRM, FM, PM, HRM) positions in the State and county offices in FSA and RD.

[2] Some of NRCS administrative staff is located in Washington, DC, some in Ft. Collins, some in Ft. Worth, and most of it in Regional Offices, to the best of our information. The detailed breakdown is unclear to us.

Summary: Rural Development Operations and Management staff (St. Louis and Washington) has already been cut to the bone. Further cuts would jeopardize program viability. NRCS and FSA (Kansas City and Washington) have done much less streamlining.

[ATTACHMENT 3]

USDA Over-reliance on Commercial Support Contracts for Information Technology

The real point about balancing the budget should be taxpayer dollars, not Federal employee jobs. We need to ensure that Administrative Convergence does not just lead to replacing Federal employees with more expensive contractors who can't do as good a job. AFGE is very concerned about this, because in DOD and other agencies, the Administration has consolidated administrative functions—and then tried to contract them out. The following numbers come from the Agencies' A–11 submissions to OMB, reporting on "Obligations for Information Systems."

[In thousands of dollars]

	Commercial support services	Personnel
Fiscal year 1993:		
ASCS	39,029	27,657
FAS	4,366	3,033
OICD	183	245
FCIC	8,572	3,627
FmHA/RDA	40,627	36,181
REA	618	1,506
SCS	17,419	38,131
Fiscal year 1998:		
FSA	90,894	44,898
FAS	7,252	.....
RMA	8,597	4,206
RD	26,148	15,048
NRCS	23,223	25,516
Percent change (1993–98):		
FSA/FAS/RMA [1]	+51	+30
RD	−36	−60
NRCS	+25	−33

[1] Some amount of the Rural Development decrease, and the FSA increase, from fiscal year 1993 to fiscal year 1998, consisted of the transfer of Farm Credit functions from FmHA/RD to FSA.

The ACAT Team 1 Draft Report (11/3/97) proposed two IT staffing options under Administrative Convergence Option 2 (50 percent decrease of Federal FTE's from fiscal year 1993) would require the Department to replace 397 Federal employees with contractors as compared to Option 1 (30 percent decrease of Federal FTE's from fiscal year 1993). "The Standard Costs for a government ITS employee FTE is $69,250. The average costs for a contractor FTE is $109,000. The option 1 mix of governmental and contractor ITS personnel will save USDA $15.8 million per year over the option 2 mix of ITS FTE's."

Summary: Contractors cost more than Federal employees. USDA already spends more on IT contractors than on employees, and this will continue to increase total IT costs more than would reducing contractors and retaining employees.

[ATTACHMENT 4]

Proposed Language for the Fiscal Year 1999 Agriculture Appropriations Act

None of the funds provided by this Act, or provided by previous Appropriations Acts, to the agencies funded by this Act, or provided from any accounts in the Treasury of the United States derived by the collection of fees available to the agencies funded by this Act, shall be used to implement Administrative Convergence, or any other initiative to reduce Federal staff performing Information Technology, Financial Management, Management Services, Civil Rights, Human Resources, or other administrative functions in support of the county-based agencies, Farm Service Agency, Natural Resources and Conservation Service, or Rural Development, until a plan for such convergence and streamlining has been presented to, and approved by, the Appropriations Committees of both House of Congress. Such plan shall include, at a minimum, the following:

(1) the number of additional County Offices to be closed, along with criteria for determining which offices will be closed, and a timetable for the closures;

(2) a detailed statement of the Information Technology, Financial Management, Management Services, Civil rights, Human Resources (including Training), or other activities considered to be administrative in purpose as distinct from program delivery, identifying such workload which will be eliminated or reduced through convergence and where each activity is proposed to be performed (i.e., County Offices, State Offices, Regional Offices, or National Support Centers such as Washington, DC, St. Louis, MO, Kansas City, MO, New Orleans, LA, Ft. Worth, TX, Ft. Collins, CO, etc.);

(3) a detailed statement of the program delivery activities which may be centralized for the purpose of improving consistency and achieving efficiencies as has been accomplished with the Section 502 Rural Housing program;

(4) a statement as to whether the Department intends to maintain two personnel systems within the Farm Service Agency, or whether the Department intends to phase out the County Office Committee personnel system;

(5) the projected impact (with locations and timetables) on Federal, non-Federal, and Contractor staff and associated costs; and

(6) a detailed statement of the Civil Rights impact on both employees and customers of the proposed changes.

Justification:

The 1996 Farm Bill (Public Law 104–127, April 4, 1996) dramatically reduced the Federal Government's role in supporting agriculture and, therefore, the county office workload. The Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 (Public Law 103–354, October 13, 1994) also directed the Secretary of Agriculture to streamline departmental operations by consolidating county offices and merging various agencies. Yet, both non-Federal and Federal employees report that USDA workload has not decreased as a result of these changes. The GAO/RCED–97–214 also reports that it is not possible to determine the impact of the 1996 act on the workload of the Farm Service Agency's county offices. GAO also emphasizes that about two (2) staff years of effort per office is being devoted to the activities associated with keeping the offices open and functioning. These duties include obtaining and managing office space, paying utilities, computer administration, and processing payroll. The Department has entered into a contract with an outside consulting firm to conduct a study of the farm and rural program delivery system of these county-based agencies, FSA, NRCS, and RD, to be completed by September 1, 1998. Among other things, the study will clearly identify the purposes agency operations are intended to achieve, an independent assessment of agency workload estimates, identify criteria for determining the highest value use of office staff, evaluate county office efficiencies gained so far, etc. That study should serve as the basis for any plan to converge the administrative support functions of these agencies.

PREPARED STATEMENT OF PAUL BROUHA, EXECUTIVE DIRECTOR, AMERICAN FISHERIES SOCIETY

The American Fisheries Society (AFS) appreciates the opportunity to present written comments concerning the proposed fiscal year 1999 budget of the USDA Cooperative State Research, Education, and Extension Service (CSREES). We ask that this letter be included in the official record of the agency's appropriation hearings.

The Society is an international organization of more than 9,000 fisheries and aquatic science professionals. Chartered in 1870, the Society is the world's oldest and largest scientific body dedicated to the advancement of fisheries science and the conservation of renewable aquatic resources.

The American Fisheries Society (AFS) recognizes that the research and educational programs of the CSREES and its Land Grant Partners effect relevant, positive changes in attitudes and implementation of new technologies by private landowners, managers, community decisionmakers, and the public. This results in significant benefits to individuals and to the Nation through building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture. Since over two-thirds of our lands, approximately 1.35 billion acres, are controlled by over 10 million private landowners and managers, it is most appropriate that the CSREES-Land Grant System, with its grass roots credibility and delivery system, be adequately funded to translate and deliver research-based educational programs and new technologies to help the Nation's private landowners and managers move towards a more sustainable society. However, in the President's fis-

cal year 1999 budget, we see very little emphasis on natural resources research and education directed toward helping these clientele.

The American Fisheries Society recommends that the fiscal year 1999 budget for CSREES should redirect funding to accomplish the following goals:

AFS recommends that the Renewable Resources Extension Act be funded at a minimum level of $9.5 million in fiscal year 1999. The RREA funds, which are apportioned to State Extension Services, effectively leverage cooperating partnerships at an average of about four to one, with a focus on the development and dissemination of useful and practical educational programs to private landowners (rural and urban) and continuing education of professionals. The increase to $9.5 million would enable the Extension System to accomplish the goals and objectives outlined in the 1991–1995 Report to Congress. The need for RREA educational programs is greater today than ever because of the fragmentation of ownerships, the diversity of landowners needing assistance, and the increasing environmental concerns of society about land use. It is important to note that RREA has been reauthorized through 2002. It was originally authorized at $15 million annually; however, even though it has been proven to be effective in leveraging cooperative state and local funding, it has never been funded at a level beyond $3.4 million. An increase to $9.5 million would enable the Extension Service to expand its capability to assist over 500,000 private landowners annually to improve decisionmaking and management on an additional 35 million acres while increasing productivity and revenue by $200 million.

AFS recommends that Smith-Lever 3(b)&(c) base program funding be increased by 9.0 percent to a level of $280,950,770 with an appropriate portion of this increase targeted to Extension's Natural Resource and Environmental Management programs (NREM). The President's fiscal year 1999 budget requests a reduction of $10,740,000 funding for Smith-Lever 3(b)&(c) funds from the fiscal year 1998 level. AFS appreciates that Smith-Lever 3(b)&(c) base programs provide "Block Grant" type funds for land grant universities to provide essential educational outreach based on local needs assessment. This will enable NREM programs to develop the critical mass of expertise at the state and local levels to redirect and leverage limited funding to address critical existing and emerging natural resource and environmental issues that are directly affecting small landowners and farmers in both rural and urban communities nationwide.

Expanding Extension programs in natural resource public issues education on important issues such as forest health, wetlands, endangered species, and human/wildlife interactions, as well as to strengthen its programs in urban and community forestry and environmental education as called for in the 1990 FACT Act is essential to address natural resource issues that are relevant to the sustainability of these critical resources. Such an increase targeted appropriately would help producers better understand and implement the changes in the 1995 Farm Bill Conservation Provisions. Moreover, we are concerned that appropriate positions in the Natural Resources and Environment Unit have not been retained to provide needed national leadership for critical interdisciplinary resources such as range management.

AFS encourages continuation of close cooperation between State CES's and their State Fish and Wildlife agencies, as well as other appropriate state and federal agencies and conservation organizations. Extension 4–H Youth natural resource programs and projects continue to increase with over 1,350,000 youngsters presently enrolled from both urban and rural communities across the Nation. Increased Smith-Lever funds targeted appropriately will enable CSREES to carry out its environmental education and NREM National Strategic Plan obligations nationwide.

AFS recommends restoration of the Rangeland Research Grants $500,000 budget for fiscal year 1999. The Society is disappointed that the practical and applied problems addressed by the Rangeland Research Grants (RRG) program were zeroed out in the President's 1998 budget and totally ignored in this fiscal year 1999 budget. Over one half of the land area of the United States is rangeland; and elimination of the only federal competitive grants program for rangelands has serious implications for wildlife, watersheds, and other natural resources. Modest appropriations for RRG in the past have supported some of the most important rangeland research conducted over the past decade, and wildlife issues on rangelands will present some of the more critical rangeland research problems over the next decade. This would help increase the interdisciplinary capacity of research and educational programs to help landowners improve the adoption of forests and rangelands ecosystem management and the conservation of biodiversity on an ecoregion level.

AFS recommends that an appropriate portion of the total increased appropriation for Pest Management should be dedicated to educational programs for prevention and control of vertebrate pests in urban and rural communities and to address invasive exotic species and noxious weed problems on rangelands for restoring, managing, and sustaining the biological integrity of the Nation's natural resource base

upon which the agricultural and natural resource economies depend. AFS notes that a combined total increase of almost $15.5 million has been recommended in the President's budget for Pest Management and related research and extension programs over and above increases received in fiscal year 1998. Vertebrate pests and invasive species have been identified in many states as posing the most significant problems, now and in the future, that agricultural and related crop producers and private landowners face. This targeting of Pest Management funds for research and educational programs would advance the knowledge and capability of landowners to reduce significant losses to vertebrate pests and invasive species.

AFS recommends that the Hatch and McIntire-Stennis funds be restored to fiscal year 1998 levels and, if necessary, redirected from the substantial $32,800,000 proposed increase in NRI funding. AFS is pleased that the Administration proposes a 9.5 million increase in basic research identified under the National Research Initiative (NRI) as Natural Resources and the Environment; however, what is proposed under this "Area of Specials Emphasis" clearly does not address critical natural resource research needs that the Natural Resource Community and the public are vitally concerned about. The Society is alarmed at the significant reduction in both the Hatch Act and McIntire-Stennis research programs of over $15.5 million. Both of these research programs, conducted by land grant university partners and other educational institutions, are crucial to addressing natural resource and environmental issues critical to agriculture and natural resource sustainability now and in the future.

SUMMARY

The American Fisheries Society, based on the above considerations, recommends the following for the fiscal year 1999 budget of CSREES:

(a) The RREA budget be increased to $9.5 million;

(b) Smith-Lever 3(b)&(c) base program funding be increased by 9.0 percent;

(c) Rangeland Research grants be restored at $500,000 level;

(d) A portion of the Pest Management and related increase be targeted to provide increased research and education programs to address vertebrate pest prevention and control needs and invasive species and exotic weed problems; and

(e) McIntire-Stennis and Hatch Act funding be restored to fiscal year 1998 levels.

Thank you for the opportunity to comment on the USDA Cooperative State Research, Education, and Extension Service programs. If there is any way we can be of further assistance, please let us know.

PREPARED STATEMENT OF RICHARD ADEE, PRESIDENT, AMERICAN HONEY PRODUCERS ASSOCIATION, INC.

My name is Richard Adee. I am President of the American Honey Producers Association, Inc. and I am submitting this statement in its behalf. The American Honey Producers Association, Inc. is a national organization of commercial beekeepers with activities in most of the States in this country.

The Association is seeking the inclusion of sufficient funds in the appropriation for the Agricultural Research Service of the Department of Agriculture to meet with the critical needs of the industry. Specifically, the Association is seeking the restoration of $500,000 in the baseline funding for the bee laboratory at Weslaco, Texas, and an increase of $500,000 in the level of funding for the ARS honey bee breeding, genetics, and physiology laboratory at Baton Rouge, Louisiana.

Honey bees pollinate over 90 cultivated crops whose estimated value exceeds $9.3 billion and produce an average of 227 million pounds of honey annually. Since 1984, the survival of the honey bee has been threatened principally by a number of problems for which beekeepers are depending upon research for the answers. Unfortunately, there is no simple solution to these problems. The honey bee industry is too small to support the cost of the needed research, and there are no funds, facilities, or personnel elsewhere available in the private sector for this purpose. Accordingly, the beekeeping industry is dependent on research from public sources for the scientific answers. As you know, there are no longer any federal subsidies on honey, there is no longer a honey price support program in effect. The key to the survival of the honey industry lies with the honey bee research program conducted by the Agricultural Research Service.

Parasitic mites, primarily the varroa mite, are causing a crisis for the U.S. beekeeping and pollination industry. Hundreds of thousands of domestic honey bee colonies are being lost annually to varroa mites, and wild bee colonies are being devastated. The only chemical now registered for varroa mite control has been rendered ineffective by the development of resistant mite populations. Moreover, chemical

pesticides for mite control can adversely affect the bees, as well as being a food safety concern.

The USDA-ARS honey bee research facility at Weslaco has been working hard in trying to find alternative chemicals to deal with the varroa mite. It is responsible for finding new and improved methods for control of parasitic mites and other pathogenic organisms on honey bees, solving beekeeping problems that interfere with honey production and effective crop pollination, and determining the impact and spread of Africanized honey bees. Until the appropriation for fiscal year 1998, it has not been possible to fully operate the facility with full-time permanent scientists and cover the necessary overhead expenses. The uncertainty of continued funding is halting the efforts of the Weslaco laboratory in implementing its plans for making full use of the fiscal year 1998 appropriation. A reduction of $500,000 in the base line appropriation for the Weslaco facility will disrupt its operations and make it more difficult to achieve its research objectives. These funds need to be restored.

The ARS laboratory at Baton Rouge, Louisiana, is the only laboratory world wide focusing on the development of long-term, genetics-based solutions to the varroa mite. After multiple matings, scientists at this laboratory have found a few colonies of honey bees that show possible resistance to the varroa mite. These types require intensive evaluation to assure that the resistance holds up under a wide range of environmental and beekeeping conditions. Attributes such as vigor, pollination, and honey production must be evaluated. There is an immediate need to propagate the resistant queen bees in large numbers for wide scale distribution to beekeepers so that this evaluation can be accomplished. The work is slow and tedious. It is also costly. We are seeking an increase of $500,000 in permanent funding for the Baton Rouge, Louisiana, laboratory to accelerate the research, development, and transfer of queen bee stock resistant to varroa mites to U.S. beekeepers.

We wish to thank you for your support of honey bee research in the past and would appreciate your continued support by approving an appropriation for the ARS bee research laboratories at Weslaco, Texas, and Baton Rouge, Louisiana, that includes an additional $500,000 for each of those laboratories above the level recommended in the Administration's budget. Only through research can we achieve and maintain profitability in U.S. beekeeping and continue to provide stable and affordable supplies of bee pollinated crops which make up fully one-third of the U.S. diet.

PREPARED STATEMENT OF THE AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, on behalf of the American Indian Higher Education Consortium (AIHEC) and the 29 Tribal Colleges that comprise the AIHEC land-grant institutions, we thank you for this opportunity to share our funding requests for fiscal year 1999. On behalf of the Tribal Colleges, we respectfully request full funding of our four land-grant programs, along with funding under the Agriculture Research Reauthorization. These include: $4.6 million for the Tribal College endowment; $1.45 million for the equity grant program; $5 million for the extension program; $1.7 million for institution capacity building grants; and $10 million for research.

This statement will cover three key points: first, it will provide a brief background on the Tribal Colleges and our long-awaited inclusion in this nation's land-grant system; second, it lays out Tribal Colleges' ambitious efforts through extension services to fulfill the agricultural potential of American Indian communities and to ensure that American Indians have the skills needed to maximize the economic development potential of our resources; and third, it describes our additional program requests for fiscal year 1999.

BACKGROUND ON TRIBAL COLLEGES

Today, 130 years after enactment of the first land-grant legislation, Tribal Colleges, more so than any other institutions, truly exemplify the original intent of the land-grant legislation. The first Morrill Act was enacted in 1862 specifically to bring education to the people and to serve their fundamental needs. Mr. Chairman, this is the definition and mission of the Tribal Colleges. We truly are institutions by, of, and for our people.

The dismal statistics concerning the American Indian experience in education brought tribal leaders to the realization that only through local, culturally-based education could many American Indians succeed in higher education and help bring desperately needed economic development to the reservations. In the late 1960's and

early 1970's, the first Tribal Colleges were chartered on remote reservations by their respective tribal governments, to be governed by boards of local tribal people. In 1972, the first six tribally-controlled institutions came together to form the American Indian Higher Education Consortium. Today, AIHEC is a cooperatively sponsored effort on the part of 31 member institutions in the United States and Canada, 29 of which are the 1994 land-grant institutions.

Tribal Colleges now serve 26,500 students each year, offering primarily two-year degrees, with some colleges offering four-year and graduate degrees. Since their inception, the Tribal Colleges have helped address the problems and challenges of our welfare system. Tribal Colleges provide GED and other college preparatory courses, probably more than any other community colleges in this country. We have done this because our mission requires us to help move American Indians toward self-sufficiency and help make American Indians productive, tax-paying members of our society. Fulfilling this obligation will become even more difficult over the next several years as Tribal Colleges feel the impact of welfare reform legislation—already, our colleges are seeing increasing numbers of welfare recipients turn to the colleges for training and employment opportunities. Tribal Colleges serve as community centers, providing libraries, tribal archives, career centers, economic development centers, public meeting places, and child care centers.

Despite our many obligations, functions, and notable achievements, Tribal Colleges are the most poorly funded institutions of higher education in this country. Historically, states do not have an obligation to American Indian lands because our reservations are trust lands under federal jurisdiction. Unlike mainstream land-grant institutions, we cannot depend on state and local governments to match or surpass the federal investment. Our core funding under the Tribally-Controlled Community Colleges Assistance Act of 1978 remains grossly inadequate; and total funding for the agriculture programs authorized for all 29 of the 1994 institutions combined equals approximately the amount the Department of Agriculture gives to just one state land-grant institution each year.

The members of AIHEC enjoy strong support from the U.S. Department of Agriculture, as witnessed by the Memorandum of Understanding between the Department and the Tribal Colleges, signed by Secretary Dan Glickman on February 3, 1998. The MOU, which was mandated in the 1996 Farm Bill, is targeted at achieving full integration of the Tribal Colleges into the land-grant system and ensure their full participation in the USDA's land-grant programs. Objectives were established covering four key areas: (1) student programs; (2) employment and program opportunities; (3) capacity building; and (4) full access to grant and excess property programs. We are heartened by the Department's apparent commitment to the Tribal Colleges, and we look forward to joining with the Department and other land-grant institutions in continuing this important work.

EXTENSION SERVICES—AMBITIOUS EFFORTS TO REACH ECONOMIC DEVELOPMENT POTENTIAL

Although current land-grant programs at the Tribal Colleges are modest, our 1994 authorizing legislation is vitally important to us because of the nature of our land base. Of the 54.5 million acres that comprise American Indian reservations, 75 percent are agricultural lands and 15 percent are forestry holdings. In fact, Indian agricultural production has been valued at nine times the production potential of oil and gas resources.

Tragically, due to lack of expertise and training, millions of acres lie fallow, under-used, or are developed through methods that render the resources non-renewable. The Educational Equity in Land-Grant Status Act of 1994 is our hope for turning this situation around. It is absolutely critical that American Indians learn more about new and evolving technologies for managing our lands. We are committed to becoming, as we were when your forefathers came to this land centuries ago, productive contributors to this nation's—and the world's—agricultural base.

This year witnessed impressive efforts to address economic development through land use, as Tribal Colleges entered into partnerships with 1862 land-grant institutions through extension services. This program, which is administered and coordinated through the 1862 institutions, represents an ideal combination of federal resources and Tribal College-state institution expertise, with the overall impact being far greater than the sum of the parts. Some examples of the innovative programs that are funded under extension services include:

—Fond du Lac Tribal and Community College and the University of Minnesota Extension Service are partnering in a project to develop, conduct, and distribute an environmental analysis of the St. Louis River ecosystem. This project will

introduce students from the college and the university to scientific research and interpretation, and promote thoughtful management and use of water resources.

—Salish Kootenai College, through a partnership with Montana State University, developed a native plant/ecosystem restoration program, that will create a tribal center for native plants and horticulture to serve the Confederated Salish and Kootenai Tribes. As part of this project, the college will conduct a market feasibility study for tribally grown native plant materials and encourage, support, and coordinate native plant knowledge on the Flathead Reservation.

—Sitting Bull College and North Dakota State University will focus on providing training and support services to ranchers in the area of bison production and management. This project will generate a database of producers and offer training sessions on-site at tribal ranches covering topics like marketing, processing, herd management, life cycle and grazing patterns.

Additional funding to support such efforts is needed because extension services provided by the states on our reservations are woefully inadequate, and the Tribal Colleges need to fill that void. It is important to note that this program is not duplicative of ongoing extension activities, and that it will complement and build on the existing Indian Reservation Extension Agent program.

In fiscal 1997 and fiscal 1998, the 1994 institutions were awarded $2 million for extension services. In fiscal 1999, we are requesting that Congress build on the modest funding increase of $1.5 million proposed in the President's budget, and raise funding to $5 million, the fully authorized level for this program. The increase recommended in the President's request emanates from the strong relationship we have with USDA and is evidence of our successes in this program.

OTHER FUNDING REQUESTS FOR TRIBAL COLLEGE PROGRAMS

The twenty-nine 1994 Institutions' appropriations request for fiscal year 1999 are extremely modest when compared with the annual appropriations to each existing land-grant institution. Along with our request of $5 million for the joint 1862–1994 institution extension program, we are seeking the following amounts for the three other authorized programs for 1994 institutions: $4.6 million for the Tribal College endowment; $1.45 million for the equity grant program; and $1.7 million for institution capacity building grants; and $10 million for research. It is important to remember, as stated earlier, total funding for the programs authorized for all 29 of the 1994 institutions combined equals approximately the amount the Department of Agriculture gives to just one state land-grant institution each year.

The Tribal Colleges are grateful for the Subcommittee's support in the past for funding of three of our programs. These small programs catalyzed the 1994 Institutions' crucial first steps in initiating and strengthening agriculture and natural resource programs in our communities. However, it is critical that we build on the momentum we have gained. Justification for our requested funding levels follows.

1. $1.7 million Institutional Capacity Building Grant Program.—This competitive grant program, which requires a non-federal match, would provide the 1994 institutions with the investment necessary to allow us to strengthen and more fully develop our educational infrastructure. Facilities maintenance and improvement are urgently needed at many of the Tribal Colleges, which are currently operating in abandoned, condemned, or donated buildings. Hazards include leaking roofs, asbestos insulation, exposed wiring, and crumbling foundations. In a recent needs assessment, nine of the Tribal Colleges identified facility maintenance and renovation as a high priority, at an estimated cost of $8.3 million. Many of these facility improvements are needed to provide American Indian students with the education necessary to fully compete in the modern agricultural world.

2. $4.6 million Endowment Fund for 1994 Land-Grant Institutions.—This endowment installment remains with the U.S. Treasury, and only the interest is distributed to the 1994 institutions. Just as other land-grant institutions historically received large grants of land or endowments in lieu of land, this sum assists the 1994 institutions in establishing and strengthening our academic programs in the areas of curricula development, faculty preparation, instruction delivery systems, equipment and instrumentation for teaching, experiential learning, and student recruitment and retention in the food and agricultural sciences. As the endowment increases over time, it will provide each 1994 institution with significant income. The second year interest payment totaled nearly $116,000, which was distributed to the 29 land-grant institutions on a formula basis.

3. $1.45 million Tribal College Educational Equity Grant Program.—Closely linked with the endowment fund, this program provides $50,000 per 1994 Institution to assist in academic programs. The 1994 institutions are in their second year of funding under this program. Through the funding made available in fiscal year

1996, the Tribal Colleges were able to begin to support vital courses and planning activities specifically targeted to meet the unique needs of our respective reservations. Examples of programs include:

—Fort Belknap College in Harlem, Montana, will build on its fiscal year 1996 project, which established a Global Positioning System/Geographic Information System (GPS/GIS), using the GPS/GIS to research, document and inventory the location of important cultural and ethno-botanical sites on the reservation. Faculty and students from natural resources courses will work with traditional leaders and elders from the Fort Belknap community to complete this project.

—Sinte Gleska University in Rosebud, South Dakota, will use the equity grant to support its development of a community-based forestry project that will involve the full life cycle of trees. The project will document tribal stories and teachings about trees and their related environment and the acquired knowledge will form the foundation for an ecological and cultural understanding of native trees that will be incorporated into the University's courses and practices.

Other Tribal Colleges have started natural resource management courses; nutrition and dietetic programs; environmental sciences curricula; comprehensive horticulture programs; and courses on sustainable development, forestry, and buffalo production and management.

Funding for Research.—In addition to these authorized programs for the 1994 institutions, we are requesting funding for a new research program, which has been proposed in an amendment to the Agriculture Research, Extension, and Education Reform Act of 1997 (currently in conference). This amendment proposes that the 1994 land-grant colleges receive the same agriculture research authority granted to 1862 and 1890 land-grant institutions, through a competitive program authorized at $10 million.

This authority, and its corresponding appropriation, is vital to ensuring that Tribal Colleges finally have the opportunity to become full partners in this nation's land-grant system of colleges and universities. Many of our institutions are currently conducting applied agriculture-based research, yet they struggle to finance this research and meet their community's other research needs. Some of the research in progress includes soil and water quality research; amphibian propagation; pesticide and wildlife research; range cattle species enhancement; and native plant preservation, for medicinal and economic purposes. We urge the committee to fully fund this program's pending authority, as we expect this amendment to be approved in the near future.

Funding for the Rural Development Trust Fund.—The Tribal Colleges also support the administration's request for the Rural Development Trust Fund, which includes a 3-percent transfer dedicated for rural development programs conducted by federally-recognized tribes.

CONCLUSION

The 1994 institutions are efficient and effective tools for bringing education to American Indians. The modest federal investment in the Tribal Colleges has paid great dividends in terms of employment, education, and economic development, and continuation of this investment makes sound moral and fiscal sense. No communities are in greater need of land-grant programs than American Indian reservations, and no institutions better exemplify the original intent of land-grant institutions than the Tribal Colleges.

Mr. Chairman, we appreciate your long-standing support of the Tribal Colleges, and we are grateful for your commitment to our efforts to bring self-sufficiency to our communities. We look forward to continuing a partnership with you, the Members of your Subcommittee, the U.S. Department of Agriculture, and the mainstream land-grant system—a partnership that will bring equal educational, agricultural, and economic opportunities to Native America.

Thank you.

PREPARED STATEMENT OF THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION

Mr. Chairman, the American Nursery & Landscape Association (ANLA) welcomes this opportunity to present the nursery industry's views regarding the U.S. Department of Agriculture's (USDA) budget for the 1999 fiscal year.

ANLA is the national trade association for the nursery and landscape industry. ANLA represents 2,500 production nurseries, landscape firms, retail garden centers and horticultural distribution centers, and the 16,000 additional family farm and

small business members of the state and regional nursery and landscape associations.

ECONOMIC SIGNIFICANCE OF THE NURSERY INDUSTRY

According to USDA's Economic Research Service (ERS), the nursery and greenhouse industry remains the fastest growing agricultural sector in cash receipts. An estimated 18,000 farms (or one percent of all farms) were engaged in producing at least some nursery and greenhouse crops in 1969. By 1992, an estimated 47,425 farms were included in this sector—an increase of 163 percent. Nursery and greenhouse crops in 1996 totaled an estimated $10.9 billion in farm-gate value, representing nearly 11 percent of the total cash receipts for all U.S. farm crops.

In 1996, nursery and greenhouse crops ranked 7th in total grower cash receipts among all agricultural commodities. It is the third largest plant crop—behind corn and soybeans, yet ahead of wheat, cotton, and tobacco. Nursery and greenhouse crop production now ranks among the top five agricultural commodities in 24 states, and among the top 10 in 40 states. According to USDA, growers produce thousands of varieties of cultivated nursery, bedding, foliage and potted flowering plants in a wide array of different forms and sizes on 390,200 acres of open ground and 678 million square feet under the protective cover of permanent or temporary greenhouses.

USDA data from 1990 also show that nursery and greenhouse farms had the highest average net farm income of all agricultural commodity groups at $53,589. This was four times higher than the average American net farm income in 1990 of $13,458. Although nursery farms can be profitable, they are often more capital intensive than other agricultural operations, and are very labor intensive given the thousands of different plant species and the wide-ranging sizes in which they are grown.

AGRICULTURAL RESEARCH SERVICE (ARS)

Reinstatement of Nursery/Greenhouse Research Funding

Noting the increasing economic significance of the nursery and greenhouse industry, ANLA is very grateful and pleased that Congress provided $200,000 to ARS in fiscal year 1998 specifically to address the important research needs of the nursery and greenhouse industry. Nevertheless ANLA is deeply disturbed that the Administration has once again failed to provide for a continuation of these research dollars in fiscal year 1999. ANLA respectfully urges Congress to restore in fiscal year 1999 the $200,000 funding which serves as a foundation and springboard for the joint research initiative that the nursery and floral industry has developed (see below).

Although recognition of the economic significance of the nursery industry is indeed increasing, very few federal dollars are dedicated directly to the nursery and greenhouse industry. In fact, only about 0.02 percent of all federal agricultural research dollars are currently so dedicated. This underscores why last year's provision of $200,000 was so important. Current competitive grant programs and other public funding mechanisms are unable to meet the industry's research needs. In fact, the nursery industry has been largely excluded from funding under the National Research Initiative (NRI) competitive grants simply because it does not grow food or fiber crops. The only rare NRI exceptions are when a horticultural crop has been utilized solely by reason of its rapid production. The nursery and greenhouse industry has an exemplary record of supporting its own research needs as industry-funded research grants annually total several million dollars.

The industry will continue to support research efforts through its own privately funded research foundations, including ANLA's very own research division (the Horticultural Research Institute) which is providing $350,000 in research grants this year alone. The federal government must play a research role more appropriate to its scope. It must retain the lead in developing the basic building blocks of plant science, in contrast to the industry's applications of those blocks to build solutions to its particular challenges. For instance, ANLA supports the federal funding of biotechnology as ARS fulfills its role as the international leader of such fundamental research. Biotechnology is a crucial tool for use in dealing with a wide spectrum of challenges to environmental horticulture, as well as other important agricultural sectors. The federal role in research is: (1) longer term; (2) cuts across multiple disciplines; (3) calls for extensive coordination among scientists and institutions; and, (4) involves higher risk than can be undertaken by any one industry. Only the federal government can fulfill this essential role.

Joint Nursery/Floral Industry Research Initiative

ANLA and the Society of American Florists (SAF) have jointly developed a detailed $21 million proposal establishing a coordinated research initiative for the environmental horticulture (nursery and floral) industry. Its goals are to:

—Protect the environment, including human health and safety through research leading to reduced use of chemicals and a reduction in runoff and other wastes.

—Enhance environmental remediation and cleanup efforts on wetlands, post-industrial sites, air quality and other environmental areas through research on the ability of plants to reverse and mitigate environmental pollution.

—Improve the ability to prevent the spread of plant pests and diseases in international trade.

—Strengthen rural and suburban economies across the U.S. by providing improved crop production systems and technologies to nursery and greenhouse crop growers and helping them to increase production efficiency.

—Contribute to the U.S. agricultural economy and increase international competitiveness by conducting research leading to improved nursery and greenhouse products and production strategies, and by improving technology transfer of research results to benefit other U.S. agricultural sectors.

—Maintain biodiversity through germplasm preservation enabling useful botanic traits to be transmitted to future generations.

—Enhance Americans' quality of life by increasing the availability and diversity of plants and flowers for the consumers' purchase and enjoyment.

The joint nursery and floral industry research initiative shall accomplish these goals by focusing on three essential research areas: (1) Improved environmental and resource management; (2) improved pest management; and, (3) improved production system practices and strategies.

ANLA respectfully requests an increase of $8.0 million in fiscal year 1999 to begin to reach the funding balance envisioned by this research initiative for the nursery and floriculture industry representing nearly 11 percent of all U.S. farm crop cash receipts. ANLA urges Congress to allocate the requested $8.0 million as follows: (a) $4.5 million to ARS centers including the U.S. National Arboretum; (b) $500,000 to Ohio State University to establish an ornamental Plant Germplasm Center in conjunction with USDA's National Plant Germplasm System; and, (c) $3.0 million to multi-state, multi-location cooperative agreements between ARS and appropriate university researchers.

Methyl Bromide

As a widely used fumigant, methyl bromide is a critical input to many nursery crop management and quarantine systems. However, the U.S. Environmental Protection Agency has listed methyl bromide as a Class I ozone-depleting substance under the Clean Air Act and will ban its use by January 1, 2001. Research and development of effective methyl bromide alternatives for soil fumigation and quarantine treatments are absolutely critical to the nursery industry. Effective alternatives to methyl bromide must be identified. Therefore, ANLA supports the proposed $2 million in fiscal year 1999 for extramural research on methyl bromide alternatives. ANLA urges that such research be funded based on a priority-setting awards process that encourages grower input. 3

U.S. National Arboretum

When it was founded in 1927, Congress had the foresight to designate research and education as the mission of the U.S. National Arboretum. Since its founding, the U.S. National Arboretum has introduced over 200 important new cultivars, including azaleas, New Guinea impatiens, crepe myrtles, hollies, magnolias, and disease resistant elms. ANLA and the nursery industry have immense respect for this highly successful federal institution. ANLA is proud to support the Friends of the National Arboretum (FONA)—the non-profit, private sector organization whose mission is to garner additional resources to advance the quality and scope of the U.S. National Arboretum's important research and education activities. ANLA supports full fiscal year 1999 funding for the U.S. National Arboretum.

Northwest Nursery Crops Research Center (OR, WA, ID)

ANLA appreciates the $500,000 in fiscal year 1998 funding for the Northwest Nursery Crops Research Center. This collaborative research center is supported by the American, Oregon, Idaho and Washington nursery associations, Oregon State University, Washington State University, the University of Idaho, and the related extension services. Nursery crop growers in the Pacific Northwest play a pivotal role in supplying nursery stock—not only to the retail and landscape segments of the industry. They provide plants and trees to growers in other areas of the nation for

further cultivation and development. ANLA urges Congress to continue funding the Northwest Nursery Crops Research Center in fiscal year 1999 at the current level of $500,000.

Nursery Crops Research Station (Tennessee State University)

ANLA appreciates the prior federal funding which helped lead to the establishment and construction of the Nursery Crops Research Station at Tennessee State University. Nursery crop growers in the South continue to face myriad serious plant pest problems. At the same time, implementation of the 1996 Food Quality Protection Act (FQPA) could drive the loss of many pesticide uses critical to nursery growers in the South and throughout the nation. ARS recently established research positions at the Nursery Crops Research Station at Tennessee State University. ANLA urges Congress to provide $515,000 in fiscal year 1999 for such positions to conduct the critical research to address pest management and other nursery crop production issues.

Endorsement of Minor Crop Farmer Alliance's Testimony

ANLA endorses the appropriations testimony of the Minor Crop Farmer Alliance regarding the following USDA programs: Agricultural Research Service (ARS)—Food Consumption Survey; National Agricultural Statistics Service (NASS)—Pesticide Use Surveys and the National Agricultural Pesticide Impact Assessment Program; and, Agricultural Marketing Service (AMS)—Pesticide Data Program.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

International and interstate trade in nursery crops is governed by inspection and quarantine regulations designed to prevent or slow the artificial spread of hazardous agricultural pests. APHIS works in cooperation with state departments of agriculture to promulgate and enforce such regulations. ANLA strongly supports APHIS' request for adequate program funds for safeguarding plant resources from exotic pests and diseases. The continued growth and success of the nursery industry, and all of American agriculture, depend on these vital APHIS programs.

Agricultural Quarantine Inspection (AQI)

Port-of-arrival inspections and first-class mail inspection under the AQI program are the first line of defense against damaging pest introductions. About 80 percent of the funding for this important program comes from user fees levied broadly across international travel and commerce.

APHIS does not currently collect user fees associated with commerce and travel from Canada to the U.S. Given the risks demonstrated in recent years of movement of such pests as exotic fruit flies into the U.S. from Canada, APHIS might consider whether collection of user fees on goods moving from Canada would allow for enhanced pest exclusion efforts along the U.S./Canada border.

Pest and Disease Management

The Administration's budget seeks about $80 million for pest and disease management programs in fiscal year 1999. ANLA supports the proposed modest increase for Pest Detection to $6.685 million in fiscal year 1999. This increase represents sound public policy as evidenced by several recent pest outbreaks. For example, detections of Asian longhorned beetle in New York and Mediterranean fruit fly in Florida have precipitated expensive quarantine and eradication efforts. These outbreaks underscore the need for enhanced pest detection programs. The earlier infestations of damaging exotic pests can be detected, the better the chances of achieving containment or eradication at reasonable expense. We are reminded of the wise adage: "Pay a little now or pay a lot later."

Imported Fire Ant

ANLA notes that the Administration proposes to discontinue funding for the imported fire ant quarantine. The fiscal year 1998 funding level of $1 million represented only 27 percent of the funding level four years ago, yet the workload associated with the quarantine has increased as the pest has continued to spread. ANLA respectfully urges Congress to direct APHIS to maintain imported fire ant funding in fiscal year 1999 at the fiscal year 1998 funding level of $1 million.

The small federal funding share is used to carry out cooperative efforts with infested states in the South and Southeast. Continued federal involvement strengthens the level of protection enjoyed by uninfested states wishing to remain free from the agricultural and public health burdens posed by imported fire ants. The federal quarantine ensures a fair, consistent framework for domestic commerce for nurseries located in the 11 affected states from North Carolina through Florida and west to Texas. In exchange for those benefits, nurseries in infested states incur substan-

tial quarantine compliance costs—often in excess of $100,000 in a single nursery—for a pest that does not cause significant harm to nursery crops. Given the great environmental and public health benefits to society resulting from a successful quarantine effort, ANLA strongly believes that a modest federal expenditure of $1 million in fiscal year 1999 is justified.

Golden Nematode

In 1995, a science panel was jointly appointed by the National Plant Board and USDA to review, evaluate and make recommendations regarding the golden nematode program. This action was in part necessitated by federal and state reductions in funding and support that jeopardize the very integrity of the federal domestic quarantine. Federal/state cooperative efforts to control and contain the spread of this serious pest have been successful and economically beneficial.

In its report, The Golden Nematode: Future Strategies for Quarantine and Management (May 15, 1996), the science panel found the golden nematode to be of continued quarantine importance and regulatory significance. Furthermore, the current quarantine program was deemed biologically sound. However, federal funding shortfalls truly jeopardize the continued long-term viability of the golden nematode management effort. Erosion of this management effort will negatively impact the entire U.S. potato industry from both production and international trade viewpoints, and it may also have disruptive impacts on the nursery industry.

Funding for this program dropped from almost $900,000 in fiscal year 1992 to $444,000 in fiscal year 1997, and to $435,000 in fiscal year 1998. ANLA strongly urges that at least the fiscal year 1997 funding level of $444,000 be provided in fiscal year 1999 for the necessary survey and regulatory enforcement activities. Optimally, a future appropriation of $862,000 will maintain the integrity of the quarantine by providing for the necessary supporting research and regulatory activities.

Chrysanthemum White Rust

Chrysanthemums are an important nursery and greenhouse crop. Annual farmgate value of the U. S. chrysanthemum crop is about $160 million. Chrysanthemum white rust (CWR), a serious disease of chrysanthemums not known to be established in the United States, has been detected in recent years in California, Oregon, Washington, New York and New Jersey. During fiscal year 1995–98, APHIS and state cooperators engaged in CWR detection survey, control and regulatory activities with these states. Yet, this level of funding has been inadequate to yield a comprehensive understanding as to whether eradication efforts have succeeded. Future regulatory decisions must be based on sound, comprehensive information. ANLA urges Congress to direct APHIS to cooperatively fund completion of thorough CWR detection surveys, and evaluate the success of the eradication program based on the survey results.

Plant Pest Emergency Fund

In recent years, emergencies have been declared as a result of discovery of such devastating pests as Karnal bunt of wheat, Asian gypsy moth, and Mediterranean fruit fly. The long-term benefits of successful eradication efforts far outweigh the short-term costs of emergency programs to eradicate such pests. However, such efforts require rapid response and adequate resources. ANLA supports the establishment of a "no-year" emergency agricultural pest fund that could be accessed at the sole discretion of the Secretary of Agriculture in the event of pest emergencies. Such a fund should be adequate to deal with multiple emergencies, and should be replenished as needed.

FOREST SERVICE

Gypsy Moth Slow-the-Spread (STS)

ANLA recognizes that jurisdiction for U.S. Forest Service funding rests with another appropriations subcommittee. Nonetheless, ANLA believes that the gypsy moth issue is so important that it needs to be brought to this subcommittee's attention as well.

Gypsy moth is a devastating forest and landscape pest that was introduced into the U.S. in 1869. It has since spread to all or part of 17 states and the District of Columbia. However, this area represents only 25 percent of the total area susceptible to gypsy moth outbreaks.

A recent Forest Service pilot program demonstrated that the rate of gypsy moth spread could be slowed by at least 60 percent through the application of modern survey and management practices. National implementation of "Slow-the-Spread" (STS) would cost-effectively reduce the new territory invaded by gypsy moth along a 1,200

mile "frontier" stretching from Wisconsin to North Carolina. STS would protect environmental resources and reduce the burden of quarantines on the nursery industry.

ANLA urges that the $3.5 million in Forest Service funds provided for the annual pilot program in recent years be dedicated to the STS program. ANLA also urges Congress and the Forest Service to vigorously pursue full STS funding of $8 million by the year 2000.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE

Pesticide Clearance

ANLA strongly supports the Administration's fiscal year 1999 budget proposal of $10.7 million for the JR–4 program under the USDA-CSREES Special Research Grants Program. Further increases may be needed and justified in view of the new requirements of the 1996 Food Quality Protection Act—(FQPA). FQPA requires the reassessment of virtually all pesticide dietary tolerances over the next 10 years—an enormous task that will require comprehensive JR–4 support. Together with USDA-ARS funding, this would increase JR–4 funding to $12.8 million for fiscal year 1999.

The JR–4 program has achieved unparalleled success in facilitating the registration of minor-use crop protection tools, including big-pesticides and other reduced-risk pesticides. While most JR–4 projects focus on minor-use food crops, the program to date has generated crucial data supporting uses of most products registered for nursery and greenhouse use. Private industry resources are also leveraging the program's successes. For example, ANLA led a successful effort in 1996 to raise $20,000 to fund a high level workshop where key nursery and floral researchers prioritized production problems and critical pesticide registration needs. ANLA's research division, the Horticultural Research Institute, as well as the American Floral Endowment and the Society of American Florists supported this effort.

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

ANLA thanks Congress for funding the very practical and efficient Census of Agriculture now under the auspices of the National Agricultural Statistics Service (NASS). Not only does the Census of Agriculture and related surveys provide environmental horticulture statistics unavailable from any other source, these critical surveys reduce both government duplication and respondent burdens.

ANLA supports the proposed $1.4 million in fiscal year 1999 to expand the current pesticide use surveys to include the burgeoning environmental horticulture industry. ANLA believes strongly that regulations need to be science-based, real world solutions to protect the environment, valued workers and nursery families. ANLA is concerned that in the absence of actual use data, regulators employ overly conservative default assumptions to determine pesticide risks and application rates.

ANLA strongly supports expansion of the labor statistics gathering of NASS as part of the Horticultural Specialties survey. As the industry's single greatest production expense, labor is key to the ability to move into the future, while attracting, training and retaining employees.

ECONOMIC RESEARCH SERVICE (ERS)

The nursery industry relies heavily upon the agricultural economic analyses produced by the Economic Research Service (ERS). In fact, ERS is this nation's sole source of such comprehensive nursery industry analyses. ANLA deeply appreciates the past support provided by Congress for the continued support of economic analyses of the nursery and greenhouse industry. Despite this congressional support, ANLA remains concerned that ERS may ignore both the congressional support and the nursery industry's demonstrated need for continuation of these economic analyses. Therefore, ANLA urges Congress to earmark $240,000 in USDA's fiscal year 1999 funds and direct ERS to continue conducting its on-going economic analyses of the size and scope of the nursery and greenhouse industry. ANLA respectfully requests Congress to direct ERS to analyze interstate and international trade flows of the nursery industry.

CONCLUSION

In closing, Mr. Chairman, ANLA is mindful of the budget constraints faced by this Committee. Yet, we believe that federal funding of the kinds of activities supported in our testimony is not only justified, but necessary, if the nursery industry is to continue to prosper and play its increasingly significant role in this nation's economic strength. As in past years, ANLA genuinely appreciates this opportunity to present the nursery industry's views regarding USDA's agricultural research pro-

grams and the Department's annual proposed budget. Thank you for your consideration, and we look forward to continuing to work with you, Committee members and your staff.

PREPARED STATEMENT OF THE AMERICAN SEED TRADE ASSOCIATION (ASTA), CORN AND SORGHUM BASIC RESEARCH COMMITTEE

STRENGTHENING THE GERMPLASM BASE OF USA HYBRIDS BY ENHANCING CORN GERMPLASM

SUMMARY

We are requesting $500,000 be appropriated annually for enhancing corn germplasm.

1. Corn is a key resource providing food, industrial uses, livestock feed, and export.
2. Corn production in the U.S. is based on less than 5 percent of corn germplasm available in the world. Broadening the germplasm base would provide genes to improve yields and protect against new disease, insect and environmental stresses. Exotic germplasm would also be a source for changes in grain quality being demanded by export markets, industrial processors, and other end users.
3. Most exotic germplasm is unadapted to growing conditions in the U.S. This proposal is a joint USDA/ARS, university, and industry effort to adapt this material, so that it can be used by commercial breeders in the development of new hybrids to meet the demands of the American consumer and our foreign markets.
4. We greatly appreciate the $500,000 previously appropriated for this research, beginning in the 1995 federal budget. This funding is supporting the two main USDA/ARS locations involved in this research (Iowa and North Carolina), as well as USDA/ARS and university locations in Delaware, Georgia, Illinois, Iowa, Mississippi, Missouri, New York, Tennessee, and Wisconsin. Industry is providing $450,000 in-kind support annually for this effort.
5. The additional appropriation of $500,000 annually would enable the Iowa and North Carolina locations to purchase equipment and add staff necessary for carrying out this research. It would also provide funding for the increased germplasm evaluation and breeding necessary to test and enhance the exotic materials available.

BACKGROUND

Corn is the major crop on the cultivated land of the USA where approximately 75 million acres are planted each year. U.S. corn production, accounting for about half of the world's annual production, adds over $16 billion of value to the American economy as a raw material. About 20 percent ($3.2 billion) of this production is exported each year, thereby providing a positive contribution to the nation's trade balance. Approximately 17 percent of the yearly corn crop is industrially refined. A portion of refined products is exported resulting in an additional $1.4 billion in export. Through feeding livestock, the rest of the crop is processed into meat and dairy products that affect everyone in our society. Corn is a key resource within our country.

CONCERNS

All of this production is based on using less than 5 percent of the corn germplasm available in the world. Less than 1 percent of our commercial corn is of exotic (foreign) origin, and tropical exotic germplasm is only a fraction of that. This situation exists because private sector corn breeders have generally concentrated on genetically narrow based, or elite by elite, sources for their breeding efforts, since their use results in getting hybrids to the marketplace faster.

Traditionally, corn has been treated as a commodity. In recent years corn grain users and processors have become more interested in the quality characteristics of the grain itself and how this affects their business. Since much of the exotic germplasm has undergone selection for many indigenous uses (foods, beverages, etc.) by various cultures, it seems likely that new grain quality characteristics will be found in exotic rather than the narrow-based germplasm now used. A small increase in value to the grain, such as 10 cents per bushel, would increase its annual value by $800 million for an eight billion bushel harvest.[1]

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[1] Salhuana, Pollask, Tiffany 1994. Public/Private Collaboration Proposed to Strengthen Quality and Production of U.S. Corn through Maize Germplasm Enhancement, Diversity Vol. 9, no. 4, 1993/Vol. 10, no. 1, 1994.

Breeders must still be concerned with breeding for higher yields so that U.S. corn farmers can remain competitive. Tapping into the broader germplasm pool could provide new sources of genes for higher yield and other performance traits, such as disease and insect tolerance or improved stalk and root strength.

A further concern with a narrow genetic base is the potential for widespread disease or insect damage due to new diseases or insect species spreading into U.S. corn growing areas. It is more likely that resistance to these dangers would be found in genetically diverse exotic germplasm sources than in our breeding material. One major benefit would be reduced pesticide use. In addition to protection against diseases and insects, these exotic materials provide insurance for unforeseen climatic or environmental problems.

A great deal of excitement has been generated over the new techniques of biotechnology, especially over the potential value to the corn industry of gene transformation using genetic engineering. Research conducted on exotic germplasm could yield many beneficial genes that genetic engineers could quickly transfer to commercial hybrids.

LAMP PROJECT

What would be the source of this exotic germplasm? Over the years, collections of corn have been made from farmers' fields and other sources all over the world, and are stored in various germplasm banks. In 1987, the Latin American Maize Project (LAMP) was initiated to evaluate these corn collections (accessions). It was a cooperative effort among 12 countries to identify accessions that might provide valuable source material for further improvement in hybrid and open-pollinated cultivars in the U.S.A. and other areas. Pioneer Hi-Bred International gave USDA/ARS $1.5 million to fund the LAMP research.

Nearly 12,000 maize (corn) germplasm accessions were evaluated. In successive stages, the project identified the top 268 accessions. The environmental areas of adaptation for these 268 "elite" populations range from temperate to tropical, and are prime candidates for enhancing the U.S.A. corn germplasm base.

GERMPLASM ENHANCEMENT

Most of this germplasm is unadapted to growing conditions in the U.S. and requires genetic enhancement to make it adapted, or able to grow and mature in our environmental conditions. Enhancement basically means that these exotic materials will be bred with U.S. adapted materials and breeders will select progeny that carry the desired exotic traits and are also adapted to U.S. growing conditions. This will require a concerted long-term breeding approach by corn breeders at numerous locations (environments) throughout the U.S. Only after this process of enhancement will these exotic materials be ready to enter commercial corn breeding channels and be effectively utilized by a broad cross-section of the industry in the development of new hybrids for farmers and corn users.

The total process of enhancement is too large and long-term for public institutions and/or seed companies to accomplish individually. An ambitious task of this nature can only be completed through a coordinated and cooperative effort between the USDA/ARS, land-grant universities, and industry.

The Corn and Sorghum Basic Research Committee of the American Seed Trade Association has been concerned that enhancement of this exotic germplasm would proceed. The Committee consists of representatives from about 30 companies actively involved in the corn and sorghum seed industry, and at the committee's request, Dr. Linda Pollak, Research Geneticist, USDA-ARS, et al., developed a proposal for enhancing exotic germplasm starting with materials which will include the elite LAMP accessions as noted above. This proposal has developed into the U.S. GEM (Germplasm Enhancement of Maize) Project.

U.S. GEM PROJECT OUTLINE

Since this project serves a national need, the primary effort and direction has come from the USDA/ARS. Two permanent USDA/ARS locations are being used as primary sites for enhancement breeding and coordination. One is at Ames, Iowa, where the USDA/ARS currently conducts corn evaluation and enhancement efforts. Dr. Linda Pollak, Research Geneticist, is located there. Dr. Pollak was the Principal Investigator of the U.S.A. for LAMP, and is the lead scientist for this project.

The other permanent site is the USDA/ARS location in North Carolina. This site has responsibility for initial evaluation and conversion of the tropical materials. Tropical corn populations normally will not reach maturity in the Corn Belt, but will produce seed in North Carolina. After initial enhancement of the tropical mate-

rials in the South, they will be sent to Ames for further enhancement and testing in Corn Belt conditions. Dr. Marty Carson is in charge of this program.

A number of corn researchers at various land-grant universities and other ARS locations are also taking part in the enhancement and evaluation of this exotic germplasm. This cooperative effort is very important and serves not only as a source of improved germplasm but also provides excellent training for future plant scientists.

Industry is also involved. A total of 21 companies have pledged research nursery and yield trial plots to be used in this breeding effort. This in-kind support is valued at $450,00 per year.

An important component of the project is an annual meeting of all cooperators to evaluate progress and plan strategies. An information network has been established to keep everyone up-to-date. A U.S. GEM Technical Steering Group consisting of members from USDA/ARS, University, and Industry has been formed for guidance and administration of this cooperative effort.

This germplasm enhancement project is public and is open to all public sector institutions as well as private seed companies. Information will be freely available and publicly developed materials will remain in the public domain, accessible to all.

ACCOMPLISHMENTS IN 1996–97

Following is a description of accomplishments and research conducted at various locations using 1996–7 funding.

Ames, Iowa.—Priorities for the corn enhancement work at this location are overall project coordination, data analysis and management, management and release of enhanced germplasm, analysis of materials for value-added traits, and as one of the many breeding sites. In cooperation with Iowa State University, a postdoctoral food technologist is working on the utility of unique oils obtained from GEM accessions and a graduate student is studying environmental effects on starch quality measurements.

The laboratory is continuing to evaluate oil, starch, and protein in the exotic accessions and in the breeding populations made up of exotic materials crossed to proprietary corn belt inbreds. In results from 1996, a line from one breeding cross measured total protein of 16 percent (corn belt germplasm has 10 percent) and total oil level of 6 percent (corn belt is 4 percent). It is extremely unique to find increased levels for both of these traits in the same line, and it is potentially very useful for food and feed applications. In 1997, lines were identified with unique starch characteristics, which may be beneficial for human food products.

GEM's World Wide Web site opened on July 15, 1996. From this site cooperators can obtain the latest data from yield tests, disease and insect screening, and value-added trait research, as well as news and upcoming events.

Raleigh, North Carolina.—The focus of this location is twofold. One priority is to develop enhanced material adapted to the Southern U.S. corn growing conditions. The second is to be a stepping stone for adapting tropical material to Midwest conditions.

Breeding populations were tested for resistance to various leaf diseases and stalk rots. Selections were made for improved material with resistance to these diseases as well as for improved yield, standability, and adaptation to North Carolina conditions. For example, in 1997 significant resistance to Fusarium ear rot was found in 4 GEM breeding populations. Resistance to Aspergillus ear rot was also found in 2 of these same 4 populations. Hybrids of about 130 advanced breeding lines developed from tropical x elite breeding populations outyielded the mean of commercial check hybrids.

Other public cooperators conducted evaluations in 1997 as follows: Drought resistance in Delaware. Yield data accumulation in Georgia. Grain yield, disease resistance and starch content in Illinois. Corn rootworm and Fusarium ear rot resistance in Iowa. Grain physical properties, wet milling properties, starch functionality, and other value added grain traits in Iowa. Resistance to aflatoxin in Mississippi. Resistance to corn rootworm and corn borer in Missouri. Resistance to anthracnose stalk rot in New York. Grain yield tests in Tennessee. Evaluation of silage quality in Wisconsin.

Demonstration nurseries were planted at Iowa and North Carolina for viewing by cooperators. Fall field days were held at Iowa and Wisconsin.

In 1997, private cooperators continued the breeding and adaption of about 15 accessions following the protocol developed by the GEM Technical Steering Group. Companies increased their nursery and yield trial in-kind support by approximately 25 percent in 1996.

RESEARCH IN 1998

Research will continue at the various USDA/ARS, university, and company locations similar to 1997.

EFFECTS OF INCREASED FUNDING BEGINNING IN 1999

Appropriation of the additional $500,000 annually would provide funds to increase research in the following ways:

Ames, Iowa.—The corn genome is being mapped by researchers in the corn genome project. This DNA information is only useful if it is associated with traits of interest. Many unique traits of interest, such as value-added traits, are being discovered in the GEM materials. Additional funding will add personnel and resources to speed up the discovery of value-added traits and help tie these two areas of research together. The increase in winter nursery funding would allow the Ames location to support the public breeding activities and allow public materials to reach commercial breeding programs in half the time. A small amount of money would be available to help public cooperators to attend the annual meeting and field day.

Raleigh, North Carolina.—This location has a number of equipment needs, such as a seed storage unit, because current facilities are filled to capacity. A technician would be added to handle the expanded field work. Current resources restrict testing and development work to relatively few breeding populations. With the increased funding, the number of breeding crosses could be increased, greatly speeding up the introduction of adapted GEM material into private and public breeding programs. Additional funding would provide for yield trial testing at more locations and more extensive disease and insect resistance screening, greatly increasing the precision in selecting materials that are high yielding and have high levels of pest resistance.

Other Public Cooperators.—The increase in funding for public cooperators (to $202,000 per year in the third fiscal year) would allow for full evaluation and development of new breeding materials improved for productivity as well as disease and insect resistance and value-added traits. It would also provide for the use of biotechnology tools in this development work. Most public cooperators are willing to participate, but cannot unless they have at least partial funding. There are approximately 30 public cooperators now, and as the project develops we are likely to have more.

CONCLUSION

Corn hybrids in the U.S. have a very narrow genetic base, utilizing only a small percentage of all available corn germplasm. This greatly increases vulnerability to unforeseen pest problems, and may lead to an eventual yield cap. Exotic corn germplasm could provide genes for resistance to pest problems and for increased yields. These exotic materials may also contain quality traits to meet new market demands. This will help ensure the U.S. maintains its world leadership in providing the best raw materials to meet the demand for the production of meat, eggs, milk, and many other food and industrial uses.

LAMP project identified the top 268 corn accessions from among 12,000 populations evaluated. The present proposal represents a joint USDA/ARS, land-grant university, and industry effort to enhance these and other exotic accessions so that they can enter commercial corn breeding programs. The result of this cooperation will be an increase in the productivity, quality, and marketability of hybrid corn in the U.S. and for export, benefiting the farmer, the feed and processing industries, and the consumer.

Therefore, the ASTA Corn and Sorghum Basic Research Committee hereby requests the 106th Congress of the United States to add funding of $500,000 (in addition to the $500,000 appropriated initially in 1997, for a total of $1,000,000) annually for this corn germplasm enhancement project beginning with the 1999 federal budget.

BUDGET SUMMARY

This is a summary of the operational and capital budgets for 1998, 1999, and 2000; 2000 will only be operational. The budget is divided into the Corn Belt Location and corresponds to Ames, Iowa (USDA-ARS) and the cooperators in the Corn Belt area. The Southern Location corresponds with Raleigh, North Carolina (USDA-ARS) and the cooperators in the states in the South. For a complete copy of the budget, please contact Dr. David Harper, Holden's Foundation Seeds LLC, Box 839, Williamsburg, IA 52361 or 319–668–1100.

Items	1998	1999	2000
Corn Belt location:			
Board reductions	$18,500	$19,100	$19,800
Personnel	143,500	252,200	262,600
Office/field	43,600	91,000	91,000
Capital equipment	34,400	68,700	57,600
Specific agreements for public cooperators [1]	60,000	169,000	169,000
Total for Corn Belt location	300,000	600,000	600,000
Southern location:			
Personnel	90,000	123,000	126,000
Office/field	25,100	53,500	54.000
Capital equipment	4,900	68,000	68,000
Specific agreements for public cooperators [1]	30,000	55,500	52,000
Total for Southern location	150,000	300,000	300,000
Summary:			
Corn States location	300,000	600,000	600,000
Southern location	150,000	300,000	300,000
USDA/ARS overhead	50,000	100,000	100,000
Grand total	500,000	1,000,000	1,000,000

[1] Specific Agreements for Public Cooperators: Agreements for public cooperation can be made with universities and ARS scientists in many locations which could include the following states: Delaware, Ohio, Pennsylvania, Indiana, Illinois, Wisconsin, Kentucky, Missouri, New York, Iowa, Michigan, Minnesota, North Dakota, South Dakota, Nebraska, North Carolina, Mississippi, Georgia, Louisiana, Texas and Tennessee. Research at these locations would include selection for disease and insect resistance, evaluation for value added traits, and yield trials.

PREPARED STATEMENT OF LORIN MOENCH, JR., PRESIDENT, AMERICAN SHEEP INDUSTRY ASSOCIATION

The American Sheep Industry Association (ASI) is a federation of state member associations representing the nearly 80,000 sheep producers in the United States. The sheep industry views numerous agencies and programs of the U.S. Department of Agriculture as important to lamb and wool production. Sheep industry priorities include rebuilding and strengthening our infrastructure, critical predator control activities, maintaining and expanding research capabilities and animal health efforts.

The rapid changes that have occurred in the domestic sheep industry and continue to take place put further emphasis on the importance of adequately funding the U.S. Department of Agriculture programs important to lamb and wool producers.

We appreciate this opportunity to comment on those portions of the USDA fiscal year 1999 budget.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

The mission of APHIS, ''to protect U.S. animal and plant resources from diseases and pests,'' is very important to the sheep industry of the nation.

Wildlife Services

The Wildlife Services (WS) program of USDA-APHIS is vital to the economic survival of the sheep industry. The value of sheep and lambs lost to predators and predator control expenses are second only to feed in sheep production costs. Costs associated with predation now exceed our industry's veterinary costs, labor, and transportation costs.

The sheep industry adamantly disagrees with the Administration's budget proposal to reduce the Wildlife Services operations budget $3.4 million and to decrease methods development funding $829,000. The proposed $4.3 million funding cut for programs and research will not only severely impact tens of thousands of agricultural producers, but will endanger the health and safety of millions on Americans, jeopardize a number of endangered species and other wildlife programs, and carry negative international implications.

The Agricultural Statistics Service estimates that two-thirds of the nation's farms suffer some form of wildlife damage each year. Most recent loss surveys found that over 520,000 head of sheep, 117,000 head of cattle and 35.4 million bushels of corn were lost to wildlife damage. The president's budget reduction will not only reduce or eliminate efforts to control livestock losses in a number of states, buts also threatens efforts to control aquaculture losses to migratory birds in Arkansas, Alabama and Pennsylvania, rice losses in Louisiana, sunflower, corn and other small grains losses in North Dakota and Iowa. Losses of federal cooperative dollars is also expected to result in corresponding reductions in state and local cooperative dollars, further reducing the effectiveness of Wildlife Services.

Agriculture is not the only sector of the public affected by the proposed Wildlife Services budget cut. Urban America makes as many requests on WS for protection of private property and human health and safety as agriculture. With over 2,000 commercial jets hitting wildlife each year, airport safety is also heavily dependent on WS. The president's budget needlessly threatens to reduce efforts to protect airlines and passenger safety in states such as Florida, Pennsylvania, Iowa, Kansas and Utah. The president's budget recommendations to eliminate $800,000 in rabies control funding for New York, Vermont, Ohio and Texas also places needless risk on human health and safety.

Due to its cooperative nature, the Wildlife Services program continues to be the most cost effective and efficient program within the U.S. Department of Agriculture in managing the public's wildlife for purposes of reducing wildlife damage to private property and protecting human health and safety. Wildlife Services is one of the few federal programs that has been consistently at or above the 50–50 federal to cooperative funding ratios. The president's recommendation that a 50–50 ratio of cooperator funding be applied at the states and local level has no justification in statute, regulation or policy. Efforts by the administration to micromanage this successful cooperative program will only serve to take away needed flexibility of WS managers and will inhibit Wildlife Service's ability to accomplish its mission as mandated by the Animal Damage Control Act, NEPA and the Government Performance and Results Act.

Although the funding for Wildlife Services has seen slight increases in the past, most increases have been Congressional Directives aimed at specific projects. Inflation has slowly eaten away at funds used to support general operations programs. The sheep industry strongly supports the funding for fiscal year 1999 Wildlife Services operations be set at $33,997,600, an increase of $5,511,600 over the fiscal year 1998 level.

Aerial hunting is one of Wildlife Service's most efficient and cost effective core programs. Past appropriations have not kept pace with inflationary effects which have almost double the cost of flying since 1980. As the budget availability for aerial hunting has decreased, Wildlife Service's ability to oversee safety inspections and to conduct annual certifications on all contract aircraft's has also decreased. A total of $3,182,500 is needed to offset inflationary effects on the aerial program and to provide better safety, training and inspection for Wildlife Service pilots.

The United States Fish and Wildlife Service continues to place increased budgetary demands on Wildlife Services in terms of endangered species protection and management. With record numbers of wolves in Minnesota this past year, also came record numbers of farms where livestock were verified killed by wolves. Wolf predation on livestock in Montana, Wyoming and Idaho doubled in 1997 vs. 1996. An additional $285,000 over fiscal year 1998 levels of funding is needed to manage rapidly expanding wolf populations.

A total of $700,000 is needed to continue implementing the new Management Information Reporting system. Implementation is expected to cost $6 to $8 million over a five year period and is necessary to replace Wildlife Service' outdated system which is to obsolete to handle current amounts of information. The new system is necessary for NEPA compliance and to provide trend information and information on resources protected, etc. as required by the Government Performance and Results Act.

As stated in the president's budget, the National Wildlife Research Center (NWRC) is the only research facility in the world devoted exclusively to studying and developing socially acceptable methods on managing wildlife damage and related human health and safety issues. The president's budget, however, is inaccurate in its statements that the NWRC cannot accommodate much of the specialized requirements of its methods development programs within current facilities and therefore requests a $479,000 decrease. These monies are being fully utilized for research in areas of airport safety, human health and safety, predator management and the protection of aquaculture, small grains and forests. Facilities in Olympia, Washington; Starkville, Mississippi; Gainesville, Florida; Logan, Utah and others are fully

capable of conducting this research until the Ft. Collins, Colorado facility is complete. The $479,000 proposed budget cut by the president will only serve to cripple or close existing facilities.

The sheep industry urges Congress to provide the necessary $20.5 million needed to complete the state-of-the-art facilities and Ft. Collins, Colorado. Future improvement of humane and effective wildlife damage management programs depends on identification and development of more effective control methods.

The president's budget also carries negative international implications. After five years of negotiation, the United States has reached agreement with the European Union (EU) to test and develop scientific information in relationship too safe and humane trapping standards. Not providing the necessary funding to conduct this research will cause the United States to renege on its international promises to the EU. The sheep industry urges Congress to add $450,000 to the budget for this very critical wildlife management, economic and trade issue.

Scrapie

Adequate funding of the Voluntary Scrapie Flock Certification Program and other scrapie control measures through USDA-APHIS is of critical importance to the sheep industry, as well as all segments of the livestock industries. ASI appreciates this Subcommittee's efforts in recognizing the seriousness of this devastating disease and the real need for control and eradication. ASI and others have urged APHIS to step up its efforts in scrapie control/eradication through a more aggressive regulatory approach. We request that the scrapie control/eradication program be funded more adequately in fiscal year 1999 as requested by the administration.

No country has, to date, conducted an active surveillance study of scrapie. ASI has requested that APHIS conduct a national surveillance study of scrapie since our industry's ability to compete in the market place is encumbered by both existence of scrapie in our flock and the lack of quantitative data about the disease. ASI has committed to investing producer funds to help cover laboratory costs associated with the study. Additional appropriations up to $600,000 are supported by the industry to insure completion of this critical surveillance effort.

AGRICULTURAL MARKETING SERVICE

Lamb Market Information and Price Discovery Systems

The sheep industry strongly supports the fiscal year 1999 budget of $22,166,00 for Market News of USDA-Agricultural Marketing Service. The increased appropriations of $820,000 is critical for the agency to conduct the increased international market reporting and activities associated with the concentration in the livestock industry. The sheep industry has requested a review and update to the lamb and lamb meat market reporting system in the U.S. and inclusion of imported lamb product prices in the market news which brings added importance to increasing funds for the Foreign Agricultural Service (FAS).

The sheep industry participates in FAS programs such as the Market Access Program (MAP) and the Foreign Market Development Program. ASI strongly supports continued appropriations at the fiscal year 1998 level for these critical Foreign Agricultural Service programs. ASI is the cooperator for American wool and sheep genetics and has achieved remarkable success in increasing exports of domestic wool, breeding sheep and semen. Wool exports have increased 170 percent over the last five years with the aid of this funding. American lamb sales also benefit from the Foreign Market Development Program though increased international efforts.

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

ASI urges increased appropriations for the range programs of the Soil Conservation Service to benefit the private range and pasture lands of the United States with conservation assistance. We support the budget item and recommend an increased level for the Grazing Lands Conservation Initiative which ASI has worked with, along with other livestock and range management organizations, to address this important effort for rangelands in the U.S.

RESEARCH, EDUCATION AND ECONOMICS

The sheep industry recognizes that it must be globally competitive, profitable and sustainable as a user of and contributor to our natural resource base; that production and processing practices must be environmentally sound, socially acceptable and must contribute to the goals and overall well-being of families and communities. It is therefore essential that an integrated systems approach be used, focusing on problem-oriented programs utilizing interdisciplinary team efforts. These efforts should be applied both to plan and to conduct research on complex problems as well

as to apply problem-solving technologies on farms and ranches through quality educational programs. We are disappointed in the small increases requested by the administration for agricultural research and education funding. In order for U.S. Agriculture to be globally competitive and environmentally sound in the future we must invest in the discovery of new technologies for producing, processing, and marketing food. We urge the subcommittee to give send a strong message supporting agricultural research and education increases.

Agricultural Research Service

ASI recommends the continued support and expansion of the scrapie/BSE and other TSE research initiatives at Pullman, Washington and Ames, Iowa as requested by the administration. The collaborative research that is ongoing at these locations is recognized world wide and will be key in finding solutions to these disease problems. We believe regulatory initiatives to prevent, control, and eradicate TSE's in our livestock populations will work when based on sound research information. We also strongly support the administration's request of $6 million for emerging diseases and we urge significant appropriations for the animal component of this line item.

COOPERATIVE STATE RESEARCH EDUCATION AND EXTENSION SERVICE (CSREES)

We strongly support the National Research Initiative (NRI) and we appreciate the Administration's request of $130 million. The competitive grants awarded under its program are for the highest quality research addressing the goals and objectives of FAIR 1995.

The ongoing research in wool is critically important to the sheep industry. ASI supports continued funding of $212,000 for fiscal year 1998 through the special grants program of the CSREES.

We urge the subcommittee to appropriate both intramural and extramural funding for research to measure the well being of livestock. Animal well being is an emotional issue; in order to consider new management strategies for the enhancement of animals, we need improved methods of measurement.

The industry greatly appreciates this opportunity to discuss these programs and appropriations important to the sheep industry.

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR NUTRITIONAL SCIENCES (ASNS)

The American Society for Nutritional Sciences (ASNS) is the principal professional organization of nutrition research scientists in the United States representing 3,500 members whose purpose is to develop and extend the knowledge and application of nutrition science. Our members include scientists involved in human as well as animal nutrition research. Our members hold positions in virtually every land grant and private institution engaged in nutrition-related research in the United States as well as industrial enterprises conducting nutrition and food related research.

THE NEED FOR NUTRITION-RELATED RESEARCH

The need for nutrition science and research is critical within the USDA. Nutrition and agricultural research are areas that impact the constituents of every congressional district in the nation. New technologies are demanded to reduce the likelihood of pathogen transmission by food, to improve the quality of processed foods, and to deliver greater nutritional value in foods. Additionally the economic impact on society in healthcare costs produced by advances in nutrition research is significant in the number of dollars saved by the American taxpayer. As health costs continue to rise, it is imperative that our medical practices take a preventive approach. This requires a thorough understanding of the role of nutrients in foods in preventing chronic illnesses such as heart disease, cancer and diabetes.

Research in the areas of food safety and human nutrition has paid-off with considerable benefits to society. The USDA has a unique role in the area of nutrition research, particularly as it applies to human nutrition. For example, although there is a serious and obvious commitment to the funding of disease-related research within the National Institutes of Health, issues important to the basic mechanisms of nutrient function and the safety of the food supply have traditionally been the purview of USDA funded research. Most of the recent work on nutrient content and availability in various foods has come from USDA-NRI supported research. From a consumer perspective, it is this type of information that is often the most useful. It is clearly an important extension of the commodity-oriented research carried out

by our land grant universities. And from the perspective of nutrition, the goal of this research often achieves optimal health in the context of using given commodities as part of our diets.

ASNS is aware that nutrition research is among those areas of public policy that has received bipartisan support, and we hope that support will continue. Nutrition scientists are grateful to those members of both parties who have supported scientific research. This investment increases knowledge that ensures a healthy and productive society.

We need to continue to invest in research as greater challenges face us in the 21st century. Increasing populations, international economic competitiveness, improving the environment and minimizing healthcare costs through disease prevention are all areas that will continue to demand solutions for the future. These solutions might include advances in the understanding of the genetic basis of disease and the genetic basis of nutrient requirements for optimal health, which will require greater understanding of how nutrition and dietary information can be used for disease prevention in at-risk populations. In recent years nutrition research has led to nutritionally improved school lunches, implemented changes in safety requirements, and increased awareness for pregnant women, children and the elderly.

SIGNIFICANT NUTRITION-RELATED RESEARCH ACCOMPLISHMENTS

Zinc Intake Important to Maintaining Good Health

National surveys have shown that in the U.S. half of the adults have inadequate intakes of zinc. Inadequate intakes of zinc can make one more susceptible to infection, poor wound healing and skin lesions. It is not known how much zinc is needed to maintain good health. In a study funded by USDA's NRI, investigators developed a model of zinc kinetics which shows the relationship between endogenous excretion, absorption, pool sizes and dietary zinc intakes. They were able to show that the size and turnover rates of rapidly equilibrating zinc pools are specific indicators of zinc status and can be used to assess the prevalence of low zinc in a population. Future studies will entail developing zinc status tests that can be used in field settings.

Dietary Energy Requirements in Children and Obesity

Data from National health surveys have shown that pediatric obesity is increasing in the U.S. This is a critical health concern because obesity in childhood increases the risk for obesity in adulthood and the many diseases associated with obesity. It has been shown that 26–41 percent of obese preschool children are obese as adults. Diet is considered to be an important variable, especially dietary fat intake. In a study supported by USDA's NRI, investigators showed that maternal obesity influences dietary fat intake in children and in boys there was a correlation between their fat intake and amount of body fat. Researchers have been able to show that physical activity (hrs/day) is more related to body fatness than to energy expenditure (kcal/day). Total energy expenditure is influenced by season and geographic location independent of differences in body composition. Gender influences energy expenditure through its effect on resting energy expenditure and this effect is consistent among several ethnic groups tested. They have been able to provide and validate new tools for assessment of diet, energy expenditure and body composition in growing children, which can be used in the development of new guidelines for dietary energy needs in children.

Vitamin B–6 Kinetics in Women

Vitamin B–6 is required for numerous metabolic functions. Lower serum levels of vitamin B–6 have been found in pregnant women. It is still unclear what is a good method for assessing vitamin B–6 status in people, especially in women during pregnancy and lactation, a time of stress. Pyridoxal, pyridoxamine and pyridoxine are the forms of vitamin B–6 found in the body and these metabolites provide critical information about vitamin B–6 status. In a study supported by USDA NRI, investigators examined the appearance of a stable isotope given to women in pyridoxic acid (important vitamin B–6 metabolite) in urine and in pyridoxal in milk of lactating women. They have shown that lactation may have a greater influence on vitamin B–6 metabolism than pregnancy. The researchers have also shown that using standard clinical assays for alkaline phosphatase and phosphorus may be used to estimate pyridoxine phosphate phosphatase activity in undiluted plasma, an indicator of vitamin B–6 status.

Vitamin A Critical to Embryonic Development

Numerous studies have shown that adequate vitamin A is critical for normal embryonic and fetal development in humans. Maternal insufficiency of vitamin A during pregnancy results in several abnormalities and death of the fetus. In a study

supported by USDA's NRI, the investigators used an avian model to look at the physiological function of vitamin A in early development. In vitamin A-deficient embryos no retinoic acid (metabolite of vitamin A) was found. However, normal early embryos were shown to be capable of processing vitamin A. Using molecular biology techniques, developmental patterns between normal and vitamin A-deficient embryos were compared. These studies showed a role for vitamin A in heart, central nervous system and vascular system development. In addition, the researchers were able to identify a valuable marker (retinoic acid receptor beta), which is vitamin A status dependent, for vitamin A-dependent developmental events. It is widely accepted that very early developmental events are similar across species, thus the finding of this research is relevant to human embryonic development, which could lead to a scientific basis for evaluating vitamin A nutrition in humans.

RESEARCH FUNDING MECHANISMS AND ISSUES

Competitive Grants

A competitive system for allocating government research funds is the most effective and efficient mechanism for focusing efforts on cutting edge research aimed at improving the health of the American people. Competitive grants provides the most effective, efficient and economic return to the public. ASNS strongly supports the competitive grants process as reflected in the National Research Initiative and believes that an open, merit and peer review process, applied as extensively as possible throughout the research system, is the preferred way to distribute research funds among qualified scientists and to support the most meritorious new concepts.

Special Grants

ASNS strongly believes that the best research results come from research that is peer reviewed. That is why researchers funded by federal agencies, such as the NIH and the NSF, that award grants on merit have made such great progress. There is a danger that special grants and earmarked research funds from USDA may be awarded on the basis of politics rather than merit, priority or research need. Therefore, the integrity of the research system and agricultural science may be eroded. Last year special grants were appropriated at $66 million even though the Administration's request for this year was just over half of that figure. We recognize that there is pressure to maintain these special grants. Special grants, however, do not always make for the best science or good use of scientific expertise. While special grants have their place to address emergency needs of national priority such as food safety, they may also be used to address research that is not deemed of the highest priority or merit. Thus, the proportion of special grants in comparison to the total research budget at USDA should be decreased.

INITIATIVE FOR FUTURE AGRICULTURE AND FOOD SYSTEMS IN THE RESEARCH, EXTENSION, AND EDUCATION REAUTHORIZATION BILL

The Agricultural Research, Extension, and Education Reform Act, which has been agreed upon in conference, and still pending in the Senate (4/29/98) includes an Initiative that would create new mandatory spending that provides $600 million for funding competitively-awarded research programs at USDA over a five year period. Priority mission areas to be addressed in the first year are food genome, food safety, food technology and human nutrition; new and alternative uses and production of agricultural commodities and products; agricultural biotechnology; and natural resource management. The Initiative also includes provisions that allow merit/peer review and lets those who benefit from agricultural research provide input about the priority setting process. ASNS supports this Initiative and urges members of this subcommittee to support the bill when it comes to the Senate floor.

ANIMAL WELFARE ACT

Research using animals has been crucial to virtually every advance in medicine in the past century. Agents for control of high blood pressure and the management of diabetes, vaccines for the control of poliomyelitis and mumps, development of artificial joints and heart-lung machines, and many more medical advances have depended on animal research.

USDA's Animal and Plant Health Inspection Service (APHIS) is charged by Congress to enforce the Animal Welfare Act (AWA). Under the AWA, USDA licenses dealers to buy and sell random-source animals to research facilities that are unable to obtain them from municipal pounds and shelters. This provides access to a critical supply of animals since animals bred specifically for research often lack characteristics needed by researchers studying health-related problems. Much of their work relies on older, larger, and genetically diverse animals.

ASNS recommends that Congress provide APHIS with adequate funding for enforcement of the Animal Welfare Act in fiscal year 1999 so that it can continue to ensure compliance with the AWA.

CLOSING REMARKS

Agriculture has been and will continue to be important to human health in terms of food that provides proper nutrition for healthier people. As the future challenges us with more complicated diseases, research is forced to expand outside the traditional disciplines and approaches, such as the work that is being done is plant and animal genomics. Transgenic plants and animals offer potential for new developments never before thought possible. New approaches must be implemented to address new societal concerns. For example, despite our hard efforts to plan healthy diets for school children much of this food is being wasted. Nutritionists are constantly challenged to develop nutrient-balanced meals that will encourage our children to choose more healthful foods. New demands to fit busy lifestyles is another example. Issues such as product convenience, uniformity of products, ease of preparation, "automatic" nutrient balancing, and packaging are all areas scientists must address. Research in areas of how our food is produced, pesticide usage, animal care and food handling issues also present demands to our scientists. These demands and opportunities must be answered in a way that sustains or enhances our quality of life. Although greater challenges lie ahead, agricultural research funding continues to be stagnant.

It is for these reasons that ASNS recommends to the Committee an increase in funding for USDA's National Research Initiative Competitive Grants Program from $97 million to $130 million. This amount reflects our view that the increase requested for the competitive grants program is an investment which will lead to a more balanced and productive research system that is vital to our national interest.

PREPARED STATEMENT OF CAROLYN CHENEY, CHAIRMAN, AMERICAN SUGAR ALLIANCE

Thank you for the opportunity to submit testimony for this important hearing. I am Carolyn Cheney, Washington Representative for the Sugar Cane Growers Cooperative of Florida. I also serve as chairman of the American Sugar Alliance, of which my cooperative is a member. The ASA is a national coalition of growers, processors, and refiners of sugarbeets, sugarcane, and corn for sweetener. I am proud to present the views not only of the Sugar Cane Growers Cooperative of Florida, but also of the American Sugar Alliance.

SUMMARY

The U.S. sugar industry has long endorsed the goal of global free trade because we are efficient by world standards and would welcome the opportunity to compete on a genuine level playing field. Until we achieve that free trade goal, however, we must retain at least the minimal, transitional sugar policy now in place to prevent foreign subsidized, dump market sugar from unfairly displacing efficient American producers. This policy was substantially modified by Congress in the 1996 Farm Bill, but remains highly beneficial to American taxpayers and consumers.

Despite its free trade goal, however, the sugar industry has some serious concerns about the structure of future multilateral or regional trade agreements.

Multilaterally, we are concerned that, while U.S. agriculture unilaterally far surpassed its Uruguay Round commitments through huge government cutbacks in the 1996 Farm Bill, many foreign countries have yet to even minimally comply with their Uruguay Round commitments.

Regionally, we are facing serious problems with both Canada and Mexico. Canada is exploiting a loophole to circumvent the U.S. tariff-rate quota for sugar and threaten the no-cost operation of U.S. sugar policy. Mexico, three years after the NAFTA went into effect, is calling into question the validity of special sugar provisions to which it agreed before the NAFTA was voted upon and approved.

American sugar farmers want free trade. But we have trouble moving further in that direction when past free trade agreements are being ignored, or circumvented, by our trading partners, to the possible detriment of our farmers.

I would like to provide some background on the United States' role and standing in the world sugar economy and on U.S. sugar policy's effect on American consumers and taxpayers and discuss the U.S. sugar industry's trade policy goal, concerns, and recommendations, with special focus on the next round of World Trade Organization (WTO) talks.

BACKGROUND ON U.S. SUGAR INDUSTRY, POLICY

Size and Competitiveness.—Sugar is grown and processed in 17 states and 420,000 American jobs, in 40 states, are dependent, directly or indirectly, on the production of sugar and corn sweeteners. The United States is the world's fourth largest sugar producer, trailing only Brazil, India, and China. The European Union (EU), taken collectively, is by far the world's largest producing region. It benefits from massive production and export subsidy programs.

Despite some of the world's highest government-imposed costs for labor and environmental protections, U.S. sugar producers are among the world's most efficient. According to a study released in 1997 by LMC International, of Oxford, England, American sugar producers rank 19th lowest in cost among 96 producing countries, most of which are developing countries. According to LMC, fully two-thirds of the world's sugar is produced at a higher cost per pound than in the United States.

Because of our efficiency, American sugar farmers would welcome the opportunity to compete against foreign farmers on a level playing field, free of government subsidies.

Unfortunately, the extreme distortion of the world sugar market makes any such free trade competition impossible today.

World Dump Market.—More than 100 countries produce sugar and the governments of all these countries intervene in their sugar markets in some way. The most egregious, and most trade distorting, example is the EU. The Europeans are higher cost sugar producers than we are but they enjoy price supports that are 40 percent higher—high enough to generate huge surpluses that are dumped on the world sugar market, for whatever price they will bring, through an elaborate system of export subsidies.

World trade in sugar has always been riddled with unfair trading practices. These practices have led to the distortion in the so-called "world market" for sugar. These distortions have led to a disconnect between the cost of production and prices on the world sugar market, more aptly called a "dump market". Indeed, for the period of 1984/85 through 1994/95, the most recent period for which cost of production data are available, the world dump market price averaged just a little more than 9 cents per pound raw value, barely half the world average production cost of production of over 18 cents.

Furthermore, its dump nature makes sugar the world's most volatile commodity market. Just in the past two decades, world sugar prices have soared above 60 cents per pound and plummeted below 3 cents per pound. Because it is a relatively thinly traded market, small shifts in supply or demand can cause huge changes in price.

As long as foreign subsidies drive prices on the world market well below the global cost of production, the United States must retain some border control. This is our only response to the foreign predatory pricing practices that threaten the more efficient sugar farmers.

The reformed sugar policy of the 1996 Farm Bill does retain the Secretary of Agriculture's ability to limit imports, and also provides a price support mechanism, though only when imports exceed 1.5 million short tons. We are currency only 240,000 tons above chat critical trigger level.

Sugar Reforms.—The 1996 Farm Bill drastically changed U.S. sugar policy, as it did ocher commodity programs. All American farmers, including sugar farmers, now face a less certain future, with less government intervention, higher risk, and the prospect of lower prices.

There were six major reforms to U.S. sugar policy in the 1996 Farm Bill:

1. *Marketing allotments eliminated.*—With no production controls, we now have a domestic free market for sugar. Less efficient producers are more likely to go out of business; more efficient producers are free to expand. Just two months ago, the only sugarbeet processing company in Texas announced it is closing, ending sugarbeet production in that state, because of low returns.

2. *Guaranteed minimum price eliminated.*—Sugar is the only program crop that has lost the guarantee of non-recourse loans and a minimum grower price. Sugar producers will have access to non-recourse loans only when imports exceed 1.5 million short tons.

3. *Minimum imports effectively raised.*—Under the Uruguay Round of the GATT, the U.S. was required to import no less than 1.256 million tons of sugar per year. The non-recourse loan trigger of 1.5 million tons effectively raises our import minimum to that level, a unilateral increase of 20 percent.

4. *Marketing tax raised.*—The special marketing assessment, or tax, sugar producers must pay to the government was raised by 25 percent, to 1.375 percent of the loan rate on every pound of sugar produced. This added burden on sugar farmers

will generate about $40 million per year for the U.S. Treasury, with all this money earmarked for federal budget deficit reduction.

5. *Forfeiture penalty initiated.*—To discourage forfeiture of loans to the government when non-recourse loans are in effect, and to raise even more money for the U.S. Treasury, a 1-cent per pound forfeiture penalty was initiated.

6. *Commitment to further reductions.*—A provision called "GATT Plus" requires that the U.S. will reduce its sugar supports further if, and when, foreign countries surpass their Uruguay Round commitments, as the U.S. has done.

Effect on Consumers.—American consumers and food and candy manufacturers benefit from high-quality, dependable, reasonably priced supply of sugar. Consumer prices in the United States are fully 32 percent below the developed-country average, according to a world survey by LMC International. Compared with consumers worldwide, and taking varying income levels into account, LMC found that in terms of minutes to purchase one pound of sugar, American consumers are the second lowest in the world, trailing only the tiny country of Singapore.

Consumer Cost Myths.—The food manufacturer critics of U.S. sugar policy repeatedly point to a severely flawed 1993 General Accounting Office study that estimated a consumer cost of U.S. sugar policy at $1.4 billion per year. Experts at the U.S. Department of Agriculture have twice vilified this flawed report, as have noted academicians. More recently critics are citing a Public Voice "update," which mimicked the faulty methodology of the GAO report and dropped this supposed cost to $1.2 billion.

Both of these absurd studies assumed that: (1) All U.S. sugar needs could be supplied from the world dump market at a price well below the world average cost of production; (2) We could fulfill our needs from this thinly traded, highly volatile world market without that price increasing at all; and (3) Every penny of the food manufacturers' and retailers' savings from the lower dump market sugar prices would be passed along to consumers.

For reasons I have already outlined, it is clear that if the United States destroyed its sugar industry and shifted all its demand for sugar to the thinly traded world dump market—which would increase demand on that market by about 50 percent—the price would skyrocket, as it has in the past with far smaller surges in offtake.

To address the third and most outrageous of these assumptions, one need only examine price behavior of the past year, or the past decade. History shows absolutely no passthrough.

No Passthrough to Consumers.—Since Farm Bill reforms went into effect in October 1996, both raw cane and wholesale refined beet sugar prices to producers have dropped dramatically, wholesale refined prices by a whopping 12 percent. But at the retail level, not even the price of sugar on the grocery shelf has dropped at all. And prices for sweetened products, such as candy, cereal, ice cream, cakes, and cookies have all risen by 1–5 percent. Looking back to price changes since 1990, the story remains the same: producer prices down, by 6–10 percent, but consumer prices for sugar and products up, with product prices rising 18–26 percent.

The disconnect between producer and consumer prices is even more pronounced with regard to beverages. Over the past year high fructose corn syrup producers have suffered a catastrophic 50 percent drop in the price for their product, the principal sweetener used in American soft drinks. Have cola consumers seen any benefit? Not a bit. Carbonated drink prices are up, by almost 1 percent, over the same period.

Effect on Taxpayers.—Not only has U.S. sugar policy been run at no cost to the government since 1985, but since 1991 it has been a revenue raiser. The marketing assessment burden on sugar farmers will generate an estimated $288 million for federal budget deficit reduction over the seven years of the 1996 Farm Bill.

U.S. SUGAR INDUSTRY'S FREE TRADE GOAL

Because of our competitiveness, with costs of production well below the world average, the U.S. sugar industry supports the goal of genuine, global free trade in sugar. We cannot compete with foreign governments, but we are perfectly willing to compete with foreign farmers in a truly free trade environment.

We were the first U.S. commodity group to endorse the goal of completely eliminating government barriers to trade at the outset of the Uruguay Round, in 1986. We understand we are the first group to endorse this same goal prior to the start of the 1999 multilateral trade round. We described our goals and concerns to the Administration in a letter last May to Trade Representative Barshefsky and Agriculture Secretary Glickman.

The U.S. sugar industry does not endorse the notion of free trade at any cost. The movement toward free trade must be made deliberately and rationally, to ensure

fairness and to ensure that those of us who have a global comparative advantage in sugar production are not disadvantaged by allowing distortions, exemptions, or delays for our foreign competitors.

To achieve a free trade transition process that is rational and fair, we offer the following thoughts on past agreements, and our concerns and recommendations regarding future negotiations.

SUGAR AND THE URUGUAY ROUND

Little Effect on World Sugar Policies.—More than 100 countries produce sugar and all have some forms of government intervention. Unfortunately, these policies were not significantly changed in the Uruguay Round Agreement (URA) of the GATT.

—The agreement failed to reduce the European Union's lavish price support level and requires only a tiny potential drop in their massive export subsidies.

—Developing countries, which dominate world sugar trade, have little or no labor and environmental standards for sugar farmers, have no minimum import access requirements, and often have high import tariffs. Nonetheless, developing countries were put on a much slower track for reductions, or were exempted altogether.

—Important sugar-producing and importing countries such as China and the former Soviet republics are not GATT members, and need to do nothing.

—State trading enterprises (STE's) that are prevalent in sugar-producing countries such as Australia, Brazil, China, Cuba, and India were ignored.

Furthermore, some countries have not yet even complied with their URA commitments.

U.S. Sugar Surpasses URA Requirements.—The United States is one of only about 25 countries that guarantees a portion of its sugar market to foreign producers and it has far surpassed is URA commitment on import access. The URA required a minimum access of 3–5 percent of domestic consumption. The United States accepted a sugar-import minimum that amounts to about 12 percent of consumption. In practice, U.S. imports the past two years have averaged 24 percent—double the promise we made in the GATT, and about six times the global GATT minimum.

All this sugar imported from 41 countries under the tariff-rate quota enters the United States at the U.S. price, and not at the world dump price. Virtually all this sugar enters duty free. Just five countries (Argentina, Australia, Brazil, Gabon, and Taiwan) that lack Generalized System of Preferences (GSP) status pay a duty, and that is quite small, about 0.6 cents per pound.

The United States calculated its above-quota tariff rate in the manner dictated by the URA. These tariff levels are totally GATT consistent, and are dropping by 15 percent over the 6-year transition period, as we promised they would in the Uruguay Round.

SUGAR AND THE NAFTA

Canada.—Sugar trade between the United States and Canada, which imports about 90 percent of its sugar needs, was essentially excluded from the NAFTA. U.S.-Canadian sugar trade is governed mainly by the U.S.-Canada Free Trade Agreement and by the WTO.

Currently, Canada is threatening the integrity of U.S. sugar policy by circumventing the quota with a new product referred to in the trade as "stuffed molasses"—a high-sugar product not currently included in U.S. sugar TRQ classifications. USDA has estimated imports of this product could add 125,000 tons of non-quota sugar to the U.S. market this year. That amount could grow if this loophole is not closed.

Mexico.—Mexico had been a net importer of sugar for a number of years prior to the inception of the NAFTA. Nonetheless, the NAFTA provided Mexico with more than three times its traditional access to the U.S. sugar market during the first six years, 35 times its traditional access in years 7–14, and virtually unlimited access thereafter.

These provisions were negotiated by the U.S. and Mexican governments and contained in President Clinton's NAFTA submission to the U.S. Congress, which Congress approved in November 1993. Nonetheless, Mexico is now undermining the integrity of the NAFTA by claiming the sugar provisions are somehow invalid.

CONCERNS REGARDING THE 1999 TRADE ROUND

Export Subsidies.—The most distorting practice in world agricultural trade is export subsidies. In the world sugar market, subsidized exports by the EU alone amount to about a fifth of all the sugar traded each year.

Export subsidies provide countries the mechanism to dispose of surpluses generated by high internal production subsidies. In the absence of export subsidies as a surplus-removal vehicle, countries would have to reduce their production supports.

The Uruguay Round did not significantly reduce the amount of sugar sold globally with export subsidies.

State Trading Enterprises (STE's).—STE's are quasi-governmental, or government-tolerated organizations that support domestic producers through a variety of monopolistic buyer or seller arrangements, marketing quotas, dual-pricing arrangements, and other strategies. These practices were ignored in the Uruguay Round, but are, unfortunately, common in the world sugar industry. Major producers such as Australia, Brazil, China, Cuba, and India have sugar STE's, but were not required to make any changes in the Uruguay Round.

Compliance with Past Agreements.—While the United States has far surpassed its Uruguay Round commitments, many other countries have yet to even minimally comply. Numerous examples exist where export subsidies, internal supports, and import tariffs for many crops are not in compliance with GATT. A key example in sugar is the Philippines' failure to lower its import tariffs.

In the NAFTA, Mexican sugar producers are casting doubts on the validity of the sugar provisions, three years after the agreement's inception, and have slammed the door on imports of U.S. corn sweeteners with duties as high as 100 percent.

Widely Varying Levels of Support.—Unilateral reforms to U.S. agriculture policy in the 1996 Farm Bill far exceeded U.S. commitments made the year before in the Uruguay Round. Furthermore, developing countries, which dominate world agricultural trade and particularly sugar trade, were subject to a slower pace of reductions, if any.

As a result, the United States is way out in front of the rest of the world in removing its government from agriculture and has placed its farmers in a domestic free market situation. This gap makes American farmers uniquely vulnerable to continued subsidies by foreign competitors.

In sugar, two examples come to mind: (1) The EU sugar support price is approximately 40 percent higher than the stand-by U.S. support price. The Uruguay Round's formula-driven percentage reductions in support levels do not reduce the gap between the EU and the U.S. at all. (2) Actual U.S. sugar imports the past two years have been nearly double the 1.26-million-ton minimum import commitment the U.S. made in the Uruguay Round and about six times the URA global minimum.

It is key that American fanners not be penalized for attempting to lead the rest of the world toward free agricultural trade. American farmers must be given credit for the reforms they have endured.

Labor and Environmental Standards.—The gap in government standards—and resulting producer costs—between developed and developing countries is well documented and immense. In sugar, the gap is particularly pronounced because, while the EU and the U.S. are major players, production and exports are highly dominated by developing countries, especially in the cane sector.

For example, the LMC International survey of global production costs revealed labor costs—per worker, per day—in Malawi, ostensibly one of the world's lowest cost producers, to be a mere one-hundredth of the average wages paid to sugarcane workers in Hawaii.

Sugar producers in Florida, and every sugar-producing state in America, comply with the world's highest standards for environmental protection—at a price. For example, the Everglades Forever Act (EFA) mandates that Florida farmers pay at least $232 million in taxes for Everglades preservation activities—on top of the many costs borne by farmers to monitor and clean water leaving farm areas. In Hawaii, extremely high environmental compliance costs have been a factor in driving two-thirds of the state's sugar growers out of business in the past 10 years. In many developing countries, by contrast, sugar mills face no restrictions, or no enforcement of restrictions, on the quality of water or air emissions.

American sugar farmers are proud to raise sugar with the highest possible regard for workers and the environment. But we should not be penalized in multilateral trade negotiations for providing these costly protections. And foreign countries that do not provide such protections should not be rewarded.

If we are attempting to globalize our economy, we should also globalize our food safety and worker and environmental protection responsibilities.

Formula Driven Trade Strategy.—For the many reasons I have outlined, the rigid, formula-driven, or "one-size-fits-all," approach for trade concessions does not work for agriculture in general, or for sugar in particular. Pursuing this approach would:

—Fail to reduce the gap in supports between countries—lowering the playing field, but not leveling it;

—Again give developing countries a free ride;

—Further diminish our negotiating leverage, which was severely reduced through our unilateral concessions in the 1996 Farm Bill.

To date, we have led the world in trade barrier reductions and we are disadvantaged as long as the rest of the world fails to follow our example.

We can turn our unilateral concessions to our advantage only if we follow a request/offer strategy. Essentially, we provide foreign countries the incentive to reduce their government programs by promising to reduce ours further when, and only when, they have reduced their export subsidies, internal support, import tariffs, and STE or similar practices to our levels.

RECOMMENDATIONS FOR THE 1999 TRADE ROUND

To address these concerns, we would like to make four recommendations for U.S. negotiators in the next trade round.

1. Elimination of export subsidies, the most trade distorting of all practices, and of state trading enterprises, which were ignored previously, must be given top priority in the next trade round.

2. The United States should not reduce its government programs any further until other countries have complied with their Uruguay Round commitments and have reduced their programs to our level.

3. The wide gap in labor and environmental standards between developed and developing countries must be taken into account in the next trade round, and addressed in a manner that ensures global standards rise to developed-country levels, rather than fall to developing-country levels.

4. We can address the huge disparities in supports among nations and turn the United States' unilateral concessions to our advantage only if we follow a flexible, request/offer type of strategy in the next trade round.

CONCLUSION

In conclusion, Mr. Chairman, thank you for convening this timely and important hearing. U.S. agriculture is extremely vulnerable as we approach the next trade round. If we negotiate carefully and rationally, however, there is enormous potential for responsible American producers to compete and prosper in a genuine free trade environment, free from the need for government intervention. Thank you for the opportunity to participate.

PREPARED STATEMENT OF BERNARD H. BERNE, M.D., PH.D.

APPROPRIATION FOR FDA CONSOLIDATION

I am a resident of Arlington, Virginia. I serve the Food and Drug Administration (FDA) as a Medical Officer and as a reviewer medical device approval applications. I am testifying as a private individual. I ask your Subcommittee to appropriate $4,000,000 for FDA to study the feasibility of consolidating its facilities at the Southeast Federal Center or at another site that is within half a mile of a Metro Station in the Washington Metropolitan Area.

The FDA Revitalization Act (Public Law 101–635, Nov. 28, 1990) (104 Stat. 4583 et seq.) authorizes the Secretary of Health and Human Services (the Secretary), in consultation with the Administrator of the General Services Administration (GSA), to "enter into contracts for the design, construction, and operation of a consolidated Food and Drug Administration administrative and laboratory facility." It is therefore the responsibility of your Subcommittee to initiate the appropriations of funds to permit the Secretary to develop this single facility.

In the past, Treasury, Postal Services, and General Government Appropriations Acts have appropriated funds to GSA to construct separate consolidated FDA facilities in Montgomery and Prince George's Counties, Maryland. Public Law 101–635 did not authorize these appropriations, since this law only authorized a single facility and only authorized the GSA Administrator to consult with the Secretary regarding this project.

Further, because of a 1995 rescission (Public Law 104–19, July 17, 1995) and the lack of proper authorization for later appropriations, there are presently no funds available to GSA or to FDA to design, construct, or operate the consolidated facilities.

GSA is presently making plans to develop the two new separate consolidated facilities for FDA. These facilities would be located far from each other in College Park in Prince George's County and in White Oak in Montgomery County. If supported by appropriations, GSA's plans would negate the goal of Public Law 101–635, which authorizes only a single consolidated facility.

There does not appear be any benefit to the government for FDA to consolidate in two locations, rather than in one. This is a wasteful type of consolidation that is not cost-effective to the government or to the public.

In 1991, a Conference Committee of the Treasury, Postal Services, and General Government Subcommittees (Treasury Subcommittees) of the House and Senate Committees on Appropriations created this double "consolidation" so that the two facilities would serve the political jurisdictions represented by certain members of the Treasury Subcommittees (House Report 102–234 (Oct. 3, 1991)). This so-called "consolidation" would benefit neither FDA, the federal government, the general public, the federal taxpayer, nor the Washington Metropolitan Area.

The Congressional division of the single consolidated facility and the forced suburban locations of the resultant FDA buildings contradicted both Public Law 101–635 and an existing Executive Order that is designed to strengthen the Nation's central cities. The location of the facilities also contravened a long-standing National Capital Region Planning Commission goal of retaining and increasing federal employment in the District of Columbia. It is difficult to find a worse example of "pork-barrel" legislation.

It is therefore necessary for your Subcommittee to review this situation and to appropriate funds to the Secretary of Health and Human Services (not to the GSA Administrator) to design and construct a single consolidated FDA headquarters facility. Your Subcommittee also needs to encourage the Secretary to locate the facility at a site that conforms with existing Executive Orders and Presidential policies that direct the placement of federal facilities in urban areas and in the National Capital Region. Previous appropriations acts relating to the FDA consolidation have disregarded these Orders and policies.

Former President Jimmy Carter's Executive Order 12072 (August 19, 1978, 43 F.R. 36869 (Federal Space Management)) states in Section 1–1 (Space Acquisition), Subsection 101: "Federal facilities and Federal use of space in urban areas shall serve to strengthen the nation's cities and to make them attractive places to live and work. Such Federal space shall conserve existing urban resources and encourage the development and redevelopment of cities."

Section 1–1, Subsection 1–103 of the Executive Order states: "Except where such selection is otherwise prohibited, the process for meeting Federal space needs in urban areas shall give first consideration to a centralized community business area and adjacent areas of similar character, including other specific areas which may be recommended by local officials." Section 1–3, Subsection 1–301 of the Executive Order states: "The heads of Executive agencies shall . . . economize on their use of space."

President William J. Clinton has reaffirmed the Administration's commitment to Executive Order 12072 in his Executive Order 13006, May 21, 1996 (61 F.R. 26071). Section 1 (Statement of Policy) states: "Through the Administration's community empowerment initiatives, the Federal Government has undertaken various efforts to revitalize our central cities, which have historically served as the centers for growth and commerce in our metropolitan areas. Accordingly, the Administration hereby reaffirms the commitment set forth in Executive Order No. 12072 to strengthen our nation's cities by encouraging the location of Federal facilities in our central cities."

In March, 1997, President Clinton ordered his Cabinet Secretaries to assure that federal agencies do not leave the District of Columbia. The President considers this action to be an important element in his plan to revitalize the District.

Despite all of the above Executive policies and orders, GSA and FDA are presently planning to locate the major consolidated facility on a sprawling 130-acre site at White Oak, Maryland. According to GSA's 1996 Draft Environmental Impact Statement for the project, no building on this campus-like site would exceed six stories in height. The campus' site plan is clearly not intended to economize on the use of space.

White Oak is located about a mile outside of the Capital Beltway in a suburban area of Montgomery County that is far from any centralized business area, is not in any city, and is three miles from the nearest Metrorail station. The highways and roads near White Oak are among the most congested and dangerous of all traffic arteries in the Washington Metropolitan Area.

If implemented as GSA intends, the Prince George's and Montgomery Counties consolidations would relocate about 1000 FDA employees out of D.C. and would encourage associated development to occur in the District's suburbs, rather than in the District itself. The White Oak facility's decentralized location would discourage FDA's visitors and employees from using Metrorail and would force nearly all employees to drive to work. FDA's consolidations would therefore serve to weaken a central city, rather than to strengthen it.

Your Subcommittee needs to take control of the FDA consolidation process and to stop this wasteful type of planning. Appropriations legislation should encourage the Secretary to consolidate FDA in a compact facility that can fit into the District of Columbia's central business area and is convenient to Metrorail.

It is not difficult to achieve such an economy of space. FDA's major headquarters presently occupy an 18-story building (the Parklawn Building in Rockville, MD). Further, the National Institutes of Health constructed in 1980 a 13-story building at its Clinical Center in Bethesda, MD, to house many of its clinical research laboratories. The FDA consolidated facility can thus be entirely accommodated in several high-rise buildings located close to each other in Washington, D.C.

GSA controls a large amount of underutilized federal space at the Southeast Federal Center. This space is located next to the Navy Yard Metrorail station in downtown Washington, D.C.

The Southeast Federal Center is only a mile from Capitol Building and from the headquarters of the Department of Health and Human Services in the Hubert H. Humphrey Building. It is thus an ideal site for the FDA consolidation.

The Southeast Federal Center can easily accommodate the FDA consolidation. GSA's plans for the Federal Center show that there is more developable space available at the site than FDA requires for its entire consolidation. No appropriated funds are presently available to construct any federal facilities at this location, which is largely vacant or occupied by obsolescent facilities.

In the National Capital Planning Commission's March, 1996, Plan for Washington's Monumental Core, a proposal in the category of "Economic Development" states: "Assist the transformation of the Southeast Federal Center and adjacent Navy Yard into a lively urban waterfront of offices, restaurants, shops and marinas."

An FDA office and laboratory facility at the Southeast Federal Center would be fully consistent with this goal. The facility would further help to compensate for the relocations of thousands of federal employees from the District of Columbia to suburban sites in Maryland and Virginia that have taken place in recent years. During the last two decades, these relocations have contradicted Executive Order 12072 and have greatly contributed to the decline of the District's economy.

Because of budgetary constraints and of FDA's uncertain future, your Subcommittee should not appropriate a large amount of funding to the Secretary for the FDA consolidation at this time. However, a small appropriation is needed to encourage FDA and GSA to begin to plan for a consolidation at the Southeast Federal Center or at another location in the District of Columbia.

I therefore request that your Subcommittee initiate a fiscal year 1999 appropriation of $4,000,000 to FDA for the specific purpose of studying the feasibility of constructing a single consolidated FDA administrative and laboratory headquarters facility within half a mile of a Metrorail station in the Washington Metropolitan Area. Legislative or Committee Report language can direct or request the Secretary to give first consideration to the Southeast Federal Center in Washington, D.C., as the site for the consolidation.

Thank you.

PREPARED STATEMENTS OF MICHAEL P. KENNY, EXECUTIVE OFFICER, CALIFORNIA AIR RESOURCES BOARD; BARBARA PATRICK, MEMBER, BOARD SUPERVISORS OF KERN COUNTY AND MEMBER, CALIFORNIA AIR RESOURCES BOARD; MANUEL CUNHA, JR., PRESIDENT, NISEI FARMERS LEAGUE; LES CLARK, VICE PRESIDENT, INDEPENDENT OIL PRODUCERS' ASSOCIATION; AND CATHERINE H. REHEIS, MANAGING COORDINATOR, WESTERN STATES PETROLEUM ASSOCIATION, ON BEHALF OF THE CALIFORNIA INDUSTRY AND GOVERNMENT COALITION ON PM–10/PM–2.5

Mr. Chairman and Members of the Subcommittee: On behalf of the California Industry and Government Coalition on PM–10/PM–2.5, we are pleased to submit this statement for the record in support of our fiscal year 1999 funding request of $436,500 (one-half of the historical baseline split between California and Washington) from CSREES, for the California Regional PM–10/PM–2.5 Air Quality Study.

The San Joaquin Valley of California and surrounding regions exceed both state and federal clean air standards for small particulate matter, designated PM–10/PM–2.5. The 1990 federal Clean Air Act Amendments require these areas to attain federal PM–10/PM–2.5 standards by December 31, 2001. Attainment of these standards requires effective and equitable distribution of pollution controls that cannot be determined without a major study of this issue.

According to EPA and the California Air Resources Board, existing research data show that air quality caused by the PM–10/PM–2.5 problem has the potential to

threaten the health of more than 3 million people living in the region, reduce visibility, and impact negatively on the quality of life. Unless the causes, effects and problems associated with PM–10/PM–2.5 are better addressed and understood, many industries will suffer due to production and transportation problems, diminishing natural resources, and increasing costs of fighting a problem that begs for a soundly researched solution.

PM–10/PM–2.5 problems stem from a variety of industry and other sources, and they are a significant problem in the areas that are characteristic of much of California. Typical PM–10/PM–2.5 sources are dust stirred up by vehicles on unpaved roads, and dirt loosened and carried by wind during cultivation of agricultural land. Soil erosion through wind and other agents also leads to aggravation of PM–10/PM–2.5 air pollution problems.

The agriculture portion of this study will be developing specific types of information, tools and techniques needed to develop an inventory and the management practices that will most likely be part of the control strategies. They are: (1) validate method or methods for accurately measuring fugitive PM–10/PM–2.5 emission rates from an individual site or operation; (2) a method to easily and quickly estimate PM–10/PM–2.5 emissions; (3) an accurate inventory of fugitive PM–10/PM–2.5 dust sources by individual farming operations; (4) validated (field tested) best management practices; (5) a clear understanding of significant factors that effect PM–10/PM–2.5 emissions; and (6) a workable, validated model or models for predicting PM–10/PM–2.5 emission, based on operational parameters.

The primary focus of the short term objectives is on those soils, practices, and conditions presumed to have the highest PM–10/PM–2.5 emissions. Priority for this work will be focused on the following situations, practices, and crops within the study area.

Almond, Walnut and Fig Harvest: Preparation for harvest; Shaking trees; Windrowing; Picking up nuts; and Ambient conditions before and after.

Cotton Harvest: Harvesting—1st and 2nd picking; Shredding of stalks; Stalk incorporation; and Ambient conditions before and after.

Dairy Industry: Dairy Lagoons and Livestock Corrals.

Fall/Spring Land Preparation: Deep tillage; Discing; Land planning; Bed formation; Ambient conditions before and after.

Feedlots: Feedlot activities.

Grain Harvesting: Harvesting; Stubble incorporation; Discing; Burning.

Land Leveling: Appropriate practices.

The importance of this study on PM–10/PM–2.5 is underscored by the need for more information on how the federal Clean Air Act Amendments standards can be met effectively by the business community, as well as by agencies of federal, state and local government whose activities contribute to the problem, and who are subject to the requirements of Title V of the Clean Air Act. There is a void in our current understanding of the amount and impact each source of PM–10/PM–2.5 actually contributes to the overall problem. Without a better understanding and more information—which this study would provide—industry and government will be unable to develop an effective attainment plain and control measures.

Agriculture wants to be a part of the effort to solve this major problem, but to do so, we need federal assistance to support research and efforts to deal effectively with what is essentially an unfunded federal mandate.

Agriculture and industry, in concert with the State of California and local government entities, are attempting to do our part, and we come to the appropriations process to request assistance in obtaining a fair federal share of financial support for this important research effort. In 1990, our Coalition joined forces to undertake a study essential to the development of an effective attainment plan and effective control measures for the San Joaquin Valley of California. This unique cooperative partnership involving federal, state and local government, as well as private industry, has raised more than $19 million to date to fund research and planning for a comprehensive PM–10/PM–2.5 air quality study. Our cooperative effort on this issue continues, and our hope is that private industry and federal, state and local governments will be able to raise an additional $8 million over the next two years to fund this important study.

To date, this study project has benefited from federal funding provided through USDA's, DOT's, DOD's, EPA's, and Interior's budgets—a total of $10.6 million in federal funding, including $436,500 from USDA (one-half of CSREES amount provided for California and Washington) in the last three fiscal years. State and industry funding has matched this amount virtually dollar for dollar.

The UC Davis research into the contribution of agriculture to airborne PM–10 in the San Joaquin Valley has produced a number of interim results. Some of these results have already been incorporated into the San Joaquin Valley Unified Air Pol-

lution Control District's planning, and additional research efforts have been planned in consultation with district personnel.

The agricultural emissions research is critical to the district's efforts to understand and control PM–10 in the valley. The San Joaquin Valley is a serious nonattainment area for PM–10 and also experiences high concentrations of PM–2.5. The district's strategies toward PM–10 emissions from agriculture focus on research to identify activities that significantly contribute to the PM–10 problem, and then to develop feasible methods of controlling emissions from those sources. Without this information, the district could be demanded to control agricultural sources in ways that may or may not be effective at reducing PM–10. Effective control plans are those that actually reduce PM–10 concentrations, so that there is some assurance that the cost of implementing them is well-laced.

UC Davis research has produced much better emission factors for the harvesting of cotton than were previously available, and has produced the only available emission factors to date for harvesting almonds. These emission factors were obtained under actual harvest conditions, so should be representative of agricultural operations in the San Joaquin Valley. UC Davis research has also investigated the emissions generated form harvesting figs and walnuts, and the burning of raisin trays. For raisin trays, the results indicate that the emissions are not significant. For fig and walnut harvesting, the results also show that the emissions are not highly significant. Moreover, actions taken to reduce almond harvest emissions will be effective at controlling emissions from fig and walnut harvesting, as these crops use the same harvesting equipment.

UC Davis has initiated research into the emission of ammonia from livestock facilities in the San Joaquin Valley, primarily dairies and feedlots. Approximately half of all ammonia emissions in the San Joaquin Valley is thought to come form animals. This research is significant because ammonia combines with NO in the atmosphere to produce fine particles in the PM–2.5 size range. Further, the ammonia emissions are not well characterized for the livestock management practices prevalent in the San Joaquin Valley, so new information is needed. some preliminary results have been obtained, but they need to be confirmed with additional measurements.

The currently available fugitive dust emission factors approved for use by the U.S. EPA rely on the dry silt content of the soil, defined as the fraction that passes through a 75 PM sieve. The emission factors were developed empirically, and there is scientific disagreement over their utility as a predictive tool. UC Davis research is exploring other methods of defining the potential of a soil to emit PM–10 and has developed laboratory procedures to measure an index of PM–10 emission potential in a repeatable manner. Additional research is ongoing to develop this as a useful tool.

The fugitive dust emissions UC Davis has measured from agricultural operations so far has relied on physically collecting the dust from the plumes on filters. UC Davis has developed a remote sensing lidar (light detection and ranging) instrument to characterize the extent of a dust plume fro afar. This instrument has been used successfully in the field to collect information on the size and shape of dust plumes. Additional research is ongoing to calibrate it and use it to quantitatively measure the dust concentrations. The device will be particularly useful under conditions when it is not possible to collect a valid sample on filters.

During the coming year, UC Davis will focus on the following research areas:

—Fugitive dust emission from land preparation activities. Land preparation is common to nearly all agricultural crops in the valley, but the emission factors from this activity is very poorly defined in the current methods. There is tremendous value in developing better emission factors from this activity.

—Controlled testing of almond harvesting. Almond harvesting is one of the dustiest activities examined to date. This summer, UC Davis plans to test several different harvesters on the same orchard, including the latest harvester from each of the two companies that produce them, as well as the most commonly used harvester of each manufacturer.

—Initiate emissions testing of garlic harvesting. This crop is expanding in the San Joaquin Valley, and is potentially very dusty. A few pilot tests will provide information on how much further this crop should be examined.

—Emissions from livestock management. UC Davis has conducted preliminary testing of dust and ammonia emissions from dairies and feedlots; additional research is needed to acquire a valid database for analysis.

The support of the Department of Agriculture has been indispensable to the completion of the work performed to date. Continued support for this research is essential to assure that decisions made on behalf of improved air quality are based on

scientifically valid information, and that the interests of agriculture are considered in the process.

For fiscal year 1999, our Coalition is seeking federal funding once again through the U.S. Department of Agriculture to support continuation of this vital study in California. In the budget for the Cooperative State Research, Education, and Extension Service (CSREES), we request $436,500, representing one-half of the $873,000 historical baseline split between California and Washington in the past three budget cycles.

The California Regional PM–10/PM–2.5 study will not only provide vital information for a region identified as having particularly acute PM–10/PM–2.5 problems, it will also serve as a model for other regions of the country that are experiencing similar problems. The results of this study will provide improved methods and tools for air quality monitoring, emission estimations, and effective control strategies nationwide. Consequently, the beneficial results of this research will contribute to national policy as well.

The Coalition appreciates the Subcommittee's consideration of this request for a fiscal year 1999 appropriation of $436,500 for U.S.D.A. to support the California Regional Region PM–10/PM–2.5 Air Quality Study.

PREPARED STATEMENT OF DAVID P. HOLVECK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CENTOCOR, INC.

Mr. Chairman and Members of the Subcommittee, I am David P. Holveck, President and Chief Executive Officer of Centocor, Inc., a biotechnology company located in Malvern, Pennsylvania. Like other biotech companies, most of our products are or will be regulated as biological products by FDA's Center for Biologics Evaluation and Research (CBER). CBER—and our emerging industry—face a crisis in research funding. Action by this Committee can resolve this potential crisis and insure informed regulation of biotechnology products, to the benefit of the United States biotechnology industry, and to patient care.

BACKGROUND

Mr. Chairman, as you know, late last year Congress enacted FDA reform legislation[1] that updated antiquated laws and practices applicable to biologics, drugs and medical devices. An integral part of this law was the renewal of the Prescription Drug User Fee Act (PDUFA)[2] under which the pharmaceutical and biotechnology industries pay user fees with most applications submitted to FDA. These fees are paid in exchange for increased numbers of scientific review staff and FDA's agreement to meet specified performance goals in the drug review and approval process.

The FDA reform law reauthorized the PDUFA program, with increased performance goals. Under the first five years of PDUFA, the FDA used a fraction of user fee funds to support research activities related to the drug review process. However, as part of the five year extension of PDUFA, use of user fee monies was restricted to information management, personnel for faster reviews and meetings on investigational new drug applications (as well as review activities themselves). User fee monies may no longer be used to support CBER research activities, even though these activities are an integral part of product regulation. Compounding the problem is the fact that the overall CBER research budget has declined significantly since fiscal year 1994. For the reasons set forth below, many of us in the biotechnology community fear that unless this Subcommittee takes action, a depleted research capability will impede the agency's review and approval process and threaten its mission to protect the public health.

While the Subcommittee has never specified appropriations that may be spent by CBER for research, our best estimates are, that for the fiscal year 1994, CBER's research budget was $18.4 million. This amount declined to $6.9 million for fiscal year 1998. Reductions in user fee monies for research activities of CBER will be $3.5 million in 1999 and CBER's fiscal year 1999 research budget will decline to $4.5 million—a little more than one-quarter of the fiscal year 1994 amount. Without action by this Subcommittee the result will be "reassignment" of 79 full-time equivalent research positions, or approximately 154 biologics center physicians and laboratory scientists, over the next three years to other Federal agencies. CBER's research capability will be severely impacted.

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[1] Food and Drug Administration Modernization Act of 1997 (Public Law 105–115).
[2] Prescription Drug User Fee Act of 1992 (Public Law 102–571).

HISTORY OF CBER AND ITS RESEARCH ACTIVITIES

Historically, CBER has recognized the link between the conduct of original research and appropriate regulation of biological products. Until the early 1970's, what is now CBER was part of the National Institutes of Health—indeed, CBER's headquarters remain on the NIH campus. Since the turn of the century, CBER and its predecessors have been involved in assuring the safety, purity and potency of biological products such as vaccines and blood products. Research was an indispensable component of these responsibilities, since often standards for biological products could only be developed after gaining an understanding of the products themselves. For over 90 years, CBER has maintained a tradition that combines scientific research with product review.

Mr. Chairman, today CBER also regulates products derived from new, emerging technologies. CBER regulates AIDS drugs, gene therapy, monoclonal antibodies and other products resulting from the genius of biotechnology. In many cases, regulatory issues related to new and emerging technologies are not initially well understood. Thus, the agency must conduct research in biomedical areas to develop the expertise necessary to address new technologies and issues, develop and validate testing methodologies, and establish standards for new biological products. Research is required to assess risks of new therapies so that the agency, in concert with industry, can, reduce and control such risks. Appropriate regulation of the biotechnology industry, consistent with the FDA reform law, demands state of the art knowledge of the science employed to develop our products.

CBER's research team includes both scientists who perform primarily review of products and those who perform both research and review ("researcher/reviewers"). Unlike other health-related agencies, such as NIH or CDC, where the majority of the professional researchers exclusively conduct research, in CBER all researchers are fully integrated into the regulatory process. CBER's researchers/reviewers participate in development of regulatory policy and the establishment of methods and standards to which products can be compared. They review investigational new drug applications (IND's) and biologics license applications (BLA's), attend pre-IND, IND and BLA meetings with investigators and manufacturers, carry out pre-license inspections, and evaluate adverse drug reaction and risk assessment issues. In short, they contribute their knowledge of complex scientific matters gained by intramural research to the regulation of increasingly complex biological and biotechnology products.

SCIENCE BOARD REVIEW OF FDA'S INTRAMURAL RESEARCH PROGRAM

Mr. Chairman, on two recent occasions, subcommittees of FDA's outside Science Board have reviewed the fiscal status of FDA's research budget, and expressed strong support for its strengthening, in order to ensure informed regulation.

Subcommittee on FDA Research.—At the recommendation of FDA's Deputy Commissioner of Operations in 1996, a Science Board Subcommittee on FDA Research was convened and Chaired by David Korn, M.D., former Dean of Stanford Medical School and currently Senior Vice President of the Association of American Medical Colleges. The Subcommittee was charged with determining how the FDA could ensure that the agency's regulatory review and decision-making processes would continue, in an era of extraordinary rapid scientific advancements, to be informed by the very best and most current scientific information available.

The Subcommittee undertook a high-level review of the state of intramural science in the FDA, including organization of the scientific programs, their interactions with the extramural scientific community, and the policies, procedures and standards that governed their conduct.

As part of its recommendations, the Subcommittee stated that:

> . . . robust, high-quality programs of intramural research are essential components of the FDA's science base and are critical for supporting, in a scientifically sound and rigorous fashion, the review and regulatory decisions made by the agency in discharging its mission to promote and protect the public health. The intimate proximity and interaction of cutting-edge scientific research with review and regulatory activities is more important today than ever before given the extraordinary rapid pace of advancements in . . . biomedicine, materials science, micro-electronics, information technology, and others. . . . A strong and well managed intramural research program provides the foundation for creating a climate of science and scientific communication within the FDA that enhances the ability of the agency to recruit and retain high quality scientific staff [and] to address existing regulatory issues and anticipate future problem. . . .

The majority of the Subcommittee rejected the arguments that the scientific research needs of the FDA can be obtained from outside sources in a more cost-effective manner that would meet criteria of timeliness, competence and freedom from conflict of interest. Likewise the Subcommittee rejected the notion that a strong program of intramural scientific research is not necessary for the recruitment and retention of high quality scientific staff The Subcommittee found that "starving the agency's base of intramural scientific expertise must inevitably compromise the quality of review and regulatory activities."

Subcommittee on CBER Review.—Last month, the Science Board's Subcommittee on CBER Review, comprised of distinguished scientists from academic centers, major pharmaceutical companies, the biotechnology industry, research foundations and the NIH expressed great concern over declines in research funding at CBER.[3] The Committee determined that

> . . . inadequate funding for CBER, particularly the inadequate funding for laboratory research within CBER, would risk potential damage to the health of the population of the United States, but also the health of our economy, by affecting an industry that will expand in the 21st Century.

The Subcommittee conducted an exhaustive review of the research capabilities of the various divisions and units within CBER. It pointed out that historically, because of their nature, biological products have been associated with adventitious (accidentally arising from an external source) contaminants that have led to adverse reactions and death. It stated that "a credible emergency response by CBER to adventitious agent problems associated with marketed biological products, including blood and blood products, requires immediate availability of a laboratory-based team of experts who understand both the potential adventitious agents involved in the scientific, manufacturing, control, and clinical aspects of the product." (p. 4)

The Subcommittee concluded as follows:

> Thorough and timely review of the safety, efficacy, and quality of a biological/product license application (BLA/PLA) requires experts with appropriate experience at CBER, including relevant laboratory techniques required to perform characterization, manufacturing, and control of the product. In a field of biotechnology, virtually every IND or BLA application raises new policy issues which are identified and addressed as part of the review process. It is incumbent upon the CBER reviewer to assess the potential merits of new technologies, to identify new risks or potential risks associated with these technologies and to develop methods for evaluating and controlling these risks."

RELATIONSHIP BETWEEN CBER RESEARCH AND EFFECTIVE REGULATION

Intramural research has shortened development time of biological products and served as the basis for product approval. Examples of the importance of CBER's research to product development are numerous:

For many years, the whole cell pertussis (whooping cough) vaccine was used to prevent pertussis in infants and young children in the United States. While this vaccine was effective in preventing pertussis in the U.S., it was associated with a number of adverse reactions. While the most severe reactions were never positively linked to vaccination with the whole cell pertussis vaccine, scores of lawsuits were filed and it became clear that a safer pertussis vaccine was desirable. Clinical trials to test the safety and efficacy of a new generation of pertussis vaccines, known as acellular pertussis vaccines, were completed last year. In July of this year, the first acellular pertussis vaccine was licensed in the U.S. for infant use. Research conducted at CBER shortened the development time for the acellular pertussis vaccines, sped approval time, and resulted in improved products.

Expeditious approval of recombinant Factor VIII (which promotes blood coagulation) was facilitated by CBER research that provided a well-calibrated reference preparation to measure the potency of these materials, and that established the conditions for potency assays that allowed comparison with plasma-derived products. CBER directed the preparation and calibration of large amounts of a Factor VIII reference standard that has received international recognition for its long-term stability and quality. CBER also recently developed a Factor IX standard that will speed approval of a recombinant Factor IX currently under development. CBER recruited large donations of potential source material from industry, assessed the biochemical and assay characteristics of these materials in the CBER laboratory, and

[3] Science Board Subcommittee for the Center for Biologics Evaluation and Research Review, Report to the Science Board to the Food and Drug Administration, May 19, 1998.

selected one for further evaluation in an international collaborative study. This study led to the acceptance of the FDA material by the European Pharmacopoeia and WHO as the new international reference preparation and working standard.

CBER research will lead to expeditious approval of safe and effective DNA vaccines. These agents, which are based on new and untested technology, are now being developed for preventing viral, bacterial, and parasitic infections, as well as for treatments of hepatic, colon and cervical cancer.

One of the ways that FDA has sped approval of breakthrough drugs is through the development of clinical endpoints—laboratory measurements that are reasonably likely to predict clinical benefit. Use of these endpoints has resulted in early approval of several AIDS drugs—more quickly in this country than in Europe or England. CBER research led to development of the surrogate endpoint for protease inhibitors. In collaboration with the developer of the drug, CBER's research was crucial to the development of quantitative polymerase chain reaction, which became the means by which the drug's contribution to a patient's viral load is determined. The viral load was used as a surrogate endpoint, rather than multi-year clinical trials to evaluate lone-term survival, to determine efficacy of this important class of AIDS drug.

Each year the Food and Drug Administration determines the type, or strains, of the influenza virus most likely to enter the United States in the coming year. This determination is based on worldwide surveillance of influenza isolates conducted by the Center for Disease Control (CDC) in collaboration with the World Health Organization (WHO). After the strains are chosen each year, CBER works closely with influenza manufacturers to provide high growth reassortant influenza viruses for use by vaccine manufacturers so that adequate vaccine supplies can be made each year. This involves basic laboratory research by molecular biologists and virologists at CBER. They also must provide new reagents each year for standardization of strains used in the vaccines produced by various manufacturers which supply the U.S. market. CBER's research on high growth reassortants and standardization of manufactured vaccines is critical for assuring that safe and effective vaccines for adults and children are available in the fall of each year. Without the support of basic science at CBER, the quality and quantity of influenza vaccines would decrease with resultant excess mortality from influenza each year.

Mr. Chairman, these examples—and scores of others—demonstrate the fact that the CBER research program is an integral component of biological product regulation. CBER research leads to establishment of standards for biological products. It shortens development time for products under investigation. It serves as a basis for FDA decisionmaking on the safety and efficacy of biological products. And—perhaps most importantly—CBER research protects the public health.

ACTION REQUESTED

Mr. Chairman, we want to emphasize that we do not disagree with the decision of Congress that PDUFA fees may no longer be used for research related activities. Indeed it is entirely proper that PDUFA fees should be dedicated to their original purpose—speeding the review of product-specific submissions. However, we are concerned that the message that research activities are essential to the broader statutory mission of CBER and FDA to protect the public health may have fallen from view in our collective interests to assure full and proper allocation of PDUFA funds. Although FDA's research efforts are not devoted to the product of a specific company, they are nevertheless critical to assuring speedy access of safe and effective products to the market.

Mr. Chairman, in terms of appropriations action, we recommend that the Committee specify amounts from appropriated funds that should be dedicated to CBER research activities. These amounts should be no less than the fiscal year 1998 amount plus inflation. We thus recommend that a minimum of $7 million be specified for CBER research for fiscal year 1999. This will require an increase in the FDA budget of $2.5 million.

Beyond this immediate request are concerns about the need to assure adequate funding for future research at CBER. In our view, the best way to assure that any program received adequate funding is to clearly and convincingly illustrate the value that the program delivers. When it comes to research efforts at CBER, neither CBER staff nor we in industry have made our best efforts to assure that the value of CBER's research programs are documented and communicated. To that end, we urge this committee consider requiring CBER to develop guidance for the process by which research programs at CBER are authorized. CBER supported research should be clearly distinct from academic or basic research efforts in that it should be conducted in support of specific, statutory, regulatory or mission-related pur-

poses. In our view, it is not the role of CBER to conduct research intended solely to contribute to the general knowledge or the advancement of a specific field of science. The research should be consistent with CBER's statutory responsibilities, authority and with its mission. It is Centocor's position that CBER's research activities should fit within one or more of the following criteria in order for it to be authorized:

1. It should fulfill a specific need identified in support of specific functions and responsibilities of the Center.
2. It should relate directly to a product category or technology for which CBER has responsibility.
3. It should identify whether it relates specifically to issues of safety, effectiveness or both. For example, many of the products under CBER's jurisdiction raise unique issues related to the impact of viruses and other adventitious agents on product safety. Also, some materials regulated by CBER are not synthesized but are the product of complex or undefined physiological processes. Process control and validation may be of greater importance for these products than for traditional synthetic drug products.
4. CBER should justify why the research must come from original, laboratory-based research conducted by CBER staff. For example, CBER should document the findings which support the conclusion that the specific type of research is not already being done elsewhere within the federal government or the public or private sectors or that the results of such research would not be readily available or useful to CBER.

Beyond these points, all research should be subject to active management and oversight by CBER and FDA staff as well as open to comment from regulated industry, academia and the general public. We anticipate that this or another appropriate form of cataloging CBER's important research activities will help CBER and the biotechnology industry better communicate the value and importance of the research work of CBER's scientific staff.

Once this action is taken, the committee will be able to evaluate specific amounts that should be allocated for CBER research and whether the recent recommendation of the Science Board Subcommittee that the budget be restored to the fiscal year 1994 level is realistic.

Thank you for your attention to the important issue of appropriate funding of CBER research. We are anxious to work with this Subcommittee in a mutual effort to halt the decimation of CBER's research program, while assuring that CBER research activities are relevant to its statutory mission of reviewing and approving life-giving biotechnology products.

PREPARED STATEMENT OF DENNIS BIER, M.D., DIRECTOR, CHILDREN'S NUTRITION RESEARCH CENTER

Mr. Chairman and members of the Subcommittee, thank you for your continuing commitment to nutrition research, and most especially for the much-needed funding increase which you provided to the Children's Nutrition Research Center (CNRC) last year. Your foresight in funding this program is more widely recognized each year as the importance of nutrition research grows and the trend of scientific discoveries continues to underscore the fact that good nutrition information is vital to our hopes of controlling a large number of very serious, and very expensive, diseases. As a physician, my own personal clinical nutrition interest relates to the management of diabetes, and I initially came into nutrition research because of its critical importance to our efforts to control the complications of this serious malady.

The CNRC was established in 1978 and operates under a cooperative agreement between the Agricultural Research Service (ARS), Baylor College of Medicine, and Texas Children's Hospital, a unique public/private partnership between the ARS and two of the nation's leading pediatric research institutions which also draws on the resources of the world's largest medical center.

The CNRC has been, and continues to be, a world leader in nutrition research. Since the Center is the best-equipped pediatric facility of its kind in the world, we can undertake many research projects that no other children's research laboratory can do. This is particularly valuable in light of our rapidly-growing knowledge of the intimate relationships linking an individual's genetic constitution (genotype), lifestyle, and diet to that individual's ultimate health. We now know that whether a person leads a long and productive life or is more likely to suffer early disability or death from chronic disease is determined in very large part by the interplay between that individual's heredity, lifestyle choices, and what he or she chooses to eat.

At least five of the ten leading causes of death—heart disease, cancer, stroke, diabetes, and atherosclerosis—are diet-related, and there is strong evidence that the contributions to the overall outcome of these diseases begin in childhood. Dealing with these diseases by preventing or delaying them through early dietary changes is a major goal of our research. The potential cost savings to the government through Medicare and Medicaid are enormous, not to mention the need both to see to the nutritional adequacy and to provide the basic scientific evidence for the USDA feeding programs which account for a considerable part of your Subcommittee's budget allocation each year.

Through advances in genetics and molecular biology, we now have the tools to aggressively investigate prevention of diet-related problems such as obesity, high cholesterol, and certain types of cancer. If we can identify a specific individual's risk factors in childhood, we could then target our efforts to those at-risk individuals alone and not expend scare funds on persons who are not at risk. Thus, identifying the specific individuals at risk and preventing the exposure to these risks in childhood will pay health dividends to society for many decades while reducing costs in two major ways: first, by not spending money needlessly on individuals without risk and, secondly, by preventing disease, which is invariably cheaper than treating the consequences of already established ailments in adulthood. Similarly, non-monetary benefits are enhanced in two ways: first, by allowing individuals not at risk to live a less restricted and, presumably, less worrisome lifestyle and, secondly, by providing at-risk individuals with a health maintenance environment whose benefits are invariably greater and last longer than the shorter and more limited benefits of treating already established adult diseases. These goals are a major priority for our research program, and we are using the additional funding which you provided last year to expand our research program in this area of nutrient-gene interactions, specifically to allow us to identify the genetic factors which place a person at risk of nutritional diseases.

CNRC NATIONAL RESEARCH AWARDS

The Children's Nutrition Research Center is dedicated to investigating the food needs that ensure health in pregnant and nursing women, and in children from conception through adolescence. The success of your decision to support the CNRC over the years, and the quality of research being done at the CNRC, is evidenced by the fact that CNRC researchers won a total of five top national research honors during this last year.

Dr. Buford Nichols, who is our Director Emeritus, was awarded the 1997 Nutrition Award from the American Academy of Pediatrics. The Academy has always been a champion and forceful advocate of the nutritional health of America's children and their Nutrition Award is their single, highest honor in children's nutrition. Dr. Nichols has made major strides in the last few years in advancing our understanding of the gastrointestinal genes regulating carbohydrate digestion in malnourished children. In some malnourished children, the body essentially turns off certain digestive enzymes. As a result, the children are unable to utilize food properly and they die even if, during treatment, they are provided with what should be adequate food. Dr. Nichols' lifelong work in this important area was the foundation for the American Academy of Pediatrics Nutrition Award and, last year, Dr. Nichols made important strides by describing for the first time the complete gene structure of the principal human gastrointestinal enzyme responsible for the digestion of starches in our diet.

Dr. Teresa Davis was chosen as the winner of the E.L.R. Stockstad Award by the American Society for Nutritional Sciences, the nation's largest scientific nutrition society. The award is given for outstanding fundamental research in nutrition. Dr. Davis' research focuses on determining the mechanisms by which nutrients, hormones, and growth factors regulate the high rate of body protein accretion that occurs during early postnatal life and is both necessary and responsible for the rapid growth rate observed in healthy infants.

Dr. Peter Reeds has been awarded the 1998 Osborne and Mendel Award from the American Society for Nutritional Sciences. Dr. Reeds was given the award for his innovative applications of non-radioactive isotope techniques to an inherently complex area of nutrient metabolism, specifically, the intestinal and liver metabolism of amino acids liberated during the consumption of dietary protein. In this work, Dr. Reeds demonstrated the important role of dietary amino acids, particularly the amino acid glutamate, in providing the metabolic fuel source for gut energy metabolism and for the synthesis of glutathione, the critical gut compound providing defense against oxidative stress damage in the intestine. Oxidative stress reactions are

important contributors to the development of diseases such as cancer and are also an underlying cause of aging.

And, if I may toot my own horn for a moment, I was elected to membership in the Institute of Medicine of the National Academy of Sciences, an award which is bestowed on only a select number of the nation's scientists and physicians. I was selected for contributions to the fields of nutrition and metabolism, and for my role in developing the field of the study of human metabolism using stable, non-radioactive isotopes. In addition, I won the National Institutes of Health Excellence in Clinical Research Award for my lifelong career work in clinical nutritional metabolism studies in NIH-funded General Clinical Research Centers (GCRC), first as Associate Program Director the GCRC at the University of California, San Francisco, then as Program Director of the GCRC at St. Louis Children's Hospital, Washington University School of Medicine, and currently as Program Director of the GCRC at Texas Children's Hospital, Baylor College of Medicine.

I want to thank the members of this Subcommittee for your support for the CNRC over the years. You have made it possible for us to do the research which has won these distinguished awards, and we want to share with you the credit for these accomplishments.

EXAMPLES OF CNRC RESEARCH

The CNRC is continuing to be a leader in the field of pediatric nutrition. Some of the studies now underway include:

A study which is looking at the possible relationship between attention-deficit/hyperactivity disorder (AD/HD) in children and DHA (docosahexanoic acid), a fatty acid found in breast milk. DHA is concentrated in the brain, is essential for normal brain growth, has effects on brain cell membrane function, and is believed necessary for overall proper functioning of the central nervous system. Some studies have shown that children with AD/HD have lower levels of DHA in their blood. We are conducting a study in which we are giving dietary supplements of DHA, which is also found in fish oil, to determine its impact on AD/HD behavior.

The potential benefits to society are enormous. Many children with AD/MD continue to have problems in adulthood with employment, family relationships, and anti-social behavior, and society ends up paying a high price for these problems. If this simple dietary intervention has an effect, then the benefits to society could be significant.

We are studying a possible link between fetal development and coronary heart disease in adult life. We have found evidence that poor fetal growth permanently alters cholesterol metabolism. As part of our ongoing collaborative research and training efforts internationally, our scientists studied the levels of HDL apolipoprotein A1, an independent predictor of coronary heart disease, in 16 Jamaican children whose mothers were not properly nourished during pregnancy. HDL apolipoprotein A1 transports cholesterol from the peripheral tissues back to the liver for excretion. High levels of HDL apolipoprotein A1 usually means that a person has a good cholesterol level. We found that the lower the birth weight, the lower the HDL apolipoprotein A1 levels in these children. The fact that they have low levels of HDL means their ability to transport cholesterol back to the liver for excretion is impaired. This study was accepted by and appeared in the prestigious international scientific journal, The Lancet, and, when confirmed by additional expanded studies, we believe this finding will enable pediatricians to use HDL apolipoprotein A1 as a screening tool to determine those children who are at greater risk of coronary heart disease later in life and allow parents to begin feeding their vulnerable children a low cholesterol diet early on.

Our researchers have developed a new experimental approach that will, for the first time, help directly measure beta-carotene absorption from vegetables and determine the extent to which it is converted to vitamin A in humans. Thanks to our greenhouse and stable isotope facilities, we were able to grow spinach hydroponically in order to label the beta carotene with stable isotopes. This technique will allow us to assess beta-carotene absorption and metabolism from individual plant foods and identify whether some foods are better sources of vitamin A. This method will also give us the opportunity to identify other factors that could improve beta carotene absorption, such as processing, cooking techniques, or the amounts of oils that are consumed with the food. We are cooperating with the USDA/ARS Human Nutrition Research Center at Tufts University in Boston to do the first human feeding studies.

This new method will provide useful information for intervention and education programs that deal with vitamin A deficiency, which is a major nutritional problem

in the developing world, especially in areas where a persons diet consists mainly of plant-derived foods.

Also, beta carotene is one of nature's most important natural anti-oxidant compounds. Oxidative stress reactions are important contributors to the development of cancer and heart disease, as well as an underlying cause of aging. We believe that the CNRC plant scientists' new approach, which promises to allow direct study of beta carotene metabolism in humans, will play a significant role in research toward a more comprehensive understanding of cancer, heart disease and aging.

SUMMARY

The CNRC is a truly unique, world-class research program in a field that is increasingly being recognized as critical to health maintenance and to food production. Top-quality basic nutrition research is of increasing importance, and the multi-disciplinary ARS human nutrition research centers are uniquely well-suited to this task. Thanks to the foresight of the Congress, the ARS human nutrition research program as a whole is strategically well-placed to tackle today's critical research issues. Congress expanded this network in the 1970's and has provided needed research funding since then. Last year, to enhance our research efforts, the ARS Human Nutrition Research Program presented you with a unified, coordinated initiative for new areas of necessary scientific investigation. You were kind enough to provide us with additional funding, and we thank you for that.

These new directions are no less important this year. To accomplish our aims, we need a significant budget increase, and you would get a very good return on that investment if you choose to make it. I urge the Subcommittee to make every effort to provide a substantially greater level of funding for these ARS Human Nutrition Research Centers this year. The research opportunities are great, and there are huge potential rewards both in cost savings and in good health in this critical area of research.

I would invite you, Mr. Chairman, and any members of your Subcommittee to come and visit the CNRC. Our visitors can testify that the program is much more impressive in person than I can make it in my description. Thank you for the opportunity to submit this statement, and thank you for your support.

PREPARED STATEMENT DR. MELVIN C. RAY, MISSISSIPPI STATE UNIVERSITY, CHAIR, MISSISSIPPI EPSCoR COMMITTEE, ON BEHALF OF THE COALITION OF EPSCoR STATES

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit this testimony on behalf of the Coalition of EPSCoR States[1] regarding the U.S. Department of Agriculture Experimental Program to Stimulate Competitive Research (USDA EPSCoR). USDA EPSCoR is extremely important to the state of Mississippi and to our nation. I appreciate the opportunity to testify.

Mr. Chairman, let me begin by thanking you for your strong and unwavering support of USDA EPSCoR. Your support has been absolutely crucial in establishing and maintaining this important program. As you know, Mr. Chairman, USDA EPSCoR is having a significant impact in Mississippi, and those of us committed to improving Mississippi's research and development capability deeply appreciate your continued efforts. Thank you for all of your fine work representing Mississippi in the United States Senate.

EPSCoR is a research and development program that was first established in the National Science Foundation. EPSCoR works to improve our country's science and technology capability by funding research activities of talented researchers in states that have historically not received significant federal R&D funding. USDA EPSCoR was established in fiscal year 1992 with a goal of increasing the amount of agricultural research at academic institutions within states that have had limited success obtaining competitive funds from USDA.

Mr. Chairman, USDA EPSCoR is helping to improve the quality and competitiveness of agriculture research in Mississippi. The amount of USDA research funds received by Mississippi increased by more than 500 percent between 1990 and 1996, a clear indication that Mississippi researchers are becoming more effective. The bulk of Mississippi's funding increase since 1990 has been in the non-EPSCoR Standard Research Grants program.

Important examples of Mississippi's research include such varied studies as kenaf processing, which is a potential economic opportunity for rural states; rapid detec-

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[1] Alabama, Arkansas, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Puerto Rico, South Carolina, South Dakota, Vermont, West Virginia, and Wyoming.

tion of E coli, an important safety issue that has been in the news recently; and disease mechanisms in channel catfish, impacting a significant cash crop across the southern part of the country. These projects and those they represent address important issues not only to rural states, but to the rest of the nation. Because of this important program, EPSCoR researchers are able to contribute to our economy and our knowledge base.

USDA EPSCoR states are those whose funding ranks no higher than the 38th percentile of all states, based on a three year rolling average of funding. For fiscal year 1998, the following states are eligible for USDA EPSCoR: Alaska, Arkansas, Connecticut, Delaware, Hawaii, Idaho, Maine, Mississippi, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Rhode Island, South Carolina, South Dakota, Utah, Vermont, West Virginia, Wyoming, and the Commonwealth of Puerto Rico. Let me stress that EPSCoR relies on rigorous merit review in order to ensure high-quality research.

USDA makes four types of competitive awards through USDA EPSCoR: Research Career Enhancement Awards, Equipment Grants, Seed Grants, and Strengthening Standard Research Project Awards. Proposals must be related to the program priorities of the National Research Initiative Competitive Grants Program, which address critical issues facing agriculture today.

—Research Career Enhancement Awards help faculty enhance their research capabilities by funding sabbatical leaves. Applicants may not have received a NRICGP competitive research grant within the past five years.

—Equipment Grants strengthen the research capacity of institutions in USDA EPSCoR states. The principal investigator for this grant is responsible for securing non-Federal matching funds.

—Seed Grants enable researchers to collect preliminary data in preparation for applying for a standard research grant. Seed Grant awards are limited to a total cost of $50,000 and are non-renewable. Applicants must indicate how the research will enhance future competitiveness in applying for standard research grants.

—Strengthening Standard Research Project Awards fund standard research projects of investigators who have not received a NRICGP grant within the past five years.

USDA EPSCoR allows Mississippi and the other USDA EPSCoR States to contribute more effectively to our nation's science and technology capability, and provides our country with needed, high-quality, peer-reviewed research. It allows all regions of the country to contribute to our nation's science and technology capability while allowing flexibility to meet regional research needs. Because EPSCoR awards are matched with state funds, it is a sound investment of taxpayer dollars.

Mr. Chairman, this Subcommittee has for the past several years directed USDA to set aside 10 percent of USDA NRICGP funds for USDA EPSCoR. Those funds have provided significant opportunity and very real success in Mississippi and in the other EPSCoR states. I request that, as it has done in previous years, the Subcommittee direct USDA to set aside 10 percent of its NRI competitive grant funds in fiscal year 1999 for an EPSCoR program. These funds will allow the EPSCoR states to continue providing for the agricultural research needs of rural America and of our nation.

I thank the subcommittee for the opportunity to submit this testimony.

PREPARED STATEMENT OF DR. ROBERT G. ZIMBELMAN, CHAIR, COALITION ON FUNDING AGRICULTURAL RESEARCH MISSIONS

Mr. Chairman: The Coalition for Agricultural Research Missions (CoFARM) consists of 20 professional scientific societies united in a commitment to support fundamental and applied agricultural research. CoFARM advocates agricultural investments in the USDA research budget that will enhance the health and well being of all Americans and increase U.S. competitiveness in expanding world markets.

Contributions of USDA-supported research to the biotechnology revolution in this age of biology is leading to extraordinary new advances in the plant, animal, microbial and nutritional sciences. Basic studies in plant genetics and plant growth and development have led to the ability of industry to regenerate transformed plant tissues. This has enabled industry to develop transgenic plants containing agronomically important genes. The plant biotechnology industry in the U.S. has flourished with the help of basic plant research in this area supported by the National Research Initiative.

Leaner meats and more nutritious plant-produced foods are resulting from USDA-supported plant and animal research. More effective protections from food-borne ill-

nesses are being found through microbial and food safety research supported by the Department. Economic studies assist the Department in implementing more efficient practices.

With predictions of substantial increases in demand for safe and nutritious food worldwide and the limitation of available land to farm, the nation and world must rely on agricultural research to increase food production on existing farmland. Support of this committee for agricultural research sponsored by the NRI, Agricultural Research Service, formula funds and Economic Research Service has been key to assisting American farmers lead the world in agricultural production.

Stagnant research budget for agriculture exposes the nation and its people to loss of leadership in agriculture—this dynamic sector that contributes to national and world security; healthier lives and higher disposable incomes for all Americans; a substantial, revenue-producing surplus in trade of agricultural products; and gainful employment for 22 million Americans. We urge the Committee to increase support for the NRI to $130 million as recommended by the President and encourage increases of 7 percent for the Agricultural Research Service and for the other areas of the fiscal year 1999 research budget for the Department of Agriculture. Enclosed is the most recent annual brochure of CoFARM with more information on the benefits of agricultural research supported by the Department of Agriculture.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF THE COALITION TO PROMOTE U.S. AGRICULTURAL EXPORTS

As members of the Coalition to Promote U.S. Agricultural Exports, we commend the Chairman and members of the Subcommittee for their interest and support of U.S. agriculture and express our appreciation for this opportunity to share our views.

The Coalition to Promote U.S. Agricultural Exports is an ad hoc coalition of over 80 organizations, representing farmers and ranchers, cooperatives, small businesses, regional trade organizations and the State Departments of Agriculture. We believe the U.S. must continue to have in place policies and programs that help maintain the ability of American agriculture to compete effectively in a global marketplace still characterized by subsidized foreign competition.

This is especially true under the new Federal Agriculture Improvement and Reform Act of 1996 (FAIR Act), which resulted in the most sweeping reforms in farm policy in over 60 years. While achieving significant budget savings, it reduces income support to producers over 7 years; eliminates acreage reduction programs; and provides increased planting flexibility. More than ever, farm income and the economic well being of American agriculture are now dependent on continued access to foreign markets and maintaining and strengthening U.S. agricultural exports.

Accordingly, we strongly urge that USDA's export programs be fully funded and aggressively implemented. This includes maintaining funding for USDA's Market Access Program (MAP) at $90 million as recommended in the President's fiscal year 1999 budget; providing $30 million for the Foreign Market Development (FMD) Cooperator Program; and ensuring adequate funding for USDA's Foreign Agricultural Service (FAS) to help meet critical export goals and objectives. Such action is essential to America's overall trade strategy and economic interest.

Agriculture is our nation's most export dependent industry with exports accounting for one third of U.S. production. In 1998, U.S. agricultural exports are projected to reach $58.5 billion, strengthening farm income, generating billions more in related economic activity, broadening the tax base, and providing jobs for over one million Americans. U.S. agricultural exports this past year also led to an agricultural trade surplus of approximately $22 billion. Without such exports, our nation's trade deficit would have been even worse.

American agriculture and American workers, however, continue to be threatened by subsidized foreign competition. Recent trade agreements, including NAFTA and the Uruguay Round Agreement on GATT, did not eliminate the use of export subsidies or other forms of export assistance. The European Union (EU), which maintains a huge advantage over the U.S. in terms of export subsidies, last year announced a major initiative to promote EU exports of meat, dairy, fruit, vegetables, and wine into Japan—a significant U.S. market.

U.S. agricultural exports to Japan last year amounted to nearly $11 billion (down about $1 billion from the previous year), accounting for 19 percent of total U.S. agricultural exports. As many as 200,000 American jobs depend on continued exports to Japan. Clearly, any further loss with regard to the Japanese market would have an adverse impact on American agriculture and American workers.

This is but one example of the competition facing American agriculture. Other countries are pursuing similar strategies. Again, this underscores the importance of USDA's export programs, including the Market Access Program (MAP) and FMD Cooperator Program. American agriculture is the most competitive industry in the world, but it can not and should not be expected to compete alone against the treasuries of foreign governments.

Funding for USDA's Market Access Program (MAP) has already been reduced by two thirds from its original authorized level. It now represents only a fraction of what our competitors are spending. To further reduce or eliminate funding for MAP in the face of increasing subsidized foreign competition would put U.S. agriculture at a substantial competitive disadvantage.

Further, it is important to note; USDA's Market Access Program has been substantially reformed. The FAIR Act, for example, made permanent the reforms contained in previous appropriations bills by specifically targeting direct assistance to small businesses, farmer cooperatives, and trade associations. In addition, the Act (1) continues the requirement that the program be administered on a cost share basis; (2) requires that funds be used only to promote American grown and produced agricultural commodities and related products; (3) prohibits assistance to foreign firms relating to foreign products; (4) maintains ongoing review and certification of use of funds; and (5) provides for program graduation.

By any measure, USDA's Market Access Program has been a tremendous success and extremely cost effective. It demonstrates what can be accomplished as a result of a true public private partnership. Since the program began, U.S. agricultural exports have more than doubled and value added exports have tripled. The number of jobs that depend on U.S. agricultural exports has also more than doubled making it one of the most successful job creating programs ever established.

For all these reasons, we again urge that USDA's export programs be fully funded and aggressively implemented. As a nation, we can work to export our products, or we can export our jobs. USDA's export programs are a key part of an overall trade strategy that is pro growth, pro trade and pro job.

PREPARED STATEMENT OF JACK A. BARNETT, EXECUTIVE DIRECTOR, COLORADO RIVER BASIN SALINITY CONTROL FORUM

The Congress concluded that the Colorado River Basin Salinity Control Program should be implemented in the most cost-effective way and realizing that agricultural on-farm strategies were some of the most cost-effective strategies authorized a program for the Department of Agriculture. With the enactment of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA), the Congress concluded that the Salinity Control Program could be most effectively implemented as one of the components of the EQIP program. Since the enactment of FAIRA, the Salinity Control Program has not been funded at a level adequate to ensure that water quality standards in the Colorado River, with respect to total dissolved solids (salinity), can be honored, nor is the funding sufficient to prevent salt loading from irrigated farms from impacting the quality of water delivered to Mexico under a minute of the International Boundary and Water Commission, the United States and Mexico.

The problem rests with the Department of Agriculture concluding that it should not designate any area of the county as a national priority area at this time. The Salinity Control Program has been subsumed into the EQIP program without giving recognition to the requirement in the Colorado River Basin Salinity Control Act that the Secretary of Agriculture carry out salinity control measures in the Colorado River Basin. Further, the Administration has concluded that the expenditure of EQIP funds shall be determined by initiatives developed at the grassroots level. Under USDA directives, this means that Upper Basin agricultural communities advance salinity control proposals for the salinity control efforts. The efforts must be implemented in the Upper Basin, as that is where the salt loading is occurring. Water users hundreds of miles downstream are the beneficiaries of this water quality improvement program. Agriculturalists in the Upper Basin, however, see local benefits as well as downstream benefits and have submitted cost-effective proposals to the State Conservationists in Utah, Wyoming and Colorado. The ranking criteria, however, prohibit the identification of downstream benefits as a benefit that can be credited when proposals are being evaluated.

If the Department of Agriculture believes that it is directed by the Congress to implement the Salinity Control Program, then it is incomprehensible that the program that is designed to provide downstream benefits cannot receive credit in ranking criteria for the accomplishment of the downstream benefits. The solution to the problem is simple. Grassroots in the Colorado River Basin means at the state level

and at the seven Colorado River Basin states level. The states, organized as the Salinity Control Forum, have adopted a program approved by EPA. The Colorado River Basin Salinity Control Forum should be recognized as the grassroots level for the Salinity Control Program and the Forum should serve as the Technical Advisory Committee (local work group) to Administration officials as to the need for and the expenditure of funds for the Salinity Control Program. The Colorado River Basin is covered by two NRCS regions and the program must be coordinated at a high administration level. Numerous requests have gone to the Department of Agriculture to make this designation, and the response has been that there are not adequate funds in the EQIP program to go beyond the initially adopted "grassroots" effort. Therefore, the Forum is pleased with the Administration's statement that it intends to spend $300,000,000 in fiscal year 1999 on the EQIP program.

The Basin states have cost sharing dollars available to participate in on-farm salinity control efforts in the cost-sharing fashion provided for by the Congress. The agricultural producers in the Upper Basin are standing in line waiting for their applications to be considered so that they might also cost share in the program. When all of the cost sharing is tabulated, the federal cost of the program is less than 50 percent. However, because of the structure of the EQIP program and the associated authorized cost sharing, these funds cannot be expended in this co-operative effort until federal funds are made available.

The Forum urges that this committee support the statement of the President when he indicated he intends to borrow $300,000,000 from the Commodity Credit Corporation (CCC) in fiscal year 1999 for the EQIP program. The Forum also requests that this Committee advise the Administration that it would be most important if $12,000,000 of these funds were designated for the Colorado River Basin Salinity Control Program.

OVERVIEW

The Colorado River Basin Salinity Control Program was authorized by Congress in 1974. The Title I portion of the Colorado River Basin Salinity Control Act responded to commitments that the United States had made, through a minute of the International Boundary and Water Commission, the United States and Mexico, with Mexico with respect to the quality of water being delivered to Mexico below Imperial Dam. Title II of the Act established a program to respond to salinity control needs of Colorado River water users in the United States and to comply with the mandates of the then newly legislated Clean Water Act. Initially, the Secretary of the Interior and the Bureau of Reclamation were given the lead federal role by the Congress. This testimony is in support of funding for the Title II program.

After a decade of investigative and implementation efforts, the Basin states concluded that the Salinity Control Act needed to be amended. Congress revised the Act in 1984. That revision, while keeping the Secretary of the Interior as lead coordinator for Colorado River Basin salinity control efforts, also gave new salinity control responsibilities to the Department of Agriculture, and to a sister agency of the Bureau of Reclamation—the Bureau of Land Management. Congress has charged the Administration with implementing the most cost-effective program practicable (measured in dollars per ton of salt removed). The Basin states are strongly supportive of that concept as the Basin states consider cost sharing 30 percent of federal expenditures up-front for the salinity control program, in addition to proceeding to implement their own salinity control efforts in the Colorado River Basin.

Since the Congressional mandates of nearly two decades ago, much has been learned about the impact of salts in the Colorado River system. The Bureau of Reclamation has recently completed studies on the economic impact of these salts. Reclamation recognizes that the damages to United States' water users alone may soon be approaching $1 billion per year.

The Colorado River Basin Salinity Control Forum (Forum) is composed of Gubernatorial appointees from Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming. The Forum has become the seven-state coordinating body for interfacing with federal agencies and Congress to support the implementation of a program necessary to control the salinity of the river system. In close cooperation with the Environmental Protection Agency (EPA) and under requirements of the Clean Water Act, every three years the Forum prepares a formal report analyzing the salinity of the Colorado River, anticipated future salinity, and the program necessary to keep the salinities at or below the levels measured in the river system in 1972.

In setting water quality standards for the Colorado River system, the salinity levels measured at Imperial, and below Parker, and Hoover Dams in 1972 have been identified as the numeric criteria. The plan necessary for controlling salinity has been captioned the "plan of implementation." The 1996 Review of water quality

standards includes an updated plan of implementation. The level of appropriation requested in this testimony is in keeping with the agreed to plan. If adequate funds are not appropriated, state and federal agencies involved are in agreement that the numeric criteria will be exceeded and damage from the high salt levels in the water will be widespread and very significant.

ADDITIONAL FUNDING NEEDS

The authorized cost sharing by the Basin states was at first difficult to implement as attorneys for USDA concluded that the Basin states were authorized by FAIRA to cost share in the effort, but the Congress had not given USDA authority to receive the Basin states' funds. After almost a year of exploring every possible solution as to how the cost sharing was to occur, the states, in agreement with the Bureau of Reclamation, with state officials in Utah, Colorado and Wyoming and with NRCS State Conservationists in Utah, Colorado and Wyoming, agreed upon a parallel program wherein the states' cost sharing funds will be used. We are now in the second year of that program and, at this moment in time, this solution to how cost sharing can be implemented appears to be a good one.

With respect to the states' cost sharing funds, the Basin states felt that it was most essential that a portion of the program be associated with technical assistance and education activities in the field. Without this necessary support, there is no advanced planning, proposals are not well thought out, allegations in the proposals cannot be verified, implementation of contracts cannot be observed, and the most valuable partnering and education efforts cannot occur. Recognizing these values, the parallel state cost sharing program spends 40 percent of the funds available on these support activities. Initially, it was acknowledged that the federal portion of the salinity control program funded through EQIP was starved with respect to needed technical assistance and education support. The Forum is encouraged with the Administration's recent determination that 19 percent of the EQIP funds will be used for technical assistance. The Forum urges this Committee to encourage or direct the Department of Agriculture and the NRCS to spend an adequate portion of the EQIP funds on technical assistance and education. The Forum believes, however, that it would be better for Congress to appropriate adequate funds for these support activities rather than to have NRCS borrow these needed funds from the CCC.

PREPARED STATEMENT OF GERALD R. ZIMMERMAN, EXECUTIVE DIRECTOR, COLORADO RIVER BOARD OF CALIFORNIA

Your support and leadership are needed in securing adequate fiscal year 1999 funding for the U.S. Department of Agriculture (USDA) with respect to it's salinity on-farm program. This program in the past had been carried out through the Colorado River Basin Salinity Control Act, which was initially enacted by Congress in 1974, Section 303(c) of the Clean Water Act of 1977, and now with the enactment of the Federal Agricultural Improvement and Reform Act (FAIRA) in 1996, it is being implemented through the Environmental Quality Incentive Program (EQIP) as one of its program components. With the enactment of the FAIRA, Congress concluded that the Salinity Control Program could be more effectively implemented as one of the components of the EQIP program. However, since its enactment, the Salinity Control Program has not been funded at the levels adequate to ensure that water quality standards in the Colorado River, with regards to salinity can be honored, nor is the funding sufficient to prevent salt loading from irrigated farms from impacting the quality of water consumed by water users along the River and delivered to the Republic of Mexico as provided for in the treaty with Mexico. It has been estimated through previous federal studies that the Lower Basin States'(Arizona, California, and Nevada) Colorado River water users are presently suffering economic damages estimated to be in excess of $750 million per year due to the salts in the River system. Most of that damage is occurring in California. The potential impact of failing to maintain the plan of implementation for salinity control in a timely manner would be to permit these damages in the Lower Basin to exceed an estimated $1 billion annually by the year 2015.

The Colorado River Board of California (Colorado River Board) is the state agency charged with protecting California's interests and rights in the water and power resources of the Colorado River System. In this capacity, California along with the other Basin States through the Colorado River Basin Salinity Control Forum (Forum), the interstate organization responsible for coordinating the Basin States' salinity control efforts, established, in June 1975, numeric criteria for salinity levels in the River to lessen the damages in the Lower Basin States as well as meet the

United States' treaty obligations to the Republic of Mexico. The goal of the Colorado River salinity control program is to maintain the flow-weighted average salinity at or below the River's 1972 levels. To maintain these levels, the salinity control program must remove 1.48 million tons of salt loading annually from the River by year 2015. To date, only 621,000 tons of salt load reduction has been achieved. In the Forum's last report entitled 1996 Review, Water Quality Standards for Salinity, Colorado River System released in June 1996, it found that additional salinity control measures were necessary beginning in 1994 to meet the implementation plan that had been adopted by the seven Colorado River Basin States and approved by the Environmental Protection Agency. For the last three years, federal appropriations for the USDA have not equaled the Forum's identified funding levels for the USDA's portion of the program the Federal Government has the responsibility to implement. In the Forum's report, it identified a "backlog" of salinity control measures of over 418,000 tons annually. This is in addition to future controls designed to lower the River's salt loading by 437,000 tons per year over the next twenty years in order to meet the established salinity standards. Very simply, there is a need for 45,000 tons of new salinity control measures to be implemented each year until 2015. The Forum has presented testimony to Congress recommending that the salinity control efforts through EQIP be accelerated to continue to meet the numeric criteria through 2015.

The President's proposed budget for fiscal year 1999 contains funding of $300 million for implementation of EQIP, up $100 million from the $200 million that has been offered the first two years of the program. The Colorado River Board is pleased with the Administration's statement that it intends to spend $300 million in fiscal year 1999 on the EQIP program. In fact, the Colorado River Basin Salinity Control Forum, at its meeting in Tucson, Arizona, during October 1997, recommended a funding level for the USDA of $12.0 million for fiscal year 1999 in order to maintain water quality consistent with the established standards. The Colorado River Board supports that action by the Forum. The salinity control program has proven to be a very cost effective approach to help mitigate the impacts of higher salinity. Continued federal funding of the program is essential.

In addition, the Colorado River Board recognizes that the federal government has made significant commitments to the Republic of Mexico and to the seven Colorado River Basin States with regard to the delivery of quality water to Mexico. In order for those commitments to be honored, it is essential that in fiscal year 1999 and in future fiscal years, the Congress provide funds to the USDA to allow it to continue providing technical support in the Basin for salinity control.

The Colorado River is, and will continue to be, a major and vital water resource to the 17 million residents of southern California as well as throughout the Lower Colorado River Basin. As stated earlier, preservation of its quality through an effective salinity control program will avoid the additional economic damages to users of Colorado River water in California.

The Colorado River Board greatly appreciates your support of the federal/state Colorado River Basin Salinity Control Program and again asks for your assistance and leadership in securing adequate funding for this program.

PREPARED STATEMENT OF DR. MICHAEL CROW, VICE PROVOST, COLUMBIA UNIVERSITY

Mr. Chairman, and Members of the Subcommittee, thank you for the opportunity to submit a statement for inclusion in the hearing volume for outside witnesses. My statement concerns USDA funding for accessing and interacting with long range forecasting and modeling efforts in the area of climate change. Specifically, I propose that USDA utilize existing climate forecasting and predictive modeling expertise for:

(1) yield calculations (using seasonal-to-interannual temperature and precipitation forecasts) in the world and domestic (U.S.) supply and demand estimates: and

(2) stewardship of natural resources, in programs managed by USDA that involve soil and water conservation and forestry management.

The value to the agricultural community of this approach has been estimated at $4.5 billion in preventable losses. The fiscal year 1999 project costs for this initiative are $750,000.

THE INTERNATIONAL RESEARCH INSTITUTE FOR CLIMATE PREDICTION (IRI)

Columbia University's Lamont-Doherty Earth Observatory (LDEO), in conjunction with The Scripps Institution of Oceanography (SIO) of the University of California at San Diego, has entered into a Cooperative Agreement with NOAA to establish

and manage the International Research Institute for Climate Prediction (IRI). The IRI's mission is to provide experimental climate forecast guidance on seasonal-to-interannual time scales for use by affected communities around the world. Working with an extensive network of domestic and international research and applications centers worldwide, the IRI will provide the necessary scientific institutional focus for a multi-national "end-to-end" prediction program. This "end-to-end" prediction program supports the development and production of forecasts of changing physical conditions (temperature and precipitation) on year-to-year time scales, assessments of the regional consequences of those variations, and the application of this information to support practical decision making in critical sectors such as agriculture, water resources, fisheries, emergency preparedness, and public heath and safety.

FISCAL YEAR 1998 ACTIVITIES

During the current fiscal year, the IRI will continue to develop improved seasonal to interannual climate forecasts in partnership with NOAA and other research elements of the Climate and Global Change effort. Recently, NOAA issued an evaluation on the ENSO Rapid Response Project, which compared the IRI net assessment precipitation forecasts to actual observed precipitation. A copy was provided to this Subcommittee's staff. Termed a "Validation of October-November-December Net Assessment Precipitation Forecasts", NOAA compared the graphics of the predictive models with the graphics of actual precipitation for the following regions: Africa; Asia; Australia and Indonesia; Europe; North America; and South America. The assessment showed that in the ten models that were used for comparison to actual events, the forecasts were accurate for nine of those models. The models accurately predicted the following:

—Eastern Africa: normal precipitation;
—Southern Africa: below normal precipitation;
—Northeastern China: below normal precipitation;
—Southeastern China: above normal precipitation;
—Indonesia: below normal precipitation;
—Europe: above normal precipitation;
—North America; West Coast, Southwest, Southeast: above normal precipitation;
—South America; Ecuador/Peru: above normal precipitation;
—South America; Argentina, Uruguay, Southeastern Brazil: above normal rainfall;
—South America; Northern Continent: below normal rainfall.

The only model that failed to predict accurate forecasts occurred for Queensland, Australia. The model failed to predict the rainfall delivered by tropical storms and cyclones, which are extremely rare in this region. In evaluating the model, IRI scientists attribute the failure of the prediction to the fact that tropical storms and cyclones cannot be resolved by the climate models currently used operationally. We are eager to see the results from the next validation assessment. We will transmit to you the NOAA evaluation as soon as it becomes available, as we did with this evaluation.

The development of regional applications of climate modeling by other institutions, currently in process as a function of fiscal year 1998 funding, will bring new data sources to the efforts of the IRI when they become operational.

FISCAL YEAR 1999 ACTIVITIES

The fiscal year 1999 program level for the IRI (through Department of Commerce funding) remains at the $5 million level we are receiving in fiscal year 1998. IRI activities in fiscal year 1999, as planned within the budget request, involve continued refinement of end-to-end modeling and the incorporation of additional regional data and modeling. The periodic evaluations of three month predictions versus actual events provide near time feedback on the accuracy of IRI models and permit corrections and adjustments to ongoing modeling efforts.

Since the IRI was initially funded by NOAA, Columbia and Scripps have invested heavily in capital and research efforts. The ratio of private to public investment has been on the order of 3 to 1. The Fiscal Year 1998 Appropriations Act was the first year in which the Congress fully funded NOAA's request for IRI funding. We realize that the funding occurred concurrently with the biggest El Niño event in over one hundred years.

POTENTIAL BENEFITS OF IMPROVED FORECASTING AND MODELING

The more we are able to conduct improved modeling and forecasting experiments, the better prepared we will be when the next big event occurs. Studies have shown

that with improved forecasting and advanced warning, billions of dollars in savings can be achieved in several economic sectors:

—Agriculture, fisheries and forestry: Annual losses, $15 billion. Preventable losses, 30 percent, or $4.5 billion.

—Mining and manufacturing: annual losses, $1.5 billion. Preventable losses, 5 percent or $75 million.

—Transportation: Annual losses, $1.2 billion. Preventable losses, 40 percent or $40 million.

—Communications: Annual losses, $334 million. Preventable losses, 8 percent or $26 million.

—Financial, insurance and real estate: Annual losses (above premiums), $5.4 billion. Preventable losses, 40 percent or $2.16 billion.

—Other (including wholesale and retail trade, services, farm and non-farm residences, and government fixed capital): Annual losses, $6.9 billion. Preventable losses, 40 percent or $2.6 billion.

—Total annual losses: $30.53 billion. Preventable losses, $10.01 billion.

Avoidance of losses in the $10 billion range, not to mention reduced fatalities and injuries due to hazards from storms and floods, dangers along the coast, and conditions of poor air quality, can be achieved.

PROJECT PROPOSAL

USDA's Budget Request includes $410,000 for two staff years for Modernization of Weather and Climate Data Acquisition. In reviewing the detail of the request, and the responsibilities of the Chief Economist for production of the monthly World Agricultural Supply and Demand Estimates (WASDE), we know that current IRI predictive modeling would greatly enhance USDA's efforts. On page 8g–4 of the Fiscal Year 1999 Budget Justifications for the World Agricultural Outlook board, the following statement appears:

"Despite inadequate data from the National Weather Service, JAWF analysts assembled data from alternate sources along the Gulf Coast and in Southern Florida to assess the probable impact of a freeze episode which occurred in mid-January."

This type of analysis, forecasting for temperature and precipitation, is what the IRI was designed to produce. The products of the IRI, noted in the NOAA evaluation earlier in this statement, are developed to assist governments and private concerns in the planning decisions they make that are affected by climate related events.

In another context, USDA management of the Forest Service, though not funded in this Bill, come directly from the secretary's Office. the Secretary Of USDA relies on the weather and climate assessments of the Chief Economists office in determining many of the activities that might be affected by extreme or unusual climate phenomena.

Following the above rationale, coupled with the IRI's current capability and the potential for growth in the natural resource assessment sector, we recommend that USDA contract with the IRI for the development of refined models that will produce long range and near term climate for use in USDA's supply and demand estimates and in the management decisions related to natural resource stewardship.

The development costs related to this refined modeling will total $750,000 in the first year. The project is estimated for a three year effort, which involves model development, assessment and validation, and real-time experimental testing. At the end of the first year, USDA would be provided predictive model information and forecasts that could be used in conjunction with traditional, less sophisticated methods. The potential benefit to the economy, local farmers and the environment far outweighs the modest investment of $750,000.

The IRI is prepared and eager to embark on exactly this kind of project with USDA. The Budget Justifications certainly speak to the need for such expertise, and that expertise is available through the IRI.

OVERARCHING IRI GOALS

We are seeking to gain more quickly the capability for avoiding losses similar to those listed on an earlier page. The IRI's core function is prepared to move to a more mature stage. We could employ more of an engineering approach to forecast system development. The characteristics of this approach include more quantitative testing, more precise figures of merit, and particularly a much more controlled environment.

The IRI would develop the analog of a state-of-the-art wind tunnel to aerodynamically design models with physical properties. The infrastructure of this advanced approach involves computation: software environment and computing power. The IRI seeks to develop and test improved coupled ocean-atmosphere climate fore-

cast system for El Niño and La Niña events, thereby enhancing the ability to understand and predict climate impacts on a higher resolution at the national scale in the near-term future.

CONCLUSION

Mr. Chairman, I recommend that the Committee provide $750,000 in fiscal year 1999 for climate modeling and forecasting development through the IRI for the purposes of (1) improved USDA capability and accuracy in producing the World Agricultural Supply and Demand Estimates; and (2) improved information for making decisions related to management and stewardship of our nation's natural resources.

Thank you for the opportunity to present this statement for the Committee's consideration in funding decisions you will make for the fiscal year 1999 Agriculture Appropriations Act.

PREPARED STATEMENT OF SUSAN G. SCHRAM, PH.D., FOOD AND AGRICULTURE PROGRAM COORDINATOR, DEPUTY DIRECTOR, WASHINGTON OPERATIONS, CONSORTIUM FOR INTERNATIONAL EARTH SCIENCE INFORMATION NETWORK (CIESIN)

Mr. Chairman, thank you for the opportunity to submit testimony to the Subcommittee. I would like to thank you and the Subcommittee for your support for The USDA/CIESIN Global Change Data Assessment and Integration Project, funded through the Agricultural Research Service (ARS). I am pleased to have the opportunity to report the accomplishments of the project over the past year, highlight the importance of the continuation of the project, and, inform the Subcommittee of some changes that will be taking place at CIESIN in 1998.

Mr. Chairman, it has been another successful year for the USDA/CIESIN project. As you know, the focus of our work is to increase the taxpayer's return on investment in years of agricultural research and data collection. CIESIN's work in global environmental change related to agriculture has provided the opportunity to document, rescue and use more efficiently, the vast long-term data resources of the USDA and its related field offices across the United States.

Specifically, the major objectives of our work are to:

(1) rescue and put to use valuable long-term scientific agricultural and natural resources data that taxpayers have paid millions of dollars to collect and that are at risk of being lost;

(2) provide state-of-the-art technical tools so that concerned farmers, ranchers, and citizens can visualize alternatives and participate in decision-making about the uses of our natural resources;

(3) provide cross-agency access to documentation on USDA's data resources related to agriculture and global environmental change; and

(4) bring the latest developments in electronic information technology to bear on challenges faced by USDA agencies.

Over the course of the project our work has helped address long-term agricultural and natural resource issues in: New Mexico, Michigan, Arizona, Colorado, Texas, Oregon, Alaska, Hawaii, Oklahoma and Idaho. Through the support of the subcommittee and in cooperation with the Agricultural Research Service, we have also been able to disseminate our new technologies to assist other USDA agencies such as the Forest Service and the Natural Resources Conservation Service.

Mr. Chairman, an important aspect of harnessing our scientific data resources for improved use by the research community and the public is to determine the location and condition of our long-term agricultural and natural resource data assets needed for analysis of global environmental change over time. We must assure that previous public investments in scientific data collection are not squandered due to retirement of veteran scientists, poor storage conditions, inadequate documentation, or existence of the data in single, hard copy format.

CIESIN has continued its collaboration with the Physical Sciences Lab (PSL) at New Mexico State University (NMSU) to address data rescue needs. Our efforts have been devoted to salvaging data related to two of the most valuable resources of the western United States—water and grazinglands.

In previous years we have been able to complete data rescue projects at the ARS Jornada Experimental Range and the Cibola National Forest in New Mexico, and the Santa Rita Experimental Range in Arizona. These projects transformed single hard copy data into digital data that are now being put to use by researchers. Rescued data have been incorporated with other digital data to provide an historic picture of long-term changes in grazingland vegetation and to permit analysis of the relationship between grazingland vegetation and climate variation.

This past year, data rescue efforts focused on rescuing hard-copy animal weight and forage density data at the ARS Southern Plains Experimental Range in Woodward, Oklahoma, and on digitizing aerial snow cover photographs at the ARS Northwest Watershed Research Center in Boise, Idaho. Following is a capsule summary of each of these projects:

Southern Plains Experimental Range.—Twenty years of steer and cow/calf monthly weights and forage density data were transcribed from ledgers to data sheets and keypunched into a data base format. These data were then combined with climate data to provide a means of performing statistical analysis over a twenty year period in the southwestern United States (including the massive drought of the 1950's).

Northwest Watershed Research Center.—Snow cover information is vital to the development of snow melt and runoff calculation used to predict water availability in the high desert country of Idaho. This information is presently contained in twelve years of individual 8 by 10 hard copy aerial photographs of snow cover on the Reynolds Creek Watershed. Snow cover percentage is currently estimated by visual examination of the photographs. During the 1997–1998 contract year CIESIN will digitize these photographs. Digitizing will not only provide the information in electronic format, but will also allow image processing and pattern recognition software to be employed to give a more accurate estimate of snow cover.

Looking forward to future data rescue projects, CIESIN is presently working with the ARS Southwest Watershed Research Center in Tucson, Arizona to evaluate the feasibility of extracting valuable long-term precipitation, runoff, and sedimentation data from old magnetic tapes, and applying these data to decision support systems to assist ranchers, farmers, and municipalities in southern Arizona and New Mexico.

Since the beginning of the USDA/CIESIN Global Change Data Assessment and Integration Project, CIESIN has been concerned with improving the ways in which data and information are presented to scientists, policymakers, and the public at large to facilitate decision making about agricultural resources. CIESIN has performed continuous research to stay abreast of the latest advances in data and information visualization techniques and applications. Research conducted in the past year focused on cutting edge visualization techniques and agricultural applications.

CIESIN continues to advance knowledge in the area of giving a spatial context to agricultural decision making. In the past year, the Agricultural Research Service has been particularly excited about CIESIN's work with the ARS Great Plains Systems Research Unit in Fort Collins, Colorado to develop a means of displaying the results of the Great Plains Framework for Agricultural Resource Management (GPFARM) model.

CIESIN work provides GPFARM with geographic capabilities—we provide a way for the farmer to see the model output (which is usually displayed in numbers) in a much more easily understood map format. Presently we are working with ARS scientists to implement the Farm Spatial Data Management System (FSDMS). FSDMS will provide a geographic interface for farm and/or ranch record keeping and trend analysis.

The FSDMS is a three level system, with each level providing additional capability for spatial analysis and modeling. The three levels are: Level 1—Farm Layout and Record Keeping; Level 2—Farm Analysis; and Level 3—Farm Research.

Level 1 helps the farmer "sketch" farm layouts and fields, import digital images such as scanned quad maps and aerial farm photos, supplement field sketches with commentary data and photos, record weed and pest infestation data with direct reference to the farm layout, and analyze trends in weed and pest records through interactive query.

Level 2 assists the farmer in translating farm sketches to precise geographic coordinates. This permits direct integration with Global Positioning Systems yield monitors, soil sampling, and precision chemical application. In addition, this allows the farmer to begin to take advantage of federal data resources such as NRCS digital soils maps, digital weather maps, and terrain maps. Level 2 provides the interface to GPFARM and other farm simulation models, allowing for direct benefit from federally funded research programs and model development.

FSDMS Level 3 will provide a spatial interface for agricultural research scientists to evaluate new models, develop enhanced simulation techniques, and investigate prescriptive farm assistance through artificial intelligence procedures. A detailed design for both Level 1 and Level 2 of the FSDMS system have been developed, as well as a conceptual design for Level 3. In addition, a functional Level 1 prototype has been developed and has been distributed to local farm consultants for review and feedback.

This year, CIESIN continued its work in global environmental change data documentation across USDA agencies. CIESIN has developed new metadata about global

environmental change-related data sets across the major USDA research agencies and continuously updated metadata collected in previous years. This information is made accessible to USDA and other researchers through the World Wide Web. The USDA/CIESIN World Wide Web "home page" (http://www.ciesin.colostate.edu/USDA), provides an integrated view of 750 USDA global change data sets, 160 models, and 173 GIS applications with electronic connections to a full spectrum of information related to environmental change research topics. Information about all of CIESIN's project deliverables to date may also be found on the home page. Between September, 1997 and January, 1998, there were over 14,000 "hits" on the USDA/CIESIN home page.

The home page now connects USDA researchers, land-grant university and other users with over 520 additional sources of agriculture and natural resource data worldwide. CIESIN also serves as the official provider of agricultural data entries, formatted appropriately, for inclusion in the electronically-accessible NASA Global Change Master Directory.

Finally, Mr. Chairman, I would like to inform you of some pending changes at CIESIN. CIESIN is in the final stages of negotiating an agreement to move its headquarters staff and operations to Columbia University in New York. Under the proposed arrangement, CIESIN would become a Center of the Columbia Earth Institute and be located at the Lamont Doherty Earth Observatory campus in Palisades, NY. This new arrangement will provide CIESIN with many new opportunities for scientific and technical collaboration, and reduce its overall current indirect cost structure, freeing more USDA/CIESIN project dollars for research.

The transition and relocation are scheduled to occur on June 30, 1998. Plans call for me to remain in the CIESIN Washington office to conduct project work and to perform federal liaison functions and for the CIESIN Ft. Collins office to continue to be co-located with ARS.

Mr. Chairman, this project is an important part of the work of USDA in preserving previous taxpayer investment in scientific data collection, providing state of the art tools for sound agriculture and natural resource decision making, and making scientific data and information more readily available and more useful for the research community, for federal, state and local policy makers and the public. We are grateful for the opportunity to provide Subcommittee members with an update on our activities and respectfully request your continued support of this program.

PREPARED STATEMENT OF E. EDWARD KAVANAUGH, PRESIDENT, COSMETIC, TOILETRY, AND FRAGRANCE ASSOCIATION

INTRODUCTION

The Cosmetic, Toiletry, and Fragrance Association (CTFA) respectfully urges you to direct $5 million in increased appropriations to the Food and Drug Administration's regulatory program for cosmetics in the Center for Food Safety and Applied Nutrition (CFSAN) Office of Cosmetics and Colors. This additional funding is essential to ensure continuing confidence in the safety of personal care products.

We believe that this funding should be provided through increased appropriations rather than through reallocation of existing resources or through user fees. Although we feel very strongly about this, we understand the difficult budget decisions facing the Subcommittee. If an increase in appropriations is not possible at this time, we ask you instead to earmark $5 million specifically for the regulatory program for cosmetics within the CFSAN Office of Cosmetics and Colors.

ADDITIONAL APPROPRIATIONS ARE DESPERATELY NEEDED

Without this funding, we firmly believe that the FDA will be hard pressed to maintain a credible cosmetic regulatory program. In recent months, the FDA's cosmetic regulatory program has sustained crippling cuts:

—In January 1998, the agency announced that all 12 of its field personnel assigned to cosmetics had been reassigned to food programs. This necessitated the immediate cancellation of the FDA's compliance programs for domestic and imported cosmetics.

—In March 1998, the remaining staff assigned to the program was reduced from 27 to 15 full-time equivalents. These cuts resulted in the suspension of the FDA Voluntary Cosmetic Reporting Program, which for more than 25 years had provided the agency and our industry with valuable information about the ingredients used in cosmetic and personal care products. The FDA has also indicated that, because of these cuts, it will limit the number of cosmetic-related tele-

phone inquiries it takes from the public and the industry. Additionally, laboratory studies of cosmetics will be significantly reduced or suspended.

During discussions with the cosmetic industry about these devastating program cutbacks, the agency raised the possibility of further weakening the regulatory program for cosmetics by moving it from CFSAN to the Center for Drug Evaluation and Research (CDER). We believe that such a shift would be disruptive and counterproductive. It is absolutely imperative that the program remain in CFSAN, where it has functioned effectively for almost 30 years and where the expertise exists.

With finite resources and a long list of responsibilities, the FDA faces daunting budget decisions. Cosmetic products have a stellar safety record and, according to FDA commissioners spanning more than two decades, are the safest products the agency regulates. Therefore, when the agency needs resources for other products or issues that present a critical and immediate problem, such as food safety, there is an understandable temptation to draw those resources away from the regulatory program for cosmetics. We must not allow this to happen.

This "rob Peter to pay Paul" approach is, at best, a short-term solution. It fails to recognize that by downgrading the cosmetic regulatory program, the agency is sowing the seeds for future problems. For one thing, it could unwittingly encourage unwarranted attacks on the agency's ability to police the industry. In addition, it could encourage entry into the market of product manufacturers that do not maintain the current high standards of the industry. We know that cosmetics are by far the least of the problems facing the agency today; we want to keep it that way. To do that, we must have a strong FDA regulatory program to stand behind the industry's commitment to maintain its high standards of safety.

A STRONG COSMETIC PROGRAM IS CRUCIAL TO OUR INDUSTRY AND THE PUBLIC

An exhaustive discussion of the importance of a healthy FDA cosmetic regulatory program is beyond the scope of this statement. We must point out, however, that the American people rely on the FDA and have every right to expect that the Congress will provide the agency with the resources it needs to ensure the safety of the products it regulates, including cosmetics.

CTFA members provide consumers with a wide choice of safe cosmetic products, including such things as makeup preparations, shampoos, deodorants, toothpastes, mouthwashes, perfumes, shaving creams, and skin lotions. These products promote personal hygiene. They help people look and feel their best, thereby increasing self assurance and self esteem. Virtually every man, woman, and child in the United States uses cosmetics every day. Due to the historic effectiveness of the FDA and the voluntary safety programs undertaken by the cosmetic industry—often with the agency's cooperation and participation—they do so safely and with confidence. Failure to fund adequately the agency's regulatory program for cosmetics will undercut a vital component of a safety system that has served consumers well for decades.

Moreover, the continued economic well-being of the $25 billion cosmetic industry depends on a strong FDA regulatory program. Our industry relies on the FDA compliance function. Without compliance, unscrupulous competitors can not only defraud the public, but undermine legitimate industry as well. The cosmetic industry needs a level playing field. We need to know what regulatory requirements apply. We want to be certain that the FDA law and regulations will be enforced consistently against all marketed products, whether imported or produced domestically.

A strong FDA Office of Cosmetics and Colors exerts national leadership, maintains appropriate standards to assure the safety and proper labeling of cosmetics throughout the nation, and ensures that Americans can enjoy a nationwide marketing system with adequate public protection and uniform enforcement in every part of the country. If the FDA's cosmetic program is diminished, the states may be encouraged to ignore the agency and establish their own, potentially conflicting, regulatory requirements for cosmetics. Such a patchwork of state mandates could only confuse consumers and wreak havoc on our industry's ability to operate in interstate commerce.

The FDA is currently recognized as the preeminent international body in the field of cosmetic regulation. A visible and vigorous CFSAN Office of Cosmetics and Colors is necessary to maintain this international leadership and to move even more quickly toward the goal of international harmonization, which the Congress established as an FDA priority for cosmetics and other regulated products under Section 410 of the FDA Modernization Act of 1997.

THE COSMETIC REGULATORY PROGRAM MUST REMAIN IN CFSAN

The cosmetic industry believes that it is imperative for the FDA's regulatory program for cosmetics to remain in CFSAN. Therefore, we are asking the Subcommit-

tee to ensure that any funding it provides to the agency's regulatory program for cosmetics is specifically directed—and firmly tied—to the CFSAN Office of Colors and Cosmetics. There is simply no budgetary, policy, or management reason to move the program from CFSAN to CDER.

No savings would result from transferring the cosmetic program. At least the same levels of staffing and funding would be needed to establish and maintain an effective cosmetic program at CDER as at CFSAN. In fact, since the present CDER personnel are not knowledgeable or experienced in cosmetics, even greater levels might be required were the program shifted.

Moreover, maximum efficiency and effectiveness demand that the cosmetic program be in a scientifically compatible environment. Cosmetics and food share many more common scientific characteristics than do cosmetics and drugs. Unlike drug ingredients, for example, food and cosmetic ingredients are largely inert, are not intended to produce a pharmacologic effect, are not the subject of therapeutic claims, and are not investigated for their clinical benefit.

More than 3,400 functional cosmetic ingredients are also regulated by the FDA's CFSAN as food additives or GRAS food substances. Food flavors and cosmetic fragrances share the same natural sources and have many substances in common. Color additives—which are a significant component of most cosmetics—and food additives have been regulated by the same scientists in CFSAN since enactment of the Color Additive Amendments of 1960. Safety decisions regarding food ingredients and cosmetic ingredients rely on the same scientific disciplines, which differ from those regarding drug ingredients.

Some personal care products, such as deodorant/antiperspirants, antidandruff shampoos, and dentifrice/fluoride toothpastes, do fall into both the drug and cosmetic definitions of the Federal Food, Drug, and Cosmetic Act. They are currently and appropriately handled by CDER, in cooperation with CFSAN, as over-the-counter drugs. These products, however, represent a small portion of cosmetic products and provide no justification for transferring the vast bulk of cosmetics, which have no pharmacologic properties, from CFSAN to CDER.

We are also convinced that the regulatory program for cosmetics must remain at the Office level within CFSAN. A reduced program, buried in the bowels of the FDA, would be unable to attract leaders or staff with strong qualifications and national stature. Moreover, such a reduction would send the unmistakable signal that the FDA is abandoning this area and would virtually preclude a position of leadership either nationally or internationally.

FUNDING THE REGULATORY PROGRAM FOR COSMETICS

We are seeking $5 million for the regulatory program for cosmetics in the CFSAN Office of Cosmetics and Colors. Although it is difficult to pinpoint an exact figure, we believe that this approximates the amount that the FDA has been allocating annually to its regulatory program for cosmetics. In this era of budgetary constraints, we are not asking for new programs. We are merely asking for a level of stable funding that will ensure the restoration and maintenance of a program similar to the one that existed prior to the debilitating cuts recently instituted by the agency.

CTFA believes it is essential to secure the $5 million through additional appropriations rather than by drawing resources from other FDA programs or by imposing user fees. If that is impossible, however, we ask the Subcommittee instead to allocate $5 million to ensure that there is a strong regulatory program for cosmetics in CFSAN.

We favor additional appropriations because we know that the FDA has many important responsibilities, of which cosmetics is only one. We believe that the agency needs appropriate levels of funding to do the kind of job that the American people expect and deserve. Furthermore, we believe that it is the responsibility of the Congress to ensure that the FDA has the necessary resources to regulate cosmetics adequately.

We appreciate the fact that the Congress and this Subcommittee in particular have consistently, and we believe correctly, rejected the imposition of user fees to fund general government operations. Such fees, in effect, would be a regressive tax on the products manufactured by our industry.

Prescription drug user fees are used to speed up a specific company's new drug applications. They are not used for general FDA administrative or enforcement purposes. Having the cosmetic industry pay user fees to finance the FDA's inspection and enforcement activities is an entirely different matter. Instead of directly resulting in faster approval of new prescription drug products for a company that pays the user fee, the user fees here would be used to fund the agency's broad public

health responsibilities for the entire cosmetic industry. This would raise serious public policy concerns.

SUMMARY

The cosmetic industry urges the members of the Subcommittee to provide $5 million in increased appropriations for the FDA regulatory program for cosmetics in the CFSAN Office of Cosmetics and Colors. If increased appropriations are not possible, we ask that you instead reallocate and expressly earmark $5 million for the regulatory program for cosmetics in the CFSAN Office of Cosmetics and Colors.

We are grateful for this opportunity to express our views on the vital importance of adequate funding for this program. Thank you for your consideration.

PREPARED STATEMENT OF SAMUEL F. MINOR, CHAIRMAN, COUNCIL FOR AGRICULTURE RESEARCH, EXTENSION, AND TEACHING (CARET)

Thank you Mr. Chairman. I appreciate the opportunity to provide testimony today in support of the Land-Grant System.

My name is Sam Minor, Chairman of the Council for Agricultural Research, Extension, and Teaching, commonly called CARET. CARET is a national focal group of lay support persons formed a number of years ago for the expressed purpose of enhancing national support and understanding of the important role played by the land-grant colleges in the food and agriculture systems as well as their role in enhancing the quality of life for all citizens of the nation.

I take part in this activity with a great amount of pride and commitment, because I know first hand of the important role played by our land-grant institutions.

As a dairy farmer, retail market, and on the farm restaurant owner/operator I have experienced the beneficial results of agricultural research and extension in our own business enterprise. This was particularly true when we, some 22 years ago, started our business from scratch on a hillside farm located some 25 miles south of Pittsburgh, Pennsylvania with nothing more than a good wife, five small children, and a few saved dollars.

I do know first hand of the value of our Land-Grant Colleges such as Penn State to the individual farm family. Nearly everything that has transpired on this farm from the cropping program, to the calf raising, to the artificial breeding, to the milking and business management has been substantially based on the research and extension work from our land-grant university. This same statement can be said about many or the hundreds of thousands of farm families across this country. Agricultural research and education has been the basis of much of the development and growth that has allowed American agriculture to be the envy of the world.

As a retailer of milk and other dairy products and farm fresh produce in our retail market and as a restaurant operator, we also have a great appreciation of the importance of food quality and food safety. The research and educational work that is being done in these two areas is also greatly recognized for the importance that this plays in our operation.

As Secretary of Agriculture, Dan Glickman, recently said, "Seventy-five percent of the progress that has been made in agriculture productivity and competitiveness since the second World War has been a direct result of the public contribution to agriculture research." Now is not the time to allow other countries to assume this lead in agricultural productivity and development.

It has been the federally supported programs of research, extension, and teaching that have provided the scientific basis to allow 1.8 million U. S. farms, such as ours in southwestern Pennsylvania, to produce a record in excess of $200 billion of food and fiber. A record of nearly $60 billion of this productivity in 1996 went to the export market, allowing for a nearly $30 billion of positive contribution to the balance of trade. Although agriculture exports were down some this past year, they still had a very positive influence on narrowing the U. S. trade margin while contributing significantly to feeding and clothing a growing world wide population.

This is an important time to talk about agriculture research and education. We are increasingly aware of the fiscal restraints and the changing role of the federal government in the conduct of our agriculture businesses. Agriculture has demonstrated that it will rely less upon the commodity support programs but will compete even more effectively in the world wide marketplace. Agriculture research and the implementation of these research findings has been a major factor in preparing for this transition. As a result of these past efforts, we will have an agriculture system that is even more competitive in the global economy.

As a result of this research and education work, we will continue to have an agriculture industry that is the envy of the world. This is an industry that combines

food and agriculture and their related industries to provide almost 20 percent of the jobs in this country and accounts for 16 percent of our gross national product. Yet, the consuming public spends less of their disposal income, just over 10 percent, for their food needs than any other country in the entire world. These are numbers that are familiar to all of us. Yet they are just as significant today.

Now, as we enter a new era in agriculture and the role that government plays in agriculture, we believe that the need for an agriculture that is based on research and science is greater than it has ever been before.

We are, for many reasons, in a very rapidly changing agriculture. Some call it an industrialization of agriculture. We are seeing a consolidation of our agriculture enterprises. We are seeing a rapid implementation of new emerging technologies. Information, of all kinds, that enhances the ability to make more rapid and more correct decisions is increasingly available. New plant and animal species, varieties, and characteristics are emerging from the rapid advancement of the biotechnological sciences. These changes and this advancement has come about, to a great extent, because of the past investment in agriculture research and education, much of it form public sources.

As we consider this transition in the framework of new work that is now being done and the new scientific advancements that are just on the threshold of disclosure, one has to think that our opportunities are greater today than they have ever been in the past. It will, however, take dollars to bring these opportunities to fruition. It will be a continuation and expansion of the federal, state, local, and private partnership that can best provide these dollars critically needed for this work. Your decisions in the coming months to increase the federal outlay for agricultural research can provide some much needed leadership for this effort. The federal funds are the heart of this partnership.

Specifically, the federally-supported programs in cooperation with our state land-grant colleges and universities are crucial for us to retain and expand the U. S. competitive edge in the world wide marketplace. Specifically federal funding for agriculture research requires a balanced portfolio of base funds, special grants and competitive grants.

This testimony is principally to request support for the fiscal year 1999 budget recommendation of the NASULGC Board on Agriculture of $910.3 million, an increase of 8.4 percent over the current year appropriation. This request is for the federal portion of the funding for research, extension, and higher education and federal administration that is, in turn, leveraged up to five times at the individual state and local level. While this is large amount of money, it is truly quite moderate in relation to the total federal appropriation to research or even in relation to the total agriculture appropriations.

Mr. Chairman, I especially want to emphasize the importance of the request for the small increase in the amount appropriated for the base programs for research and extension. This highly successful state/federal base program partnership has provided critically needed stable on-going research. These funds are essential for leveraging external resources. As you are aware, these base fund levels have been eroding for a number of years. It is very critical that this trend be reversed. Base program funding is unmatched as a vehicle to foster multi-year programs essential to the science of agriculture. Measured rates of return on this investment range from 30 to 50 percent, depending on location and commodity. Again, I sincerely request that you begin to restore these very critical base program funds.

As I am finalizing this prepared testimony, I am aware that Congress is right now preparing to finalize the reauthorization of the Research and Science portion (Title VIII) of the Farm Bill. We in CARET and the entire land-grant system are appreciative of the opportunity to have participated in this process. We are especially glad to know of the recognition that has been given to the addition of substantial new funding for agricultural research. We trust that everything possible will be done to assure that these new research monies will be included in the final form of the Title VIII reauthorization. We also trust the House and Senate appropriators will join in supporting this newly-authorized Congressional support for agricultural research, if enacted into law, without penalizing agricultural research through discretionary funding.

The Council on Agricultural Research, Extension, and Teaching is very pleased to speak on behalf of the land-grant university system This land-grant partnership, these seventy-five universities working in close cooperation with the USDA Cooperative State Research, Education, and Extension Service, is a very important and very strong relationship. This is a partnership that undergirds successful agriculture in the United States and is the envy of the entire world. This is a partnership that our CARET organization believes should be financially supported to the fullest pos-

sible extent at both the federal and at the state levels. We ask that you give this request your fullest possible consideration this year.

As an individual farmer and a member of the agriculture community, I am very proud of what this federal, state, and local partnership has provided to us. At the same time, agriculture research and education must be an important part of our long-term agricultural policy. We must strengthen our financial commitment to assure that these basic programs of the land-grant system will be prepared to meet the emerging need of the food and fiber sector. We in agriculture and the country as a whole want to be prepared to take full advantage of the further opening of global markets, greater deregulation of the commodity programs, and the promise of scientific breakthroughs. We also want to be prepared to address important environmental and food safety issues. These all provide unprecedented opportunity to put science and education to work in support of mankind.

Thank you for the opportunity to provide this testimony.

PREPARED STATEMENT OF SARA AMUNDSON, DORIS DAY ANIMAL LEAGUE

INTRODUCTION

The Doris Day Animal League, on behalf of its 370,000 members and supporters, is a national, animal protection organization. We appreciate this opportunity to submit testimony supporting our respectful request for a specific appropriation for the Office of Cosmetics and Colors in the Center for Food Safety and Applied Nutrition at the Food and Drug Administration.

BACKGROUND

The Office of Colors and Cosmetics (OCC) is the primary department with regulatory authority for administering the cosmetics program at the FDA. Due to increased responsibility for regulation of food at the Agency, funding for the OCC has been shifted to meet new mandates. A significant portion of the estimated $5 million annual appropriation for the OCC is being absorbed, leaving the least regulated product under FDA open to safety concerns for consumers. The lack of commitment to the OCC has manifested itself in the following ways:

—Staff for the OCC was cut by 50 percent, from 27 to 15 full-time employees in March 1998.

—The Voluntary Cosmetic Reporting Program, a resource for consumers and industry, has been discontinued. This program provided information on the ingredients used in cosmetics and other personal care products for many years.

—All assessments of in vitro, or non-animal test methods, to substantiate the safety of products have been discontinued. The FDA's authority on this issue of great concern to many Americans will be seriously undermined, as Europe progresses towards its legislative mandate to end animal tests for safety studies of cosmetics.

Under Section 410 of the FDA Modernization Act of 1997, the Agency was charged with actively pursuing international harmonization of regulations for the products under their purview. The European Union has already passed a Directive to replace animal tests for safety assessments of cosmetics with non-animal alternative methods. In order to comply with the European Union when the full Directive is implemented, it is crucial that the OCC continue to move toward harmonization of United States regulations with Europe.

With members of industry backing changes in testing methods that can be more accurate, faster and ultimately less expensive, it is important to meet the current mandate to internationally harmonize regulations. The FDA must ensure all of industry and consumers benefit by consideration of these testing methods.

The FDA, in an era of budget cuts and shifting priorities, has striven to meet other mandates by absorbing a significant portion of the OCC's budget into other programs. However, by further cuts in a program already compromised by previous budget constraints the consumers may be negatively-impacted.

The Doris Day Animal League urges an additional appropriation of $5 million for the OCC, as a stable level of funding for this existing program, to ensure uninterrupted cosmetics regulation. If the additional appropriation is not possible, we ask that Senate Agriculture Appropriations earmark $5 million from the existing FDA budget.

Thank you for this opportunity for the Doris Day Animal League to express the concerns of our constituents. We appreciate your consideration of our request.

PREPARED STATEMENT OF WILLIAM K. CRISPIN, EXECUTIVE DIRECTOR, EVERGLADES RESTORATION OVERSIGHT GROUP

We should most deeply appreciate your thoughtful consideration of this testimony that we are submitting on behalf of the Everglades Restoration Oversight Group (EROG). I have attached a curriculum vitae and a statement of disclosure concerning federal grants.

EROG, and its organizations respectively, thank the Senate Appropriations Committee for its leadership in appropriating funds to enable the Agricultural Research Service, USDA, to establish one hydrologist at the Subtropical Horticulture Research Station in Miami, Florida. The ARS has recruited an excellent hydrologist, Dr. Reza Savabi, to establish this program. Dr. Savabi will focus on developing a farm-scale model of the movement of water under and over agricultural fields in relation to water levels in the canal system. These water levels are being raised as part of the effort to restore the functioning of natural ecosystems in the national parks and in coastal waters. There is great concern that ecosystem restoration must be carried out in a manner that maintains or enhances the existing water supply and flood control features of the Central and South Florida Project (C&SF).

It is very clear that the science base has not been established to adequately guide the restoration program. Thus we are alarmed that the US Army Corps of Engineers and the US Department of Interior have placed the South Florida Restoration effort on a very fast track.

In the southernmost part of the Florida peninsula, the restoration effort is being implemented through the C–111 Basin Project and the Modified Water Deliveries Project. There is great concern that these Projects will have a negative impact on agriculture and on rural communities. We believe that the long-term objectives of the Ecosystem Restoration thrust can be met only if: the water management scheme is placed on a solid scientific footing; and, sustainable agricultural practices are developed in a way that facilitates the economic viability of agriculture, as well as good land and water stewardship.

Unfortunately, the focus of hydrological study to date has been within the boundaries of Everglades National Park. The Park employs more than a dozen hydrologists for this work. By contrast, until the ARS recently stationed Dr. Savabi in south Miami, only very limited hydrological studies were conducted that pertain to the agricultural areas and rural communities. Nevertheless, the University of Florida established an Hydrological Task Force which issued a report in 1997 titled "Water Management Issues Affecting the C–111 Basin, Dade County, Florida". This report found that the documents produced by the US Army Corps of Engineers and the South Florida Water Management District concerning studies relevant to ecosystem restoration in south Florida to be "inconsistent, both internally and with other published reports". Moreover, the University found many deficiencies both in the models which serve as the basis for planning and in the operating guidelines of the canal system.

In addition, in 1996 the University of Florida developed a Comprehensive 5-Year Crop Research and Extension Plan of Work that addresses technologies, which need to be developed, to make agriculture more robust and economically sustainable, and to make agriculture a better partner in ecosystem restoration. The University of Florida is addressing these needs, but the University is not able to assign additional faculty to accelerate this vitally important effort. Therefore, the University's efforts need to be augmented by a strongly-focused effort by the Agricultural Research Service.

We recommend that the Congress provide the support needed by the ARS USDA to develop a strong Everglades Agro-Hydrology Research Laboratory in south Miami, Florida. This Laboratory would address needs from Lake Okeechobee to the Florida Keys. The Laboratory would establish a coordinated multidisciplinary team of scientists to conduct cooperative research on water management issues and on sustainable agricultural production systems for this region. At least three additional scientist positions must be added. The positions should be as follows:

(1) *Research Hydrologist.* This position has been established recently. It will integrate the science information bases in a systematic manner to produce hydrologic models for planning and practical water management.

(2) *Research Soil Physicist/Engineer* to produce the hydraulics science base that characterizes the physical systems of soil, surface and subsurface water flow and transport of agricultural chemicals, salts, etc.

(3) *Research Soil Chemist* to develop the agrochemical science base needed to enable growers to provide sufficient crop fertility while guarding against environmental risks.

(4) *Research Horticulturist* to provide leadership in developing Best Management practices and in creating improved production technologies.

We request that the Congress appropriate an additional $900.000 per year to the Agricultural Research Service for a cooperative research program on agrohydrology and sustainable agriculture in south Florida.

PREPARED STATEMENT OF GARY JACKSON, DIRECTOR, AND RICHARD CASTELNUOVO, ATTORNEY, NATIONAL FARM*A*SYST/HOME*A*SYST OFFICE

Thank you for the opportunity to submit a written statement to the Subcommittee on the issue of appropriations for agricultural research, education and economics. From our perspective as part of a national office coordinating a network of state Farm*A*Syst/Home*A*Syst programs, we are in a unique position to provide valuable information on the benefits of an action-oriented approach to education that results in voluntary actions that effectively respond to water quality concerns. At the outset, we would like to acknowledge the support of the National Association of State Universities and Land Grant Colleges and in particular the Cooperative Extension Services in Michigan, New Mexico, New York and Wisconsin.

Through increased support for programs such as Farm*A*Syst/Home*A*Syst, the federal government can effectively address important environmental concerns in ways acceptable to farmers, ranchers and other landowners. Few dispute the growing importance of these groups in tackling significant environmental issues such as non-point source pollution and safe drinking water. The disagreement comes when the discussion turns to issues of cost and approach. Too often government responds to the environmental problem of the moment by creating a new initiative. Rarely is this approach more cost-effective than making better use of programs that are proven performers. Nor does it necessarily result in programs that fit the needs of targeted audiences. In the case of Farm*A*Syst/Home*A*Syst, an incremental investment in this unique voluntary program would generate considerable benefits, building on a program awarded a 1997 USDA Group Honor Award for Excellence "for outstanding leadership in building cooperative, interagency partnerships that encourage farmers, ranchers, and home owners to take voluntary action to prevent or reduce environmental pollution."

Farm*A*Syst/Home*A*Syst is not another federally-directed program. It is locally-controlled by individual state teams who draw strength and focus from national coordination and unprecedented levels of cooperation among government agencies, universities and the private sector. This special arrangement is vital to building a broad-based commitment to voluntary action while providing familiar sources of support that enable individual landowners to improve management of their property. At the federal level, CSREES has joined NRCS and U.S. EPA to support a national office that provides assistance and guidance to a network of Farm*A*Syst programs in nearly every state (including Alaska, Arkansas, Iowa, Kentucky, Mississippi, Missouri, Montana, Pennsylvania, Vermont, Washington, West Virginia, and Wisconsin) and newly-developed Home*A*Syst programs in 30 states. National coordination enables these state programs to respond as a system to pollution concerns and provides structure to conduct program evaluations that demonstrate impacts. Nonetheless, this framework is sufficiently flexible to permit states to tailor Farm*A*Syst/Home*A*Syst programs so they effectively address local concerns.

State endorsements of Farm*A*Syst/Home*A*Syst reveal how states take advantage of this flexibility. Dr. Jimmy Bonner, Mississippi Extension Farm*A*Syst Program Coordinator, explains how the program creates opportunities to work with the private sector:

> The Delta Council, an organization of Mississippi Delta farmers, was looking for a way that its members could show they were doing the right thing environmentally. In Farm*A*Syst, the group saw a program that suited its needs. The Council wants to adapt Farm*A*Syst to address specific environmental concerns in the heavily row-cropped Mississippi Delta. We are ready to help with modification to develop materials emphasizing soil and water conservation, pesticide management, wildlife management, solid waste management and other areas to complement the existing Farm*A*Syst model. If all goes as planned, farmers will start using the materials this year.

Meg Burgett, Alaska Cooperative Extension, knows firsthand the value and impact of the program:

> We are working closely with the Alaska Department of Environmental Conservation (ADEC) to integrate this program with their statewide Wellhead Protection and Groundwater Protection Programs to achieve maximum use of the materials. Alaska has approximately 85,000 households that get their drinking water from privately owned water wells. In addition, there are approximately 1700 Class A and B community water systems, most of which have privately-owned land in close proximity. Although ADEC is charged with the protection of drinking water for Alaskans, their role is not to regulate these private holdings. Educational outreach to the private landowners is the most effective method of reducing the risk of pollution to our drinking water supplies. Use of the Home*A*Syst materials developed for Alaska will enable landowners to assess pollution problems and risks on their property and empower them to take voluntary actions to prevent pollution using the best available scientifically-based recommendations.

Bob Broz, Missouri State Coordinator observes, ''Like a lot of states, Missouri can benefit from pollution prevention. Agriculture is often overlooked in this effort. Farm*A*Syst offers an action-oriented approach that farmers feel comfortable using to take voluntary action to prevent pollution on their property.''

Karen M. Blyler, Coordinator for Washington Home*A*Syst (a comprehensive program that reaches farmers as well as homeowners), provides insights concerning the tremendous growth of the state program:

> In a little over four years, Washington's highly successful Home*A*Syst program has been used in over 17 counties and in a wide array of educational projects. Initially proposed as a ''Wellhead Assessment and Protection Pilot'' for farmers, ranchers and rural residents, Home*A*Syst has evolved to meet other water quality needs, including source water protection and safeguarding private drinking wells. In many areas, Home*A*Syst has become the educational tool of choice because it is both voluntary and confidential.

KY*A*Syst State Coordinator, Roger Rhodes, points to the program's value in satisfying an ''innovative piece of legislation'' that requires all Kentucky agricultural landowners of 10 acres or more to complete a water quality plan that covers 59 best management practices: ''KY*A*Syst is the most effective way to accurately assess farmstead pollution risks related to petroleum tanks, septic systems, and pesticide storage. It will result in more complete and thorough state water quality plans.''

State Coordinator Les Lanyon believes that Pennsylvania Farm*A*Syst enables farmers to take a positive approach to protect shared resources through pollution prevention:

> I tend to work with small dairy farmers (40–50 cow operations) who are under intense economic pressure. Farm*A*Syst is a voluntary program that can focus on the positive. It lets folks who are doing a good job know that they are on the right track. Also it reveals opportunities for improvement on individual farms.

These experiences have been replicated in state after state. To develop and deliver the program, each state has assembled teams that have successfully linked agency officials at different levels of government, agricultural and environmental regulators, and educators and technicians in cooperative enterprises to address common environmental concerns. In states such as Washington and Arkansas, for example, local staff from CSREES and NRCS are actively involved as agency partners, together with officials from U.S. EPA and Soil and Water Conservation Districts.

These partnerships improve the effectiveness of programs such as NRCS's Environmental Quality Incentives Program (EQIP) by providing action-oriented education. Funded by an educational grant under EQIP, a Wisconsin team of Extension agents and others plan to use Farm*A*Syst with small dairy farmers, contractors and milk machine installation technicians in Outagamie, Shawano and Waupaca Counties to improve milkhouse waste treatment systems. On the western edge of the state, in Buffalo and Grant Counties, interagency teams are using EQIP funds to deliver Farm*A*Syst in two watersheds to reduce soil erosion and other environmental problems related to agriculture. Through the EQIP program in Missouri, producers will be eligible to receive a $100 payment for conducting Farm*A*Syst assessments and adopting management practices to reduce pollution risks.

Dr. Jimmy Bonner provides this example of partnerships from Mississippi:

> A Farm*A*Syst pilot project involving dairy farmers in Mississippi's Tangipahoa Watershed developed into a two-state, multi-agency initiative,

> including NRCS, RC& D, Farm Services Agency, Mississippi Soil and Water Conservation Commission, Mississippi State Health Department and the Mississippi Department of Environmental Quality, as well as Louisiana agencies. With a strong partnership between agriculture, the environment and local producers, there were many opportunities to help producers test their drinking water, install and renovate animal waste lagoons and improve animal waste management practices. In addition, a special waste pesticides collection was held in the watershed resulting in the proper disposal of more than 6,000 pounds of waste pesticides. This special effort was part of a larger state-wide collection of over 600,000 pounds of waste from 1994–1997.

Ties to the private sector have strengthened state teams. Tyson Foods has turned to Farm*A*Syst to improve management of its animal production operations in Arkansas. According to John Gunsaulis, Nutrient and Land Manager for Tyson Foods, "Farm*A*Syst is a tool that allows farmers to identify any potential area of environmental concern and plan actions that need to be taken." In eight out of the 29 states where Farm*A*Syst/Home*A*Syst is in the advanced stages of development, state Farm Bureaus are actively involved. WaterSafe (West Virginia's version of Farm*A*Syst) is extending its outreach capacity by using an 800 number provided by the state Farm Bureau. The Iowa State Farm Bureau is assuming a leadership role in launching a major initiative to refine Farm*A*Syst materials for Iowa and deliver the program in a priority watershed. Missouri has pioneered a successful training effort that introduces real estate brokers to Farm*A*Syst and Home*A*Syst and has started sharing this model with other states such as Washington. Through mini-grants, Montana will enable about 10 counties to explore "something different" in their delivery of Home*A*Syst, according to state coordinator Mike Vogel. This will create new opportunities to work with insurance agents, home inspectors, local health departments, bankers, home builder associations and Welcome Wagon in their efforts to deliver the program.

Farm Cooperatives were a vital link in a Wisconsin project working with petroleum marketers to reach new audiences with Farm*A*Syst and other pollution prevention materials relating to petroleum storage. "The materials were professionally done; very well put together," according to Dean Hanley, energy department manager, Danco Prairie FS Co-op. In the words of Tom Van Arsdall, Vice President of Environment, National Council of Farmer Cooperatives:

> [N]ow farmers are turning increasingly to cooperatives for assistance in the face of growing environmental pressures. That's why we are excited about the Farm*A*Syst program. It provides an opportunity for the agricultural community to pull together and help farmers pursue voluntary, cost-effective solutions when responding to environmental challenges.

States are applying Farm*A*Syst/Home*A*Syst to tackle their toughest environmental problems through voluntary action. Since every state needs help protecting private drinking water wells, Farm*A*Syst/Home*A*Syst stands out as the only national program that provides information and technical assistance that can help 23 million private well owners protect the quality of their drinking water. In Sevier County, Arkansas, Farm*A*Syst assessments were the first step in detecting and closing abandoned wells, a major pathway for pollution that threatens drinking water. County officials mobilized highway crews to close nearly 70 wells, saving an estimated $250 per closed well. In Whatcom County, Washington, Extension teamed with the state department of health and local agencies to train operators of small water supply systems in the delivery of the program. By working with private landowners to assess pollution risks, these operators were able to minimize contamination threats to recharge zones for public drinking water wells, while helping rural landowners protect their private wells.

State programs have the potential to involve and motivate a wide range of audiences. In addition to state-specific materials developed for farmers and ranchers, they have access to specialized education tools to reach under-served groups with practical information about pollution prevention. They can build on successful pilot projects that tested simplified assessment materials with Native Americans in Washington and Wisconsin, Spanish-language materials with landowners in two states and newly-developed Home*A*Syst materials with non-farm homeowners in Alaska, Montana, Washington and other states.

Increased funding can substantially improve state and local capacity to provide pollution prevention assistance to individual landowners, as the performance of Michigan Farm*A*Syst/Home*A*Syst shows. With a boost in funding, this state program was able to conduct more than 6,500 Farm*A*Syst assessments; more than

150 Field*A*Syst assessments; and more than 12,500 Home*A*Syst assessments. Reaching more people is important but changing behavior is the test of effectiveness.

Farm*A*Syst/Home*A*Syst results in voluntary actions to prevent pollution. Clearly, a key element in this process is landowners' acceptance and use of the program, as information provided by Karen Blyler illustrates. But this alone cannot explain improvements in management. Changes result from a system of education, self-assessment and action planning in which landowners are active partners in making improvements. Easy-to-use worksheets provide a simple and inexpensive way for individual landowners to evaluate pollution risks on their property and serve as the essential first step in formulating plans to prevent pollution. Farm*A*Syst worksheets initially covered farmstead pollution risks, such as well condition, petroleum tanks, chemical storage and animal waste, but have been expanded to include field activities such as nutrient and pest management. These materials are effective and useful because they organize complex regulatory requirements, technical information and recommended management practices into a system that non-experts can apply to their property to prevent pollution.

Using the process of self-assessment, landowners learn firsthand the consequences of pollution to their home. They are motivated to improve management to safeguard the health of their land and families, avoid environmental liability and cleanups and satisfy the concerns of lenders and property buyers. Based on state surveys, it is estimated that two of every three participants make or intend to make low-cost changes immediately, with higher-cost actions planned for the future.

According to a detailed benefit-cost study of 134 Louisiana farmers, Farm*A*Syst/Home*A*Syst is an extremely cost-effective program with long-reaching economic and non-economic (educational) benefits. Drawing on the results of this two-year study, Farm*A*Syst produces benefits-over-costs ranging from at least $2.4 million to more than $15 million. This range is calculated using three methodological approaches (averting expenditures, avoided costs, contingent valuation) and is based on an estimated 10-year implementation period.

Nearly one in three Louisiana participating farmers had made—or planned to make—66 individual changes in their farming practices "due to information provided by the Farm*A*Syst materials," changes that should prevent pollution to groundwater. These farmers voluntarily invested a total of $91,437 (approximately $682 per farmer) to make these changes. While these actions included low or no-cost changes in management, 18 percent of the changes involved construction costs over $500, 12 percent involved the plugging of old wells and the drilling of new wells and 12 percent involved the removal or replacement of underground petroleum storage tanks. Since petroleum storage and well water contamination were two of the most frequently reported high risks on Louisiana farms, these changes will have direct and significant impact in preventing pollution. In addition, the study revealed multiple non-economic benefits including positive changes in knowledge, attitude, perception and awareness of the pollution risks associated with farming practices.

Results from less comprehensive studies in Alabama, Arkansas, Kentucky, Maine, Missouri and Washington state confirm the findings in Louisiana. In an Arkansas "Emphasis" project involving four counties (Sevier, Benton, Howard and Washington), 85 percent of the 330 participants responded to a follow-up survey by saying they had taken more than 190 voluntary actions. In Washington, 500 evaluations revealed that participation helped 75 percent of the respondents identify a high-risk activity or practice and motivated over 75 percent to make at least one change in 1–3 years to reduce pollution risks. In addition, these surveys consistently reveal user satisfaction with Farm*A*Syst. Users overwhelmingly report that the program is useful, informative, and easy to understand.

From these specific study results, it is not difficult to draw important conclusions about the nationwide impact of the program. There are many states that should have greater benefits than Louisiana since more people have participated in the program. As previously noted, Michigan alone has reached 19,000 landowners. Using conservative estimates, it is safe to assume that 80,000 assessments have been conducted nationwide. Based on the findings in the Louisiana study, it is estimated that Farm*A*Syst/Home*A*Syst activities have generated more than $50 million in pollution prevention investments.

The value of Farm*A*Syst/Home*A*Syst cannot be measured simply in end results. The program demonstrates how Land Grant Colleges and CSREES can play leading roles in pollution prevention for farmers, ranchers and homeowners. In the tradition of Extension programs with strong links to research, Farm*A*Syst/Home*A*Syst can stimulate relevant inter-disciplinary research related to pollution prevention and organize research findings into educational programming that directly benefits landowners. During July 1997 hearings of the House Subcommittee

on Forestry, Resource Conservation, and Research, Dr. Bob Robinson, CSREES Administrator, singled out Farm*A*Syst/Home*A*Syst as one of two efforts that bridged the gap between research and applied programs, "Another notable example of a decision aid to help farmers is Farm*A*Syst, which is used to assess farms and farmsteads for potential pollution problems." This is a model for environmental programming that enables landowners to take voluntary action based on research-based recommendations. For farmers and ranchers, it offers an acceptable approach to responsibly manage their land without losing their competitive edge in the marketplace. For non-farmers, it offers a way to make significant contributions to protecting drinking water and preventing non-point source pollution.

DISCLOSURE OF FEDERAL FUNDING FOR NATIONAL FARM*A*SYST/HOME*A*SYST OFFICE (FISCAL YEARS 1998 AND 1997)

Fiscal year 1998	Funds received	Other	Forthcoming
USDA/CSREES	$209,017		
U.S. EPA	25,000		$100,000
USDA/NRCS	80,000	$84,450	
Total			498,467

Fiscal year 1997	Funds received	Other
USDA/CSREES	$197,977	
U.S. EPA	50,000	
U.S. EPA Pesticide Environmental Stewardship Program	29,910	
USDA/NRCS	80,000	$84,450
Total		442,337

PREPARED STATEMENT OF RALPH G. YOUNT, PH.D., PRESIDENT, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY (FASEB)

I am Ralph Yount, professor of biochemistry at Washington State University. I am a basic scientist who works on the mechanism of muscle contraction. I serve this year as the President of the Federation of American Societies for Experimental Biology, usually referred to as FASEB. Founded in 1912, FASEB is the largest organization of life scientists in the United States with a combined membership of more than 52,000 researchers. Our members include scientists involved in human as well as animal nutrition research. These scientists hold positions in virtually every public and private institution engaged in nutrition-related research in the United States, as well as in industrial and biotechnology enterprises conducting nutrition and food related research.

FASEB believes, as we believe this committee does, that research sponsored by the Department of Agriculture conducted at universities throughout the United States generates new knowledge that ensures an affordable, abundant and wholesome supply of food and fiber, and promotes the competitive position of U.S. agriculture in the global marketplace. The growth of our global population and the threat of food-borne pathogens require improvements in agriculture and food safety, as well as advances in nutrition and reduction of environmental pollution.

As the leading agency in support of research on human nutrition and food safety, plant pathogenesis and control, and on plant genomic projects benefiting mankind, the USDA is the primary support of basic and applied research through its Research, Education, Extension budget. This budget supports the Cooperative State Research, Education, and Extension Service (CSREES) whose mission is to advance research, extension, and higher education in food and agricultural sciences and in related fields.

The National Research Initiative Competitive Grants Program, a CSREES program, funds competitive extramural research projects at public and private universities and colleges. Research proposals are merit-reviewed by panels of experts, and those attaining the best scores are funded. The NRICGP is the largest national competitive research grant program in the USDA.

FASEB's recommendations for the USDA focus principally on the NRICGP. Some examples of the program's recent accomplishments are:

—*Calcium homeostasis and bone turnover in adult women.*—Studies show that healthy adult women consuming either low- or high-protein diets exhibited calcium and bone metabolism abnormalities, not observed in those on a medium-protein diet. Impaired intestinal calcium absorption combined with reduced bone turnover may result in diminished calcium incorporated into bone. These abnormalities could lead to decreased bone mass and/or increased risk of fracture. The studies suggest that in evaluating the recommended daily allowances (RDA's) for protein, the impact on calcium homeostasis and bone turnover be considered.

—*Enterohemorrhagic Escherichia coli (E. coli).*—Strains of E. coli are associated with disease in humans and animals. E. coli O157:H7 is the predominant strain associated with food-borne human infection and death. Most infectious outbreaks of this form of E. coli have been associated with eating beef products; studies have shown that diets fed to cattle and sheep influence the shedding of E. coli O157:H from the gastrointestinal tract. Further research demonstrates that E. coli O157:H can survive in fecal matter in the environment for up to a year. Outbreaks of this strain have also been associated with drinking contaminated apple cider, and studies are underway to develop processes to eliminate it from cider without compromising the flavor.

—*Anti-shattering gene in grain.*—Scientists have identified a gene that eliminates "shattering," or seed loss, of mature grain crops. Cloning this gene will contribute directly to long-range improvement in U.S. agriculture by reducing seed losses during grain harvests. It will also help to accelerate commercialization of new crops, providing a wider range of options to agricultural producers by reducing both genetic and environmental vulnerability of the U.S. food production system.

These are but three samples of agricultural research that mark the high quality productivity and achievement found in the competitive and merit-reviewed research programs of the NRICGP. As you can see, these research projects affect our basic health, our food supply and our reliance on the safety of the food supply. Many other significant achievements of NRICGP are not widely known to, or appreciated by, the public that finances them. It is important that the USDA continue to expand its efforts in publicizing research accomplishments and to remind investigators to acknowledge USDA support when reporting their findings to Congress and the public.

RECOMMENDATIONS

NRICGP.—The NRICGP's competitive and highly productive merit-reviewed research program is vital to the future of U.S. agriculture. Unfortunately, only 24 percent of applications submitted under this program can currently be funded. It is in my role as President of FASEB that I write in support of an increase in funding for USDA's National Research Initiative Competitive Grants Program from $97 million to $130 million. This is the same level requested in the President's budget.

National Needs Initiatives (NNI).—The NNI, the Graduate Fellowship Program of the Higher Education Office, and other USDA programs contribute to the USDA's training mission. The NNI is crucial for the recruitment, preparation, and training of the next generation of scientists. Therefore, FASEB specifically recommends that NNI funding be increased to $4 million in fiscal year 1999. FASEB also believes that an external review of the NNI would provide useful program guidance and ensure effective use of the funds in providing graduate training.

Expanding USDA Office of Competitive Grants.—FASEB endorses efforts to expand the use of outside review to improve the research programs at USDA, and further recommends that new funding initiatives be administered by the USDA Competitive Grants and Awards Management Unit of CSREES. This would establish a solid, consistent merit-review process for these programs.

Animal Welfare Act.—Reasonable safeguards on the sale of animals protect the public and allow the legitimate use of animals in research. USDA's Animal and Plant Health Inspection Service (APHIS) is charged by Congress with enforcement of the Animal Welfare Act (AWA). We recommend that Congress provide the APHIS with adequate funding for enforcement of the Animal Welfare Act in fiscal year 1999 so that it can continue to ensure compliance with the AWA.

Mr. Chairman, these are FASEB's recommendations as you and the Committee begin the task of deciding how best to allocate funding for the Department of Agriculture, including the research programs of the NRICGP. We have also made other policy recommendations in our formal report of the Funding Consensus Conference

for fiscal year 1999, distributed earlier to members of this subcommittee, which we hope you will review carefully.

In conclusion Mr. Chairman, we believe this is an opportunity to expand our country's historic effort to improve America's health through nutrition using all the tools of research scientists. Agricultural research is the key to the improvements in agriculture required to feed the world, reduce environmental pollution, increase food safety and improve nutrition.

PREPARED STATEMENT OF THE CITY OF GAINESVILLE, FL

SWEETWATER BRANCH/PAYNES PRAIRIE STORMWATER PROJECT

On behalf of the City of Gainesville, Florida I appreciate the opportunity to present this written testimony to you today. The City of Gainesville is seeking federal funds in the fiscal year 1999 Agriculture Appropriations bull, in order to assist our efforts to protect the Floridian aquifer from stormwater runoff. In particular, we are hopeful that the Subcommittee will provide the City with $2 million through the Fund for Rural America.

In Gainesville, the Sweetwater Branch basin contains approximately 1,710 acres and is located in the southeast central portion of the City. The outfall from this basin discharges into Paynes Prairie, a state owned preserve and park system, which eventually flows into the Alachua Sink, a natural sink hole that drains directly into the Floridian Aquifer. This Aquifer provides the majority of drinking water to Florida's a residents and has a direct impact on Florida Everglades.

The Sweetwater Branch drainage basin contains urban, commercial, industrial, and residential area stormwater runoff. Because the branch runs through some of the oldest portions of Gainesville, most stormwater runoff is directly discharged into the Branch with very little flooding attenuation or pollution loading reduction. The runoff has the potential to affect threatened and endangered wildlife such as the Bald Eagle, the Woodstork, the Florida Sandhill Crane, and the Southeastern American Kestrel. In addition, many domestic water wells are used to obtain water from surficial and intermediate aquifers in the area. In summary, the situation has created a concern amongst environmentalists, business leaders, and concerned citizens throughout the region that Paynes Prairie and Floridian aquifer are being compromised.

With this in mind, the City of Gainesville, Alachua County, St. Johns River Water Management District, Florida Department of Environmental Protection and local citizens are all seeking a comprehensive ecosystem management solution to the problem of stormwater runoff from downtown entering Sweetwater Branch, Paynes Prairie, and the Alachua Sink. The project devised by these groups would reduce or eliminate the sediment, debris, nutrients and general pollutants currently being discharged. Current projections are that the project would consist of the following three components:

—the purchase of undeveloped property in the vicinity of State Road 331 and Sweetwater Branch;

—the construction of maintainable sediment and debris removal systems; and

—the construction of maintainable nutrient removal systems.

An in-depth engineering analysis of the creek system, property topography, associated wetlands, and other pertinent factors is needed to determine the optimum and appropriate scope of property purchase and facilities construction. The City is prepared to pay some of the cost for this analysis, but we are simply unable to bear the entire burden. As a result, we request that the Subcommittee appropriate $2 million to assist their efforts. Once the project construction is complete, Gainesville Stormwater Management Utility, a public utility, would provide the required annual maintenance for the facility and no federal maintenance funds would be needed.

This is a critical and much needed project for the City of Gainesville, as well as the entire State of Florida, and we respectfully ask the Subcommittee for its consideration of the Sweetwater Branch/Paynes Prairie Stormwater Project.

PREPARED STATEMENT OF JOHN DEMOTT, PRESIDENT, DADE CHAPTER, FLORIDA NURSERYMEN AND GROWERS ASSOCIATION

We should most deeply appreciate your thoughtful consideration of this testimony which we are submitting on behalf of the Tropical Fruit Growers of South Florida, Inc. and the Miami-Dade County Chapter of the Florida Nurserymen & Growers Association, Inc. Each of us has attached a curriculum vitae and a statement of disclosure concerning federal grants.

We request that the House Committee on Appropriations effectively address two very important issues, namely (1) to re-establish a program to introduce tropical plant material, to improve this germplasm and to disseminate it throughout the United States as appropriate, and (2) establish a R&D program to combat harmful exotic organisms (initially focusing on Diaprepes) that threaten both agriculture and natural ecosystems in south Florida.

RE-ESTABLISH PROGRAM TO INTRODUCE, IMPROVE AND DISSEMINATE TROPICAL PLANT MATERIALS

The introduction of tropical plant material began with the establishment of the Spanish and English colonies on this continent. In 1790 Thomas Jefferson wrote: "The greatest service that can be rendered to any country is to add a useful plant to its culture". In order to provide effective institutional leadership for this vital activity the Congress assigned responsibility for it to the U.S. Department of Agriculture through the Organic Act of 1862 that created the Department. In order to implement this mandate on the mainland the USDA established a number of plant introduction stations. However only one of these plant introduction stations is essentially frost-free and suitable for conducting the needed R&D on tropical plants, i.e. the Subtropical Horticulture Research Station, Miami, Florida.

We are very grateful that the Congress prevented the Agricultural Research Service from closing the Subtropical Horticulture Research Station. Unfortunately the ARS no longer employs any of the horticulturists who previously had introduced tropical plant material from abroad, and improved and disseminated it. The corresponding resources were redirected by ARS during the attempted close-out process to other programs. Thus there is a need for an annually recurring appropriation of $900,000 to assemble a team of three scientists plus technicians, field laborers, etc. needed to re-establish the program of introducing, improving and disseminating ornamental, tropical fruit and vegetable materials.

The production of horticultural crops in the southern United States is under severe pressure from NAFTA. Additional developments are in the offing that will increase such pressures including the development of additional free-trade agreements with Latin America and other tropical and subtropical countries and the inevitable democratization of Cuba. Thus American producers can remain competitive only if they employ superior technology including better quality and higher yielding varieties of tropical fruit, vegetable and ornamental crops.

The proposed budget increase request would restore three scientists years of horticultural research effort. This effort would be focused on the introduction of frost-sensitive plant material, its improvement and its dissemination to other US scientists and industry associations. This along with the plant molecular geneticist would provide a core of four scientist years of effort devoted to the development of sorely needed improved tropical fruit, vegetable and ornamental crops. At $300,000 per scientist year of effort, the total annually recurring request is $900,000.

The Positions would be as follows:

1. Field Research Leader (Research Horticulturist), one full time technician (BS or MS), two field hands and one secretary. The Research Leader would plan and carry out plant explorations and exchanges, establish plantings, make appropriate crosses and selections, and oversee the work of the entire Unit.

2. Research Horticulturist/Outreach Specialist, one full time technician (BS or MS) and 2 field hands. This specialist would undertake crop improvement research, develop methods of culturing new plants, organize and conduct field days and other educational events, propagate and disseminate improved plant materials to research institutions and to industry associations.

3. Research Horticulturist/Curator of Living Collections, one full time technician (BS or MS) and two field hands and one clerk typist. This horticulturist would be responsible for assembling core collections of living plants, developing methods of cryopreservation and other methods of storage of living materials, development of traditional and in vitro methods of propagation, and the preparation and maintenance of herbarium specimens of significant plant materials. Also this individual would work cooperatively with the Research Geneticist to "finger-print" plant materials, and to develop pathogen-free materials for dissemination.

We request that the Congress appropriate $900,000 recurring annually to the Agricultural Research Service to re-establish the above program on tropical plant material.

ESTABLISH A R&D PROGRAM TO COMBAT HARMFUL EXOTIC ORGANISMS THAT THREATEN BOTH AGRICULTURE AND NATURAL ECOSYSTEMS IN SOUTH FLORIDA WITH INITIAL EMPHASIS ON DIAPREPES

With the great increase in travel, trade and influx of refugees into south Florida in the last three decades the frequency of introduction of harmful exotic organisms has increased to an alarming level. This is of great national concern because many of these pests, diseases, weeds, snails, fish, etc. threaten the fundamental character of National Parks and Preserves, spread to other parts of the United States and impose an enormous burden on agricultural production and marketing in the affected States.

In recent years south Florida served as the gateway to the entry of the devastating whitefly (Bemisia argentifolli), the insidious melon thrips, Thrips palm), sixteen whitefly-transmitted gemini viruses, which cause Bean Golden Mosaic disease, the most recent being the tomato yellow leaf curl virus. The latter appeared in Homestead in July 1997, has spread to the major tomato growing areas, and is causing severe losses. Also several scale insects and mealybugs have arrived recently, and they are extremely damaging to the nursery trade and to homeowners.

In past decades a number of very harmful organisms penetrated our quarantines. One of these is the West Indian Sugarcane Rootstock Borer Weevil, Diaprepes abbreviates. This insect, a native of the Caribbean and Latin America, has been found in central Florida for several decades. Losses in citrus production by this exotic pest are estimated at cat $72 million per year. In 1996 this pest was found in Miami-Dade County, and it is causing damage to fruit, vegetable and ornamentals crops which already exceed $1 million per year.

Not surprisingly conditions for the pest are considerably more favorable in southern Florida than in Central Florida. In south Florida the subtropical climate allows this pest to reproduce and develop year round, and its native host plants occur in abundance.

Florida Division of Plant Industry and University of Florida scientists have collated the pests host records. These show that Diaprepes attacks 270 species of plants belonging to 157 genera in 59 plant families. Plants that have been shown to support the entire life cycle from egg through adult to egg include Citrus sp., peanut, sorghum, guinea corn, corn, Surinam cherry, dragon tree, sweet potato and sugarcane. Larvae have been shown to feed on 40 plant species in 20 plant families. Host plant associations of concern to Miami-Dade County residents include mango, Brazilian pepper, Dahoon holly, Chinese holly, Burford holly, Scheffiera, silver trumpet tree (Tabebuia aurea), Geiger tree, gumbo limbo, black olive, silver buttonwood, black sapote, persimmon, live oak, avocado, acacia, orchid tree, Royal poinciana, Lima bean, bush beans, tamarind, Dracaena rainbow, day-lily crepe-myrtle, cotton, okra, neem, mahogany, banana, Simpson's stopper, guava, Areca palm, Phoenix palms, passion fruit, mangrove, loquat, citrus, carrotwood, longan, caimito, sapodilla, tobacco, eggplant, potato and lignum-vitae.

Host suitability seems to vary with locality. In Miami-Dade County carrotwood appears to be a preferred host, but near Vero Beach carrotwood tends to escape infestation. In Puerto Rico Diaprepes attacks sweetpotato but ignores it in Florida.

As you know, for about 20 years the Congress has appropriated about $400,000 per year to the Agricultural Research Service. These funds support research in central Florida that is conducted by the Agricultural Research Service and by the University of Florida.

However no funds are ever provided by ARS for research on this problem in south Florida. The Miami-Dade Chapter of the Florida Nursery and Growers Association has been providing $20,000 per year to the University of Florida to conduct research on this problem as it affects the ornamentals industry in Miami-Dade County. However this level of funding is not sufficient to mount an effort that is in any way commensurate to the magnitude and urgency of the need. As you may know, only limited amounts of the technologies developed against this pest in central Florida have proven to be suitable for use in southern Florida.

We request that the Congress appropriate $300,000 per year to the Agricultural Research Service for a cooperative research program on Diaprepes in south Florida. Only after satisfactory means are available to cope with this pest should any of the funds be diverted to research and development on other pest problems affecting southern Florida.

PREPARED STATEMENT OF DR. RAYMOND E. BYE, JR., ASSOCIATE VICE PRESIDENT FOR RESEARCH, FLORIDA STATE UNIVERSITY

Thank you, Mr. Chairman, and the Members of the Subcommittee, for this opportunity to submit testimony. I would like to take a moment to acquaint you with Florida State University. Located in the state capital of Tallahassee, we have been a university since 1947; prior to that, we had a long and proud history as a seminary, a college, and a women's college. While widely known for our athletics teams, we have a rapidly emerging reputation as one of the Nation's top public universities. Having been designated as a Carnegie Research I University several years ago, Florida State University currently exceeds $100 million per year in research expenditures. With no agricultural or medical school, few institutions can boast of that kind of success. We are strong in both the sciences and the arts. We have high quality students; we rank in the top 25 among U.S. colleges and universities in attracting National Merit Scholars. Our scientists and engineers do excellent research, and they work closely with industry to commercialize those results. Florida State ranks seventh this year among all U.S. universities in royalties collected from its patents and licenses. In short, Florida State University is an exciting and rapidly changing institution.

The Florida State University appreciates the support this Committee has provided for agricultural research in the past, and asks for your support for the President's budget proposals to increase funding for research, particularly for basic research performed at universities. A strong national research enterprise requires a balanced portfolio across the many scientific and engineering disciplines. We have seen, time and again, how research developments in one field can revolutionize work in others. Breakthroughs in biotechnology can lead to new and improved crops and higher crop yields. There are many examples of research investments paying very practical dividends to all of our citizens.

Mr. Chairman, let me describe an important project that we are continuing this year involving agriculture and new ways to look at climate prediction. It is a major collaborative program, which focuses on climate variability in the State of Florida and the Southeast (SE) United States. Objectives include developing new applications and usage for climate data. The consortium draws upon the expertise of scientists at FSU (climate analyses and coupled ocean-atmosphere prediction models), the University of Miami (climate analyses and economic value of forecasts), and the University of Florida (agriculture) to quantify climate variability (e.g., the El Niño phenomena) for the SE and to explore the potential value and practical application of climate forecasts in agricultural decisions. Based upon these analyses, farmers will be able to make better-informed planting decisions well in advance of each season.

During the initial phase of this effort, the FSU team described qualitatively the impact of El Niño (and the other extreme, La Niña) on temperature and precipitation patterns across the SE. Additionally, they found a geographic shift in tornadic activity associated with El Niño events. A new climate forecast system was created to provide predictions of seasonal temperatures and precipitation with longer lead times and improved skill in the testing phase. Improvements are due partly to the linking of ocean and atmosphere data in the forecast system. Our colleagues at the University of Florida have identified several crops in Florida which are vulnerable to shifts in weather patterns associated with El Niño and La Niña. Such information will be economically valuable in farming decisions.

Continuing this collaborative work, we hope to estimate the economic advantages that can be achieved by incorporating climate forecast information into farming management systems and eventually work with sector representatives in developing guidance products for the agricultural community.

We are seeking funding for this effort through USDA's Fund for Rural America. To make truly worthwhile breakthroughs in improving efficiencies and allowing for better and more economical decisions, farmers must have the best thinking and access to the newest approaches available. This utilization of climate data for agricultural purposes should be an example of supporting the best ideas through the Fund for Rural America. Our request of $600,000 for two years will pay substantial returns to the American farmer and to the public. Thank you for your support.

PREPARED STATEMENT OF THE FRIENDS OF AGRICULTURAL RESEARCH—BELTSVILLE, INC.

Mr. Chairman, and Members of the Subcommittee, thank you for the opportunity to present this statement in support of funding for agricultural research. We are re-

questing your support for programs of the Agricultural Research Service (ARS) and its world renowned Beltsville Agricultural Research Center (BARC) in Maryland.

The Friends of Agricultural Research—Beltsville (FAR-B) is a private non-profit corporation dedicated to supporting and promoting agricultural research, especially the ARS research programs at Beltsville. FAR-B provides supplementary private funds for both research and education programs. The Friends co-sponsor symposia and conferences on topics of current scientific interest. Funds are provided to co-host important international scientists who visit Beltsville each year in order to discuss cooperative programs and exchange scientific information. This public/private partnership promotes excellence, helps to ensure that useful new BARC technology is put into practice, and is supportive of the mission of the Agency.

The agricultural enterprise with asset of over $900 billion is one of the major sectors of the U.S. economy. Employment in the food and fiber sector generates 23 million jobs, representing about 18 percent of the civilian jobs in the U.S. economy. The demand for food and fiber products annually generates almost $1 trillion in Gross Domestic Product, about 16 percent of the Nation's GDP. U.S. exports of agricultural products rose to $60 billion in 1996. Of the 11 major U.S. industrial sectors, agriculture generated the largest trade surplus of $27.5 billion in 1996.

The outstanding performance of the agricultural industry and the unprecedented gains in agricultural productivity over this century can be attributed in large measure to the dynamic research and development system in this Nation. Agricultural scientists and engineers have contributed a continuing stream of new knowledge, technological innovations, and new products to undergird the U.S. agricultural enterprise. Public investments in agricultural research have been critical to these gains. Economic studies show that such investments yield substantial returns on the order of 30 to 40 percent. These are sound investments. Future support for agricultural research will be critical to the economic prosperity of our Nation and the well-being of society.

The Agricultural Research Service is the principal inhouse research agency of the U.S. Department of Agriculture. It has a lead role in solving high-priority problems of broad national significance. The Beltsville Agricultural Research Center is one of the major research facilities within ARS; it is among the largest and most diversified agricultural research complexes in the world.

BELTSVILLE

The Beltsville Agricultural Research Center was established in Maryland in 1910. It has a long and distinguished history of outstanding contributions to scientific discovery. Although it is most popularly known for developing the Small White Beltsville turkey which graces consumers' tables each Thanksgiving, BARC's contributions are much more extensive and profound. Beltsville scientists identified and supplied plant breeding centers around the world with disease-resistant wheat that ultimately led to the Green Revolution. Genetic concepts that became the foundation for modern plant and animal breeding were developed at BARC. Beltsville discovered the photoreceptor that regulates the growth and development of plants. A BARC scientist discovered an entirely new class of viruslike pathogens—viroids—which opened new avenues to understanding and controlling diseases of plants, animals, and humans. The first naturally occurring beneficial fungus approved by the Environmental Protection Agency for the biocontrol of plant diseases was developed at Beltsville. Chemists and entomologists have pioneered the discovery and synthesis of a number of attractants (pheromones) essential for trapping and surveying insect populations for integrated pest management programs. Human nutrition scientists at Beltsville demonstrated that decreasing animal fat and increasing the proportion of fat from vegetable sources significantly reduces blood pressure, thus reducing the risk of cardiovascular disease.

Beltsville is a comprehensive research center with a wide variety of disciplines addressing diverse programs of great breath and scope. The ARS staff at Beltsville totals about 1,500, including over 300 scientists. Programs are designed to systematically address the highest priority concerns of the Department, including food safety and human nutrition, natural resources and environmental quality, emerging diseases and exotic pests, genetic resources, climate change, integrated pest management, and sustainable farming systems. Research ranges from very basic experiments in plant and animal molecular genetics, physiology and chemistry to applied research in new instrumentation, germplasm databases and integrated systems.

The Beltsville complex is the repository for a number of unique national scientific assets. Among these are important research collections: the National Fungus Collection, the National Parasite Collection, the USDA Nematode Collection, and other outstanding collections of insects, seeds, nitrogen-fixing bacteria, and plants. These

collections are essential in identifying and assigning names to specimens and organisms, a crucial first step to reliable research and to effective control measures, especially for alien pests. The Beltsville Human Nutrition Center is home to the National Nutrient Data Bank, i.e., the database of the nutrient content of foods which is the foundation for food consumption tables throughout the world. The Center also has a staff responsible for the National Food Consumption Survey and the Continuing Survey of Food Intakes by Individuals, unique in understanding long-term dietary trends in the U.S. population. The world renowned National Agricultural Library is also located on the grounds of BARC.

MODERNIZATION OF FACILITIES

A General Accounting Office Report a few years ago found widespread problems with aging Federal research facilities around the country. The findings indicated that a massive overhaul of these facilities, especially those built over 50 years ago, was needed.

Modernization of the facilities at Beltsville began in 1988. A systematic plan was developed to guide the modernization. USDA, the Office of Management and Budget, this Committee, and the Congress have been generous in providing annual support to upgrade and modernize BARC. House of Representatives Report No. 99–211 included the following language: "The Committee will expect to be kept fully advised as the Department works to restore and upgrade the Beltsville Agricultural Research Center." (p. 31)

Significant progress has been made in improving the facilities at Beltsville. Six major buildings have been modernized; a greenhouse complex has been renovated; a new dairy facility and composting research facility have been completed; and a new waste water treatment plant is now in operation. The infrastructure, including water lines and electrical service have been significantly upgraded.

The highest priority at Beltsville is funding to upgrade the facilities for the Beltsville Human Nutrition Research Center (BHNRC). Human nutrition research is a high priority within ARS and the Department. The link between diet and health is intriguing. Important breakthroughs have been made during this century. Many debilitating diseases such as pellagra, pernicious anemia, rickets, and scurvy have been eliminated as a result of research in human nutrition. The focus now has shifted from prevention of nutrient deficiencies to health maintenance and reduced risks of chronic illnesses, such as coronary heart disease, cancer, and diabetes.

The Beltsville Human Nutrition Research Center is the first of six such centers established in ARS. BHNRC programs focus on nutrient composition, nutritional quality, nutritional requirements, nutrient interactions, energy metabolism, and dietary strategies to delay the onset of nutrition-related chronic diseases. The National Food Consumption Survey also is an essential part of this program. For over 30 years, BHNRC scientists have had an uninterrupted input into the establishment of the Federal government's Recommended Daily Allowance (RDA) for dietary intake by the U.S. population. The broad indepth scientific knowledge base at Beltsville plays a vital role in the creation of these highly regarded guidelines for enhanced public health. The Beltsville staff has close associations with the National Institutes of Health, especially the National Heart, Lung, and Blood Institute, and the National Cancer Institute.

The ARS budget proposes a number of thrusts that would complement the BHNRC projects. Among these are proposals to upgrade the National Nutrient Data Bank that is so important to understanding the food choices necessary for a healthy diet. Also, support for research on nutrient-gene interactions, with special emphasis on the role of phytonutrients, is proposed.

The human nutrition research facilities at Beltsville are among the oldest in the Department and are, thus, in the greatest need of overhaul. This Committee provided funding for the planning and design of new BHNRC facilities. The design is underway; funding is needed to complete construction in a timely manner. Costs for the new facility in fiscal year 1999 are estimated at $17 million for construction.

The proposed budget includes funding in the amount of $2.5 million, primarily for a new poultry production facility. The purpose of this facility is to brood and grow turkey toms and hens, and provide breeder space for different strains of turkeys with a view toward healthier and more efficient production of a commodity destined for human consumption. This proposal is consistent with the long-range plan for upgrading the Beltsville complex.

OTHER CURRENT AND EMERGING ISSUES

A wide range of important issues confronts American agriculture and is of concern to the public. Two are of particular interest.

Pfisteria outbreaks in the Mid-Atlantic coastal tributaries and estuaries have become a major issue. Recent incidents in the Chesapeake Bay tributaries have focused public attention on the potential role of agricultural nutrients in the degradation of the waters. ARS scientists at Beltsville are working with colleagues at the Federal and State levels to develop management practices that farmers could adopt to reduce the movement of nutrients and pathogens to surface and ground water. A nitrogen soil test has been developed to help minimize excessive applications of nitrogen. New sustainable cropping systems which reduce nutrient and pesticide leaching and surface loss by runoff are being evaluated. Improved methods for handling, composting, and disposing of manure from farms are being developed. And, remote sensing technology is being investigated as a cost-effective may of monitoring changes in the natural ecosystems over time and across large geographic areas. Approval of the fiscal year 1999 budget proposals would allow a stronger research program in this critical area.

Food safety and quality are of paramount importance to the public. Despite the fact that the U.S. food supply is the safest in the world, thousands of Americans are stricken annually by illnesses caused by the food they consume. Consumers need to be assured of the safety of their food supply to prevent disruptions of normal healthy eating patterns. Beltsville scientists are widely involved in food safety research. New and improved analytical procedures for detecting antibiotic residues in meat and milk were developed at BARC. Industry, the Food and Drug Administration, and USDA's Food Safety and Inspection Service are now using these methods. BARC engineers are developing sensors and imaging technology for rapid inspection of poultry carcasses online during processing. Diagnostic tests and fundamental information on livestock parasites of human health significance are being researched, especially zoonotic diseases such as trichinosis, toxoplasmosis, and cryptosporidisis. In recent years, increased attention is being given to the safety of fresh fruits and vegetables, which are so essential to a healthy diet. The Beltsville Symposium in Agricultural Research in May 1998 will bring together leading world experts to review the most recent advances in the science related to the safety and quality of fresh fruits and vegetables. The proposed budget would give a boost to this initiative.

Mr. Chairman, FAR-B thanks you and the Committee for your interest, leadership, and generous support of ARS and the Beltsville Agricultural Research Center. We recognize that finding funds for Federal agricultural research programs and facilities is a difficult challenge no matter how important the work is to the health, safety, prosperity, and well being of the Nation. This Committee has met that challenge over the years, and we encourage your continued efforts. We look forward to working with you in any way you may desire to serve the interests of American agriculture.

PREPARED STATEMENT OF LARRY BOHLEN, D.C. ISSUES COORDINATOR, FRIENDS OF THE EARTH

SUPPORT FOR FDA CONSOLIDATION AT AN URBAN, METRO ACCESSIBLE SITE

Friends of the Earth is taking an increasing interest in protecting the urban core and inner suburbs of cities across America. Existing communities are worthy of protection. In addition, making sure that existing communities are safe and economically viable places to live is one of the surest ways to protect undeveloped farms and forests from falling to haphazard sprawl development.

Moves of Federal jobs outside the D.C. beltway are detrimental to the health of the District and the inner suburbs of D.C. A currently proposed move of the Food and Drug Administration to White Oak, Maryland would threaten the economic viability of areas inside the Beltway.

To address these issues, we propose that you:

(1) Initiate a study of consolidating the FDA within a half mile of a Metro-accessible site, such as the Southeast Federal Center in the District of Columbia. We suggest that at least $4 million be appropriated in fiscal year 1999 to conduct such a study.

(2) Observe federal Executive Order 13006 directing the location of federal facilities in urban centers.

Consolidation of the FDA at the Southeast Federal Center has several advantages:

—it is adjacent to the Navy Yard Metro;

—it is only one mile from the Dept. Of Health and Human Services, FDA's parent agency;

—it is owned by the federal government and controlled by GSA;
—it has more than adequate floor space for FDA's site plan and is currently underutilized;
—the Southeast Federal Center site has no funds appropriated for its redevelopment; and
—it is in an area of D.C. urgently in need of revitalization.

In comparison, siting of the FDA in White Oak, Maryland, as proposed, has several disadvantages:

—it is 3 miles from the nearest Metro station and has very limited bus service;
—it is in a low-density sprawling neighborhood outside the Washington beltway, not in an urban center as directed by Executive Order 13006;
—it is 10 miles from other FDA facilities that would not consolidate in White Oak, raising the question of just what kind of benefits is consolidation bringing; and
—it would involve development of undeveloped wooded areas near a stream on the White Oak site whereas the Southeast Federal Center is already paved.

Your consideration of this matter is greatly appreciated.

PREPARED STATEMENT OF R. LAWRENCE COUGHLIN, PRESIDENT, FRIENDS OF THE NATIONAL ARBORETUM

Mr. Chairman and Members of the Subcommittee, as President of Friends of the U.S. National Arboretum (FONA), I am grateful for this opportunity to present testimony in support of FONA's request for additional funding of $300,000 in fiscal year 1999 for the Gardens Unit of your U.S. National Arboretum.

This funding is urgently needed to strengthen the Gardens Unit in anticipation of the new master plan for the National Arboretum which is being prepared under contract with the renowned landscape architectural firm of Environmental Planning & Design.

The Gardens Unit is presently the most understaffed of all of the National Arboretum's Units. Yet it is central to the purpose of the National Arboretum. There has been a continued loss of permanent staff positions in the Gardens Unit and an increase in temporary staff in order to conform to imposed budget limitations. At the same time, new facilities have been added with public and private support including The National Bonsai and Penjing Museum and the National Grove of State Trees, educational outreach has been increased and greater levels of public visitation have occurred.

An addition of $300,000 to the Gardens Unit in fiscal year 1999 would provide four urgently needed new staff positions and, most important, allow stabilization of the staffing base in the Unit. It is currently experiencing a high turnover level because it cannot offer permanent positions to technically qualified and trained people. Attached as Exhibit I is a more detailed description requested by FONA and prepared by National Arboretum staff.

Mr. Chairman, FONA has been working with your National Arboretum staff, the Agricultural Research Service and the Department of Agriculture on a new Master Plan for the National Arboretum. FONA's objective has been to modernize the Arboretum into the millennium, to adapt it to 21st century technology and to make it a horticultural educational attraction in accordance with its Congressional mandate and worthy of the term "National Arboretum."

In its initial review, Environmental Planning and Design found that the National Arboretum was an outstanding pure research facility but was not very user friendly. Visitors sought more plant and gardening information. In short, from a visitor standpoint the National Arboretum is more a very nice park than an arboretum, and it is not adequately fulfilling its Congressionally mandated mission as a premier facility for horticultural education.

The new Master Plan is moving forward and will address such current practical needs as a new entrance, improved traffic flow and better facilities for visitor parking. Hopefully the vision will also identify educational needs such as an orientation center, automated train tours, and interactive exhibits in the display gardens. Your National Arboretum should be a horticultural education attraction in Washington that excites interest in earth sciences.

Mr. Chairman, the $100,000 provided to the Arboretum in fiscal year 1998 for the Integrated Pest Management Program (IPM) has added a permanent technician and a second non-permanent technician to the Arboretum's highly successful IPM program. This stabilization of staff has allowed the National Arboretum to increase research and transfer knowledge to the landscape industry and the public as well as create partnerships with Federal, local and private institutions.

Your Subcommittee should be proud that thanks to your support the National Arboretum is serving as a model for IPM in the urban landscape. It is also part of a major effort to reduce nutrient loading in the Anacostia River and the Chesapeake Bay.

The National Arboretum's request for $300,000 for the Gardens Unit in fiscal year 1999 is also consistent with last year's unfunded request to expand germplasm acquisition and maintenance. The Gardens Unit is responsible for the maintenance of extensive germplasm of species and cultivars of trees and shrubs from throughout the world. Expanding the germplasm collection improves the overall care of existing plants.

Mr. Chairman, FONA is most appreciative of your efforts and those of your Subcommittee on behalf of your National Arboretum. As always, FONA looks forward to working with you on behalf of horticultural research and education.

[EXHIBIT I]

GARDENS UNIT PROGRAM CONCERNS

The work of the Gardens Unit is very labor intensive and highly visible. The Unit staff are responsible for maintaining the display gardens, collections, and natural areas on the U.S. National Arboretum's 444-acre District of Columbia campus. With visitation increasing each year, greater numbers of customers are reaping benefits from the display gardens and collections. While the Gardens Unit welcomes this increased interest, it must be recognized that this escalates the pressure on the Unit to not only maintain the current level of quality and service, but also to meet ever higher standard for garden display and information retrieval.

GARDENS UNIT STAFFING PRIORITIES

Priority 1

The responsibility of running the horticultural activities at the greenhouse area is currently shared among the curators, gardeners, researchers, and facilities managers. The effort could become more efficient if a single person was added to the staff to assume responsibility for the day-to-day operations of the greenhouse complex. Efforts are currently underway to document the needs for the daily running of the facility. This adjustment was recommended by the team of outside reviewers who undertook a 5-year review of the Gardens Unit Program in February 1997. ($50,000)

Priority 2

The Arboretum possesses a distinctive collection of Asian plant material which is an important source of germplasm for research and an integral part of the USNA's educational programming. Though the collection was once under the jurisdiction of a single curator, monetary constraints compelled the Unit to reassign this area to a curator with many other responsibilities. If the Asian area is to remain an integral and viable part of the Arboretum's research and educational programs, it is essential that additional funds be obtained for a full-time curator to oversee this significant collection. Preliminary data from the ongoing USNA Visitor Study indicates that the Asian Collections is the third most visited display area on the grounds (after the Bonsai Museum and the Herb Garden.) This is significant because the collection is located at the furthest point on the grounds from where visitors obtain information when entering the USNA. This action was recommended by the team of outside reviewers who undertook a 5-year review of the Gardens Unit Program in February 1997. ($60,000)

Priority 3

The expansion of the Bonsai Museum provides an opportunity to generate a range of new programs for both occasional visitors as well as the serious bonsai scholar. The Education and Visitors Services Unit is doing all that it can to meet this need. Still, it is imperative that a museum specialist with expertise in the garden art of Bonsai be hired to develop and implement programming in this unique facility. The priceless value of this collection requires that the Museum be staffed seven days a week, which requires additional staff to cover the weekend hours, which also coincide with the highest levels of visitation. Preliminary data from the ongoing USNA Visitor Study indicates that the Museum is the most frequently visited area on the grounds. ($50,000)

Priority 4

The Plant Record Office, while funded by the Gardens Unit, serves all Units of the Arboretum. The Office provides leadership in the implementation, operation, and expansion of the accessioning, labeling, mapping, and documentation activities of the living plant collections. It also develops and maintains the Arboretum's computerized database of plant holdings. Concerted effort is being made to input the backlog of record data in the database. An increased effort would enable the generation of computerized reports which would serve as tools to the managers of the living collections. In addition, mapping of the gardens and collections is an essential aspect of the Gardens Unit mission, yet this cannot be done with current staff. ($35,000)

Priority 5

The stabilization of the staffing base is a great concern of the Gardens Unit. At present time, six of the nine gardener positions (Agricultural Science Research Technicians) are held by temporary employees. Regular turnover of personnel severely limits the effectiveness of garden and collection care and curtails program development from year to year. It diverts curatorial attention from legitimate collection concerns to personnel matters as an inordinate amount of time is spent in the recruiting/hiring process and in retraining new gardeners. At a minimum, each garden and program area should have at least one permanent gardener position to assure continuity of care in the collections. This would require providing additional base funding to convert five of the six temporary positions to permanent positions. ($25,000)

Additionally, the Gardens Unit's need for administrative and facilities programmatic support services (i.e., computer support and engineering and construction support services) have exceeded the Unit's available funding. An additional $50,000 is required to fund these needs. Finally, all programmatic increases are assessed to fund Agency administrative and support initiatives. This amounts to $30,000.

Summary of Funding Needs

Greenhouse Manager	$50,000
Asian Curator	60,000
Bonsai Museum Assistant	50,000
Plant Records Assistant	35,000
Permanent Gardeners	25,000
Subtotal	220,000
Garden Unit Support Services	50,000
Agency Support Services	30,000
Total	300,000

Total is based on projected personnel costs over the next 5 years.

PREPARED STATEMENT OF FATHER WILLIAM L. GEORGE, S.J. AND FATHER T. BYRON COLLINS, S.J., ASSISTANTS TO THE PRESIDENT, GEORGETOWN UNIVERSITY

Mr. Chairman and Members of the Committee: We are Father William L. George, S.J. and Father T. Byron Collins, S.J., Assistants to the President of Georgetown University, the Reverend Leo J. O'Donovan, S.J. We appreciate the opportunity to submit this testimony to the Subcommittee on the development of the Natural Medications Research Consortium Program.

NATURAL MEDICATIONS RESEARCH CONSORTIUM (NMRC)

The Senate Committee on Agriculture, Nutrition and Forestry and the Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies have expressed interest in the development of new farm products to improve the health of the citizens of the United States. We are requesting an appropriation of $6 million for fiscal year 1999 for a consortium of the University of Mississippi, Georgetown University and the McKennan Health Systems in Sioux Falls, SD.

For centuries humans have utilized the products of nature to maintain health and treat disease. Many of the earliest known herbal remedies and other natural products are still used today and are becoming an ever more important part of the treatment of patients with illnesses. It is estimated that for these products today, Americans spend over $14 billion, and it is a rapidly increasing portion of the $60 billion spent on all medications. Until recently, none of these treatments had been evalu-

ated using rigorous modern testing methods to determine their safety or efficacy. Basic questions of stability and reproducibility of the content of the various formulations have made it difficult to assess the potential medical value of these products. The lack of patent protection for these products has been a disincentive for the pharmaceutical industry to assume a leadership role in this potentially valuable field of research. Although the National Institutes of Health has established an Institute for Alternative Medicines, it has only been able to support a few clinical trials. Concern about the safety of these products is appropriate considering the previous deaths and serious side effects observed with products such as ma huang, which contains the cardiac stimulant ephedrine, comfrey tea, which causes liver damage, and tryptophan, which had a contaminant that caused serious muscle damage and deaths.

In order to protect and serve the public, there is a critical need for the creation of a consortium with the resources and expertise in three major areas represented by the members of the consortium. They are; cultivating the herbs and plants that contain potential remedies by the University of Mississippi, analysis, evaluation and clinical testing by Georgetown University, and the optimal clinical resources necessary to evaluate these products in humans offered by McKennan Health System in South Dakota.

An important component of such an evaluation is the ready access to enroll patient populations that have the biologic, racial and ethnic diversity truly representative of the American population. Georgetown University and the University of Mississippi have expertise required to perform the needed product formulation and testing of these natural products. McKennan Health Systems in Sioux Falls, SD has the expertise in Native American natural product remedies and a clinical program essential for access to the diversity of populations needed for such clinical trials. The results would be made available to the Department of Agriculture to assist in the development of new crops and the public for more informed use of these natural products. We are requesting appropriation of $6 million for fiscal year 1999 to conduct a demonstration program for the testing and scientific evaluation of treatments from natural products.

PREPARED STATEMENT OF THE GROCERY MANUFACTURERS OF AMERICA

GMA appreciates the opportunity to submit testimony on the President's fiscal year 1999 budget with regards to proposed food user fees and the food safety initiative. GMA is the world's largest association of food, beverage and consumer brand companies. With U.S. sales of more than $430 billion, GMA members employ more than 2.5 million workers in all 50 states. The organization applies legal, scientific and political expertise from its member companies to vital food and public policy issues affecting the industry. Led by a board of 44 Chief Executive Officers, GMA speaks for food and consumer brand manufacturers at the state, federal and international levels on legislative and regulatory issues. The association also leads efforts to increase productivity and efficiency in the food industry.

USER FEES

GMA opposes the President's fiscal year 1999 user fee proposals on the food industry for the following reasons:

1. User fees imposed on the food industry are bad public policy. User fees, by definition, are intended to reimburse agencies for specific private benefits they provide to identifiable companies. The availability of a safe, plentiful, and affordable food supply, however, benefits the public generally. Consequently, regulatory activities such as post-market surveillance and inspection should be paid by public funds and not user fees. As Congress itself has repeatedly pointed out in previous years, these regulatory activities are designed to protect the public health and should not be funded by new taxes on the regulated industries.

2. User fees are essentially a regressive tax on food products. Imposition of user fees, in effect, would constitute an inappropriate tax on products essential to the health and well-being of the American public. Although user fees would be paid by food companies, the ultimate cost would be born by consumers.

3. FDA principally regulates food by taking regulatory action against adulterated and misbranded products, and is largely dedicated to enforcement activities which benefit the public at large. These activities are properly funded out of general revenues.

4. Unlike new drugs, food manufacturers may change product formulas frequently, thus creating "new" products all the time. A user fee for food products would therefore be a virtual impossibility.

5. The only type of food product for which any form of FDA premarket approval is required is for individual food additives. An average of one petition is filed every year for a new direct food additive.

BACKGROUND

In 1947, Congress actually enacted a user fee for meat inspection, which was subsequently repealed the following year because of public outcry that government programs should be funded by public dollars. In 1971, the General Accounting Office published a report recommending that fees be imposed for new drug applications. FDA opposed user fees at that time, on the grounds that regulation benefits the entire public and not just individual companies. Although Congress and FDA subsequently have debated the merits of user fees, the notion of imposing user fees to finance FDA regulation of food products had never been proposed by the Administration until only a few years ago.

GMA has always supported a strong, focused and effective FDA. In the last few years, Congress has enacted legislation giving FDA new authority in areas such as nutrition labeling, prescription drugs, medical devices and generic drugs, adding to the agency's already broad mandate. Unfortunately, additional adequate resources have not been provided.

Shifting the costs of these programs to the regulated industry, however, is not in the public interest and would constitute an inappropriate and regressive tax on the food industry ultimately borne by consumers. In practical effect, these user fees proposed in the fiscal year 1999 budget would constitute a federal sales tax on food products, which would ultimately be passed on to the consumer.

User fees by definition are intended to reimburse agencies for the particular benefits they provide to regulated companies. The courts have already determined the definition of a user fee. More than two decades ago, the Supreme Court held that the imposition of user fees on regulated companies for benefits enjoyed by the general public is nothing more than a tax on industry (*National Cable Television Association* v. *United States*, 415 U.S. 336, 340–341 (1974).

THE PRESIDENT'S FOOD SAFETY INITIATIVE

GMA applauds the Clinton Administration's efforts to enhance the nation's food safety system. We have always supported adequate funding for FDA, USDA and other food safety agencies. We are pleased to see an emphasis on food safety education, risk assessment and research. Without proper research behind inspections, there is a risk that regulators won't be able to keep pace with the science involved in food safety decisions for today's food manufacturing processes. An effective and credible science-based standards and inspection system combined with food manufacturers' own safety assessment programs, will provide consumers with the greatest assurance that their food is safe. Unfortunately, the fiscal year 1999's proposed user fees will only leave vital FDA functions starved for resources.

CONCLUSION

In conclusion, GMA opposes any efforts to extend the user fee concept to the food industry. As we've written in letters to Members of this Committee, GMA remains committed to a strong FDA and USDA. Congress should, however, provide funding to meet its statutory commitments to protect the public health. Although GMA appreciates the efforts of the Administration to provide targeted funding for food safety efforts, food safety is a fundamental regulatory/enforcement mission of FDA and it benefits the public at large, not individual food manufacturers. Congress has repeatedly rejected the idea of new taxes disguised as user fees and we ask them to do so again.

PREPARED STATEMENT OF THE HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

INTRODUCTION AND SUMMARY

This testimony is submitted on behalf of the Health Industry Manufacturers Association (HIMA) and the more than 800 manufacturers we represent. HIMA is the largest medical technology trade association in the world. Our members manufacture nearly 90 percent of the $55 billion of health care technology products purchased annually in the United States and more than 50 percent of the $130 billion purchased annually around the world. We welcome the opportunity to comment on issues surrounding FDA's funding for the next fiscal year.

We wish to highlight several key issues:

—Enactment of landmark legislation—the "Food and Drug Modernization Act of 1997" (the "Act")—has created opportunities as well as challenges affecting resources for the Agency.
—Implementation of the Act will be a key priority for both the Agency and the industry this year and next. Additional activities necessitated by implementation may strain Agency resources.
—We continue to advocate stable funding for the Agency. We believe that all Agency programs should be held harmless from any funding reductions. New important initiatives such as tobacco regulation and food safety should carry with them additional funding appropriate to carry out the intent of Congress and not dilute other important functions of the Agency.
—We applaud the efforts of the Subcommittee to hold FDA to a greater standard of accountability for allocation of resources within the Agency. We urge continuation of efforts to ensure that taxpayer dollars are spent wisely and fairly.
—Finally, we believe the Administration's user fee proposal for the medical device program masks dangerous cuts in FDA's budget authority that could undermine the efforts of Agency personnel to perform their essential functions of protecting and promoting the public health. We strongly oppose user fees for the medical device industry.

FDA PERFORMANCE AND THE "MODERNIZATION ACT OF 1997"

Last fall, the Congress achieved a remarkable milestone in the history of regulation of the device industry: it enacted the "Food and Drug Modernization Act of 1997." An enormous amount of bipartisan effort went into passage of this legislation, much of which was presaged by activities encouraged by members of this Subcommittee for years. Without the leadership exercised by this Subcommittee in conjunction with the Senate Labor and Human Resources Committee, this legislation may have never seen the light of day. We thank you for your efforts.

The victory ultimately rests with those patients who stand to benefit from the wonders of modern medical technology. The efforts of this Congress have helped to assure a promising future for continued innovation directly targeted to improving patient health and saving lives. As the new law makes explicitly clear, FDA's mission is to "promote the public health by promptly and efficiently reviewing clinical research and taking appropriate action on the marketing of regulated products in a timely manner." (Public Law 105–115, Section 406)

In enacting the new law, Congress recognized that the Agency was simply taking too much time to review products. Overwhelming evidence was presented that painted a bleak picture of patients being deprived of access to life-saving, life-enhancing medical products, Americans traveling overseas for medical procedures, U.S. companies relocating their research and development and clinical trial arms outside of the country, and the threat of increasing losses of our scientific infrastructure. With the new legislation, Congress has signaled the beginning of a new era in the regulation of medical devices—one marked by (1) reduced regulatory burden, (2) increased efficiency, and (3) greater focus on the patient.

We know too well, however, that simply enacting a law does not translate into an immediate fix. Implementation of the new law will not happen overnight; nor will it happen without the expenditure of Agency staff time and resources to carry out the intent of Congress. And, our concern is that all the gains we achieved with enactment of this new legislation will be for naught without thoughtful implementation by the Agency, informed by industry where appropriate, and overseen by the Congress that created the law.

From an appropriations perspective, the new law contains both resource-saving and resource-consuming provisions. The former include concepts such as exempting lower risk devices from the product clearance process (510(k)) and relying more heavily on the use of national and international consensus standards to provide a more uniform and predictable review process. The latter include new requirements for interactive meetings between industry and the FDA to enable earlier agreements on what is needed to get a product onto the market; another involves the review, analysis, and the potential recognition of a portion of approximately 30,000 national and international consensus standards applicable to the medical device industry. If FDA is to become a standards-based organization, as it has avowed, it must devote resources to this initiative.

While we expect the Agency to expend resources to prepare guidance documents, internal operating procedures, regulations, and other implementing documents, we are also concerned that resources may be redirected away from primary review functions thus resulting in increased review times, negating all of our hard-fought gains.

That being said, however, we have been pleased with the recent enhanced performance of the Center for Devices and Radiological Health. Even before the enactment of FDAMA, the center aggressively sought to dig itself out of the mounds of backlogged 510(k)'s and PMA's of several years ago through a series of effective management initiatives. Their efforts have paid off. The time to review 510(k)'s has substantially improved, and PMA's are being reviewed in a more timely manner as well. One indicator that the climate for innovation has improved is that the number of PMA's filed has increased from 39 in fiscal year 1995 to 63 in fiscal year 1997.

The leadership and management initiatives so apparent at the center today are reflections of what the manufacturing sector of our economy has undergone in order to regain America's competitive edge and make us the most productive country in the world. It is only fitting that our government should embrace the same disciplines so key to successful companies. As we said in our testimony last year, "We believe the record shows that entrepreneurial thinking and innovative management are the commodities the Agency needs and that improvement in performance are more a question of intent than of increased appropriations."

Consequently, for the past several years, we have supported level funding for the Agency on the basis that Agency management improvements can substitute for increased staff and resources. However, now the center is faced with a potentially devastating reduction in funding—one that we strongly oppose.

At this point, let me state how difficult it is to sort out the labyrinthian budget documents to ascertain actual levels of funding, particularly for the review functions of the center. We applaud your efforts to hold the Food and Drug Administration to higher standards of accountability for the allocation within the Agency of taxpayer dollars. The directive in last year's conference report requiring "a detailed operating plan for fiscal year 1998 . . . no later than 30 days after enactment of this Appropriations Act" was an important step in making sense out of the financial management of this key government function.

We were dismayed by the FDA operating plan for fiscal year 1998. It was untimely and hardly responsive to the level of detail required by the appropriators. We support your continued efforts to spur greater accountability and responsiveness from FDA.

Our understanding of the President's budget documents is that the level of direct appropriations (not inclusive of user fees) for "Device and radiological products" was $147 million in fiscal year 1997, is estimated at $142 million in fiscal year 1998, and is proposed to be $103 million in fiscal year 1999. In addition, the fiscal year 1999 budget proposes $39 million in "non-additive" user fees—user fees intended to substitute for, not add to, Agency appropriations (unlike the Prescription Drug User Fee Program which was structured to collect fees on top of appropriations in order to enhance Agency performance).

We are very concerned about this situation. While the fiscal year 1998 reduction appears arbitrary and unnecessary, the fiscal year 1999 proposed budget level could devastate the device program at FDA. This is at least the fourth year the Administration has proposed user fees for the device industry. We urge you, as you have in the past, to rule out user fees for the device industry.

It is important to note that the Administration's proposal to reduce the level of funding to $142 million for fiscal year 1998 from the fiscal year 1997 level of $147 million represents a reduction of 3.4 percent. The $103 million level proposed for fiscal year 1999 represents a reduction of 26.5 percent from fiscal year 1997 funding. In CDRH, where the bulk of the budget is for salaries, reductions of the type being proposed necessarily mean sizable reductions in staff positions.

While we have every confidence that the leadership of CDRH will continue to find ways to work smarter and more efficiently—especially with the new tools provided in FDAMA, there is a limit to how many staff positions can be reduced without consequences. Core functions required to be performed by law within specific statutory time frames and in accordance with clear Congressional intent may not be doable with a "skeleton" staff. Such a result would be especially ironic considering that one of the main "drivers" of FDAMA was a desire on the part of legislators to reduce review times to speed up the delivery of important new technology to patients.

If we look at the recent appropriations levels for the entire FDA, the amount of taxpayer dollars funding salaries and expenses for the Agency—without user fees—is as follows: Fiscal year 1997—$819,971,000; fiscal year 1998—$857,501,000. The fiscal year 1998 direct appropriation level represents a 4.57 percent increase over the fiscal year 1997 level. During that same time, the device program suffered a reduction of 3.4 percent. While we understand Congressional interest in funding new initiatives such as tobacco and food safety, we also believe it is important for there to be sufficient appropriations to ensure the performance of statutorily mandated functions. If tobacco regulation and food safety are priorities, Congress should pro-

vide separate funding for those initiatives, not require the Agency to reduce funding for functions that are required by law.

Accordingly, we urge the Subcommittee to enact an appropriations level for fiscal year 1999 that will provide device program funding at the fiscal year 1997 level of $147 million.

SUMMARY OF FUNDING RECOMMENDATIONS

This Subcommittee has done an excellent job over the years in encouraging the Agency to adopt administrative reforms. And, your support was key to the enactment of FDAMA last year. But we cannot rest on our laurels. In the spirit of continuing improvements to this key federal regulatory program—so important to the public health—we offer the following specific suggestions for funding levels and report language as you consider the details of the Administration's fiscal year 1999 budget.

Soundly reject the Administration's medical device user fee proposal and send a strong signal that deep cuts in the Agency's budget authority for medical devices are unacceptable

We also urge the Subcommittee to include language in its report expressing concern over the continued efforts of the Administration to include user fees in its budget proposals year after year.

Ensure level funding for the medical device program in fiscal year 1999 so that it has adequate resources to do the important functions mandated by law.

We are concerned that the device program is shouldering disproportionate cuts vis a vis the rest of the Agency. While "belt-tightening" is appropriate across the board, singling out the device program for more than its fair share is unfair and could negatively affect patient health. The size of the reduction being proposed by the Administration translates into drastic staffing cuts and a concomitant increase in review times. We do not believe anyone wants to see the devastating scene of several years ago repeat itself. Patients will suffer if funding is not kept level for the device program. Accordingly, we request that funding for the device program be level-funded at the fiscal year 1997 level of $147 million.

Ensure that any reductions in FDA funding are not made in activities central to the Agency's primary mission—such as device reviews and activities to protect patient safety

In this age of smaller government and balanced budgets, it is important that the Agency focus on core activities mandated by statute and not spend precious resources on activities that may be interesting and helpful but not essential to the requirements of the law. Redeployment of resources—especially from the educational, scientific, and research arenas—should be encouraged by the Subcommittee. We recommend report language that urges the Agency to examine the allocation of resources and ensure that appropriate staff are assigned to product reviews and activities to protect patient safety. Goals to be achieved should include retaining the performance levels in the 510(k) product review area and improving review times for PMA's. In addition, sufficient staff should be allocated to implementation of FDAMA.

Urge the Agency to implement FDAMA in a timely manner consistent with Congressional intent and continue its "re-engineering" initiatives

The Agency has demonstrated a remarkable capacity to creatively step in new directions to improve the product review process. With re-engineering initiatives such as revival of the Product Development Protocol and the "New 510(k) Paradigm" together with the significant new tools provided in FDAMA, the Agency is indeed being "modernized." Thus far, CDRH has produced timely documents to implement the new law and has given the device industry every indication that it fully intends to continue effective implementation. Such efforts should be recognized and encouraged.

We also wish to point out that, recently, the Agency has decided to diminish its collaborative efforts with industry to address FDAMA and other policy issues. This is an unfortunate decision. As the Agency develops documents that affect industry, it should be informed throughout the process by practical considerations that only industry is in a position to present. Constructive collaboration with industry, with the Agency—of course—retaining final authority, is always a more efficient, less time-consuming model that generally results in a better product. We urge the Subcommittee to encourage such a model.

The consistent message from this Subcommittee—which has been heeded by the Agency—is to focus its efforts, use management tools, reassess core functions—in order to improve performance. This message should continue to be reinforced with FDA and expanded to include a message to work with industry to develop appropriate guidance and other documents.

Continue efforts to ensure that FDA's operating plan is consistent with Congressional intent and improve the financial accountability of the Agency to Congress

As mentioned earlier, we applaud the efforts of this Subcommittee to mandate greater accountability to Congress for allocation and use of taxpayer funds. The recent experience with the request for and submission of the fiscal year 1998 operating plan lays the groundwork for further review and analysis of Agency allocation of resources. We support your efforts and urge that they continue into the next fiscal year.

CONCLUSION

In conclusion, Mr. Chairman, we believe the Agency is poised at the brink of a new era—one marked by increased efficiency, reduced regulatory burden, creative initiatives—with the ultimate winners being the patients that benefit from medical device technology. Success can only be achieved, however, with continued attention from you and your Subcommittee to ensure that (1) an appropriate level of funding—preferably level funding based on the fiscal year 1997 amount—is provided for the medical device program, and (2) those funds are intelligently spent to carry out the health protection and promotion purposes of the Federal Food, Drug, and Cosmetic Act—as most recently amended so wisely by the Food and Drug Modernization Act of 1997.

Thank you for the opportunity to present our views.

PREPARED STATEMENT OF THE HUMANE SOCIETY OF THE UNITED STATES (HSUS)

SUSTAINABLE AGRICULTURE PROGRAMS

Public interest in sustainable agriculture farming systems continues to grow. The HSUS supports these cost-effective yet environment-friendly systems which also improve the welfare of animals. We join the Campaign for Sustainable Agriculture in requesting funding for the Sustainable Agriculture Research and Education (SARE) program. SARE is a competitive grants program that funds high-quality, farmer-involved research and education on economic, agronomic, and environmental aspects of sustainable agriculture farming systems. We join the Campaign in requesting an increase of $2 million for fiscal year 1999 to $10 million for the SARE program.

AGRICULTURAL TECHNOLOGY AND TRANSFER FOR RURAL AREAS (ATTRA)

The HSUS strongly supports funding for ATTRA at the level of $2 million for fiscal year 1999. Since 1989, the caseload has more than tripled but has received the same level funding for years. It serves the entire nation with specialists who provide farmers and others with sustainable agriculture information, research results, and information based on practical experience. There is no other source of readily available information covering such a wide scope of sustainable agriculture topics. The funding level requested for fiscal year 1999, an increase of $700,000 over fiscal year 1998, will allow ATTRA to continue to perform this important function.

ORGANIC FOOD PRODUCTION ACT

For the seventh year in a row, the organic industry has continually grown in sales, with reasons for purchase ranging from environmental and health concerns to that of enhanced animal health and well-being. Adopting consistent national standards for organic products is very important, and now is a crucial time for the national organic program to begin full implementation. This program is on the verge of becoming extremely beneficial to consumers and producers alike. More staff hours are needed to manage comments on the proposed rule, to get the final rule out, enable implementation of the program and facilitate dissemination of program information. The HSUS requests funding of $1 million with at least $250,000 going to offset the cost of the first round of accreditation.

ANIMAL WELFARE INFORMATION CENTER

The Animal Welfare Information Center (AWIC) of the National Agricultural Library (NAL) was started as a Congressional mandate in the 1985 Farm Bill. By law,

AWIC's main missions are to provide information that can be used for: (1) training researchers about more humane animal care and use and (2) improving methods of animal experimentation that can reduce or replace animal use or minimize pain or distress to animals.

As part of the NAL, AWIC also provides information to the public. There are several thousand users of its services, including researchers, technicians, veterinarians, IACUC members, exhibitors, dealers, Federal agencies, educators, students, and others. Due to the great success of the AWIC program in the U.S., it is being duplicated in other countries, with farm animal welfare information included in those services.

AWIC is currently operating on a staff of only 4 full-time and 2 part-time individuals. Since it's inception, AWIC has never received an increase in their funding. We support the USDA's request to expand the mission of AWIC to include a comprehensive collection of information on the well-being of farm animals and to develop an inventory of and disseminate fact sheets and other materials on farm animal well-being issues. It is imperative that AWIC's funding be increased to accomplish these important functions recommended by the USDA.

PACKERS AND STOCKYARDS ADMINISTRATION

We support the USDA's fiscal year 1999 request for an increase of $1,600,000 to focus on packer competition and industry structure. This funding will support the Secretary's Advisory Committee on Agricultural Concentration recommendations that include appropriating sufficient resources to aggressively enforce the Packers and Stockyards Act.

The HSUS also supports an increase of $0.8 million for poultry compliance requested by the Secretary's Advisory Committee on Agricultural Concentration. We are concerned that contract poultry growers have the ability to bargain with integrators and be protected from unfair and discriminatory practices and that the Secretary be provided the same administrative enforcement authority over poultry that currently exists for red meat.

The HSUS also supports an increase of $0.8 million for monitoring and analyzing packer competitive practices and the implications of structural changes and behavioral practices in the meat packing industry. GIPSA expects to increase their investigations of livestock markets from 1,800 in 1998 to 1,950 in 1999. The requested increase will enable GIPSA to adhere to the recommendations of the Secretary's Advisory Committee on Agricultural Concentration.

ANIMAL WELL-BEING RESEARCH

Living conditions for farm animals which provide for their health and well-being are increasingly recognized as an important component of food quality, and are also of increasing concern to the public. Research into understanding what is required to provide for the well-being of these animals is needed to help address these concerns. However, funding of such research is virtually nonexistent in the U.S. We request that $29.5 million be appropriated to the Animals division of NRI with at least 50 percent of the funding allocated specifically for well-being research, thereby achieving a greatly needed balance between animal health and animal well-being research.

WILDLIFE SERVICES

Wildlife Services continues to be one of the most controversial programs in the Department of Agriculture. Its Western region in particular remains focused on killing wildlife, rather than solving the damage wildlife sometimes causes.

Most of the federal WS appropriations are allocated to the Western region, where the vast majority is spent killing coyotes. Although the results of scientific research have shown that control of coyote populations, as opposed to individual offending animals, is futile and even counterproductive in stopping damage, this remains the primary approach used by WS employees. By way of example, WS still relies heavily on preventive aerial gunning, in which a coyote population in an area to be used for livestock grazing is targeted, and all animals destroyed, before livestock are even moved to the area. This is precisely the kind of non-selective and unnecessary destruction of wildlife that has earned WS its nefarious reputation.

The HSUS believes that WS must change its Western program to one that helps livestock producers, rather than one that just kills wildlife. By teaching livestock producers and property managers how to prevent or reduce wildlife-caused problems themselves, the cost of this program would be substantially reduced, while its effectiveness would markedly increase. Only when initial efforts to prevent or reduce the

problem fail would lethal control, under this approach, be conducted by the government with federal funding.

A similar program of shared responsibility has very effectively reduced wildlife-caused damage in Kansas, Missouri and other states for a fraction of the federal share of WS' budget in most Western states. The HSUS recommends, therefore, that the Subcommittee direct APHIS/WS to undertake a shift in focus from direct control services to education/self-help. Lethal control would be provided by the government only as a last resort. With such a change, operational funding needs would be reduced by $10 million. We strongly urge the Subcommittee to reduce the fiscal year 1999 budget of WS in this manner.

In addition, we urge that WS be directed to spend 90 percent of fiscal year 1999 funds allocated to WS research on the identification and development of non-lethal, non-injurious control methods.

ANIMAL WELFARE ACT

The HSUS requests a significant increase in funding for the enforcement of the Animal Welfare Act (AWA). For more than 30 years, the AWA has failed to provide protection to animals in breeding facilities for the commercial pet trade, or to animals amassed by Class B "random source" dealers for sale to research facilities. The lack of sufficient funding in this area—which has hovered at about $9 million for years—has exacerbated the gross inadequacies that characterize AWA enforcement.

Facilities that house animals covered under the AWA are not inspected to a sufficiently frequent and random degree. Currently there are 71 inspectors covering 10,366 sites of licensed facilities, including 2,506 registered research facilities that house laboratory animals. Violations documented by inspectors must be swiftly responded to and acted upon in a definitive manner, in order to encourage compliance by all facilities in the field. The load placed upon the current inspection staff does not allow such response and action. Increased funding for additional inspectors and an expanded inspection program would therefore improve overall conditions of all facilities.

The HSUS also suggests modifications to the operation of Animal Care that could increase government revenues. These suggestions include:

—An increase in the fees for dealers, since fees for dealers have remained stagnant for many years.

—The elimination of "random source" Class B dealers, whom APHIS regulatory staff spends a significant portion of their time trying to monitor and investigate. Although these dealers are a small percentage of the total number of licensees, a disproportionate amount of time must be spent dealing with this group of chronic AWA violators.

—The imposition of strict penalties and collection of fines for all documented violations of the Act, including failure to be present or to allow for the inspection of facilities. Frequently, fines go uncollected or inspectors are denied access to facilities to verify whether licensees have complied with the AWA. Repeated unsuccessful visits and uncollected fines cost the USDA/APHIS hundreds of thousands of dollars.

The HSUS supports current efforts to strengthen USDA regulations covering large-scale commercial breeding facilities. The commercial pet breeding trade is plagued by chronic, serious violations of the AWA, and USDA-licensed facilities must be brought into compliance immediately or eliminated if compliance with the Act cannot be achieved.

MARKET ACCESS PROGRAM

The HSUS request that no monies under this program be allotted to the Mink Export Development Council or any other mink industry cooperative. From 1989 to 1995, more than $13 million in federal funds were handed over to the Mink Export Development Council. Despite this large commitment of funds, which were used primarily for fashion shows overseas, the value of mink exports declined by 33 percent and U.S. production dropped by more than half (Source: Fur Age Weekly). In addition, mink fur is purely a luxury item for which animals are subjected to extreme cruelty. In the last Congress, an overwhelming majority of the Congress agreed that the mink industry should not receive a government subsidy under this program. In light of these facts, we urge that the Congress continue to bar funding to the Mink Export Development Council.

THE HORSE PROTECTION ACT

The HSUS supports the full appropriation of funds as authorized by law under the Horse Protection Act. The authorization limit for the enforcement of the Act has

been frozen at $500,000 since the enactment of the law in 1970. In addition to the devaluing effects of inflation, the actual appropriation has been drastically cut in recent years. USDA only received $353,000 for the Horse Protection Act program in fiscal year 1998, and only about $260,000 of that money was available for enforcement purposes.

The HSUS requests that $500,000 be appropriated for the next budget year. This amount represents the absolute minimum expenditure necessary to carry out the provisions of the Act. It is essential to insure the proper training of USDA enforcement personnel in the use of thermovision and other diagnostic techniques employed to detect the illegal soring of gaited horses. It will also support some needed research. The full appropriation will enable USDA staff to attend a representative number of target horse shows (approximately 10 percent) and it will help to improve the training and oversight of non-governmental enforcement personnel (known as Designated Qualified Persons or DQP's.)

The HSUS also wishes to go on record as stating that the Tennessee Walking Horse industry has demonstrated that they are clearly incapable of effective self-regulation as envisioned by the 1976 amendments to the Act. Industry inspectors consistently report fewer than half the number of violations cited when USDA personnel are in attendance. Also, an increasing number of walking horse shows have no inspection programs whatsoever. We urge prompt and full implementation of the strategic plan.

COMMERCIAL TRANSPORTATION OF EQUINES FOR SLAUGHTER

The promulgation of regulations concerning the humane and safe transport and treatment of horses shipped to slaughter within the U.S. are provided for under a provision of the farm bill passed in 1996. We support full development and implementation of thorough regulations to remedy the mistreatment and inhumane conditions horses transported to slaughter currently endure.

Our two year investigation and subsequent research confirmed that there are several areas of serious concern regarding how these horses are treated and transported on these long distance trips to one of the eight slaughter plants. These areas include, but are not limited to, the shipment of seriously injured, late-term pregnant mares, foals, and ill or incapacitated horses. In addition there are serious deficiencies regarding the duration of deprivation of water, food and rest during transport, the inappropriate interior height, design, and use of many livestock vehicles, the lack of segregation of horses by size, and the lack of segregation of fractious horses and stallions from others, as well as adequate protection from the elements. We are also concerned about the lack of any record keeping by which to establish ownership or track these animals. We urge full funding be appropriated for implementation of these regulations and specifically request $425,000, which is close to the amount requested by USDA. We urge that the money allocated include adequate funding for USDA FSIS inspectors to enforce these regulations.

PREPARED STATEMENT OF R. MAX PETERSON, EXECUTIVE VICE PRESIDENT, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

The International Association of Fish and Wildlife Agencies was founded in 1902 as a quasi-governmental organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the states, provinces, and federal governments of the U.S., Canada, and Mexico. All 50 states are members. The Association has been a key organization in promoting sound resource management and strengthening federal, state, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest.

NATURAL RESOURCE CONSERVATION SERVICE (NRCS)

The Natural Resource Conservation Service has immense responsibilities for implementing the conservation provisions of the 1985 Food Security Act (FSA), the 1990 Food, Agriculture, Conservation and Trade (FACT) Act, and the Federal Agricultural Improvement and Reform (FAIR) Act of 1996.

Technical assistance

The USDA publication "Geography of Hope" identifies that the need for general conservation technical assistance for America's private landowner will continue to increase to 2002 and beyond. The Association supports the $38 million increase in conservation operations. This will be used for: updating and refining the NRI; pro-

viding incentive payments to state NRCS offices that leverage local funds; and hiring non-federal watershed coordinators.

The Association supports the President's fiscal year 1999 request for an additional $1.9 million for updating and digitizing soil surveys and training field staff to improve technical assistance to users of soil survey data. These items are included in the Conservation Operations budget request and the Association strongly supports a $752 million budget for this program.

In addition to increasing general (non-programmatic) technical assistance, increased technical assistance funds are needed to implement increasingly popular provisions of the 1996 FAIR Act. The budget for the Wetlands Reserve Program (WRP), the Conservation Farm Option (CFO), Wildlife Habitat Incentives Program (WHIP), and the Farmland Protection Program (FPP) all include the customary 19 percent to 20 percent for technical assistance. The Association strongly supports this level of funding provided to ensure maximum agriculture and natural resource benefits will accrue from these programs. Notably absent from the list of programs providing adequate levels of technical assistance is the Environmental Quality Incentives Program (EQIP). The 1998 budget provides the customary 19 percent level for technical assistance while the proposed 1999 budget raises EQIP from $200 million to $300 million which the Association applauds. It lowers however the percentage for technical assistance to 10 percent, a net loss of $8 million but a functional loss of $27 million since EQIP is increased from $200 million to $300 million. Some Programs (CRP, WRP, CFO and FPP) have a technical assistance cap set by Section 11 of the CCC Charter Act at the 1995 spending level. No such constraint exists on EQIP. The Association therefore strongly urges the restoration of the customary 19 percent for technical assistance on EQIP.

State Technical Committees (STC).—The 1990 FACT Act required that State Technical Committees (STC) be established to facilitate interagency cooperation and coordination of technical guidelines for the conservation programs. Further, the USDA 1995 Reorganization Act specifically exempted the STC from the Federal Advisory Committee Act (FACA). The 1996 FAIR Act further added additional members to the STC. Federal-State coordination is an ongoing normal function which is required with or without a formal State Technical Committee. We commend the strong efforts of NRCS that has ensured the establishment of the State Technical Committees in each State with representation from the respective State fish and wildlife agency.

Wetland Determination.—We believe the need for wetland determination, certification, and mapping is great and urge NRCS to proceed as soon as possible, under the guidance of the FAIR Act of 1996. The Association urges expeditious completion of the wetland determinations required to implement the Swampbuster provisions of the 1985 FSA, 1990 FACT Act, and the 1996 FAIR Act as well as the FAIR Act directed interagency cooperation, whereby NRCS assumed responsibility for wetland designation for Section 404 (Clean Water Act) purposes on farmland, including tree farms, rangelands, native pasture, and other private lands used to produce or support the production of livestock. The Association and individual states wish to continue to work with NRCS to help achieve these goals.

Public Law 566.—The Association generally supports the $49 million request for small watershed (Public Law 566) projects. That support is based upon continued emphasis on updated watershed planning and management. Such efforts could utilize and expand upon existing Public Law 566 plans examined in light of present day issues of wetland protection, water quality enhancement and fish and wildlife habitat. The greatest potential for these programs is for land treatment measures that retain the water on the land, improve infiltration, improve water quantity and quality, and provide fish and wildlife habitat. Structural and non-structural land treatment activities require state and local matching funds and are therefore leveraged to provide greater conservation benefits for each federal dollar spent while promoting valuable partnerships among states, local agencies, and other organizations.

National Buffer Initiative.—NRCS has implemented the initiative in cooperation with industry and other partners. The Association is pleased to be a sponsor of this innovative approach. The National Academy of Sciences has found that buffer strips can reduce off-field pollution by 70 percent, thus also contributing to meeting nonpoint source remediation goals under the Clean Water Act. NRCS has committed special emphasis and a major effort to use the strip practices covered by the continuous CRP sign-up in a more targeted fashion. Unlike the large or whole field CRP retirements, buffer strips will require extensive outreach plus the much more attractive rental rate now available. The Association supports the allocation of increased funds specifically for outreach to increase participation in the various buffer strip practices.

Forest Incentive Program (FIP).—The Forest Incentive Programs (FIP) has multiple resource values for fish, forests, wildlife, clean water and erosion control. The Association opposes the NRCS proposed intention to drop FIP funding and strongly recommends that the fiscal year 1998 level of $6.325 million be continued.

Capped Program.—The Wetlands Reserve Program (WRP), Wildlife Habitat Incentives Program (WHIP), Farmland Protection Program and the Conservation Farm Option (CFO) have all reached or are near authorized acreage or appropriation caps. The Association continues to recognize and support the benefits to our natural resources from these programs. We believe that due to the over-whelming success, customer's acceptance and public benefits of this program, they should be re-authorized and funded at least at the 1998 level through 2002.

FARM SERVICE AGENCY (FSA)

An adequately funded budget for the FSA is essential to implement those conservation related programs and provisions under FSA administration and/or in cooperation with NRCS as a result of passage of the Federal Agricultural Improvement and Reform (FAIR) Act of 1996. The Association strongly advocates that the budget include sufficient personnel funding to service a very active program.

FSA programs have tremendous quantifiable impacts on natural resources, and yield substantial public as well as private benefits. Building on the provisions of the 1985 FSA, the 1990 FACT Act, and the 1996 FAIR Act, the Association wants to ensure that each program accomplishes the broadest possible range of natural resource objectives, and encourages close cooperation between FSA, NRCS and the State Technical Committees in implementing the 1996 FAIR Act.

Flood Risk Reduction Program.—We believe this program has great potential to mesh with the Army Corp of Engineers Rivers Ecosystem Restoration and Flood Hazard Mitigation Project which is a part of the President's Clean Water Initiative. We urge FSA to prepare regulations and budget for implementation and make every effort to ensure that language used in its easements and agreements provide a streamlined basis for appropriate administration and are user-friendly.

Conservation Reserve Program.—The continued administration of CRP under the guidelines of the 1996 FAIR Act is a very significant and valuable commitment of USDA and the FSA. The Association applauds FSA efforts to fund and extend CRP contracts for the multiple benefits that accrue to the public as well as the landowner. The Association is especially pleased to note the commitment to reach as soon as practical and maintain the authorized 36 million acres in CRP. The Association provides special thanks to FSA for the continuous CRP sign-up of high value environmental practices and urges a special effort to advertise and increase landowner participation.

The commitment of FSA to provide high wildlife benefits in CRP contracts was most obvious in the 15th and 16th sign-up. The Association applauds FSA in those efforts with their special emphasis on native grass species and enlightened pine planting and management strategies for maximum wildlife benefits.

WILDLIFE SERVICES, ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

The President's budget for the APHIS Wildlife Services (WS) Operations is $26.05 million, a net reduction of $2.436 million from fiscal year 1998. For Methods Development, the proposed amount is $9.681 million, a $543,000 decrease from fiscal year 1998. The Association is discouraged that the Administration continues to overlook the importance of the leadership role the WS program has in the area of wildlife damage management and recommends that Congress restore these funds.

WS, a unit of APHIS, has the federal responsibility for controlling wildlife damage to agriculture, aquaculture, forest, range and other natural resources; controlling damage to property, and for protecting public health and safety through control of wildlife-borne diseases and wildlife hazards at airports. Its control activities are based on the principles of wildlife management and integrated damage management and are carried out cooperatively with state fish and wildlife agencies. Most APHIS operational work is cost shared between the federal WS program, state and county governments, agricultural producers, and other cooperators.

The cooperation and support of the agricultural community are essential to maintaining wildlife populations because much of the Nation's wildlife exists on private, agricultural lands. A progressive wildlife damage control program which reduces the adverse impact of wildlife populations is necessary to maintain the support of the agricultural community and to counter increasing pressures for indemnity due to wildlife damage.

The Association works closely with WS on numerous issues critical to the state fish and wildlife agencies such as the recent agreement between the United States

and the European Community to identify and develop more humane traps for taking furbearing animals. The Association is disappointed that $450,000 was not included in the President's fiscal year 1999 budget for the important work of developing and testing more humane traps. Without necessary funding for trap testing, the United States will not be able to keep its agreement with the European Community. The Association strongly urges Congress to add $450,000 in the US budget for this very critical wildlife management, economic and trade issue.

The Association recommends that Congress make $700,000 available in fiscal year 1999 to allow WS to continue implementation of their new Management Information Reporting system. The implementation will occur over a 5-year period at a total cost of between $6–8 million. The current system is outdated, uses obsolete hardware, and is limited in the amount of data collected. The new system will allow WS to provide specific information on resources protected, damage levels, trend information, cooperator employed methods, and data on measurements and outcomes now required by the Government Performance and Results Act.

The President's budget also directs implementation of a cost-share arrangement requiring states and other cooperators to pay at least 50 percent of the program cost in each state. Problems involving wildlife damage are unpredictable and extremely varied. The Association strongly objects to such a rigid cost-share arrangement and urges Congress to maintain maximum flexibility for cost sharing.

With the success of the recent wolf reintroductions in Yellowstone and the resulting expansion of their range, the reintroduction of the Mexican wolf in Arizona, and the natural dispersion of wolves into new areas in Minnesota, Wisconsin, and Michigan, the agency's present funding level to deal with wolf problems is inadequate. As wolf populations continue to increase, so do wolf conflicts and requests from the public for assistance. The Association recommends that Congress provide an additional $275,000 to WS for fiscal year 1999 to deal with the increasing workload related to resolving wolf conflicts in order to facilitate this important recovery effort.

A significant problem exists with regard to brucellosis which affects domestic livestock and other animals and is present in elk and bison in the Greater Yellowstone area. ASPHIS has a key role in working to resolve issues related to this problem. We strongly urge that funding be included in the Service's budget to meet the needs in veterinary services, research, and operational funding for the quarantine facility to allow the Service to meet its responsibilities in resolving this issue.

We commend Congress for recognizing the need to relocate the WS research facility from Denver to Ft. Collins, Colorado. However, the Association urges the Congress to finish what it has begun and provide the necessary $20.5 million to complete this $37.7 million state-of-the-art facility. The future of an effective wildlife damage management program depends on the identification and development of more effective and socially acceptable control methods. The only source of new methods is through research.

The Association is pleased with the accomplishments of the Berryman Institute at Utah State University in Logan, Utah. However, the activities have seemed to reach a plateau, and we would like to see the Institute enhance its capabilities to conduct social science research, expand continuing education programs, and start a new high-quality scientific journal for wildlife damage management that would be patterned after other established journals. To reach these new goals, the Association supports an increase of the funding to the Berryman Institute by an additional $236,000.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE (CSREES)

The Association recognizes that the research and educational programs of the CSREES and its Land Grant Partners effect relevant positive changes in attitudes and implementation of new technologies by private landowners, managers, community decisionmakers, and the public. This results in significant benefits to individuals and to the Nation through building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture. Since over two-thirds of our lands, approximately 1.35 billion acres, are controlled by over 10 million private landowners and managers, it is most appropriate that the CSREES Land Grant System, with its grass roots credibility and delivery system, be adequately funded to translate and deliver research-based educational programs and new technologies to help the Nation's private landowners and managers move towards a more sustainable society. However, we are disappointed that the President's fiscal year 1999 budget reflects very little emphasis on natural resources research and education directed toward helping these clientele.

The Association recommends that the fiscal year 1999 budget for CSREES should be redirected to accomplish the following goals:

The Association recommends that the Renewable Resources Extension Act be funded at a minimum level of $9.5 million in fiscal year 1999. The RREA funds, which are apportioned to State Extension Services, effectively leverage cooperating partnerships at an average of about four to one, with a focus on the development and dissemination of useful and practical educational programs to private landowners (rural and urban) and continuing education of professionals. The increase to $9.5 million would enable the Extension System to accomplish the goals and objectives outlined in the 1991–1995 Report to Congress. The need for RREA educational programs is greater today than ever because of the fragmentation of ownerships, the resultant increase in small farm numbers, the diversity of landowners needing assistance, and the increasing environmental concerns of society about land use. It is important to note that RREA has been reauthorized through 2002. It was originally authorized at $15 million annually; however, even though it has been proven to be effective in leveraging cooperative state and local funding, it has never been funded at that level. An increase to $9.5 million would enable the Extension Service to expand its capability to assist over 500,000 private landowners annually to improve decision-making and management on an additional 35 million acres while increasing productivity and revenue by $200 million.

The Association recommends that Smith-Lever 3(b)&(c) base program funding be increased by 9 percent to a level of $280,950,770 with an appropriate portion of this increase targeted to Extension's Natural Resource and Environmental Management programs (NREM). The President's fiscal year 1999 budget requests a reduction of $10,740,000 funding for Smith-Lever 3(b)&(c) funds from the fiscal year 1998 level. The Association appreciates that Smith-Lever 3(b)&(c) base programs provide "Block Grant" type funds for land grant universities to provide essential educational outreach based on local needs assessment. This will enable NREM programs to develop the critical mass of expertise at the state and local levels to redirect and leverage limited funding to address critical existing and emerging natural resource and environmental issues that are directly affecting small landowners and farmers in both rural and urban communities nationwide. The nation is rapidly becoming a suburban society and these new landowners are ripe for education at the urban and rural interface. Expanding Extension programs in natural resource education on such issues as forest health, wetlands, endangered species, and human/wildlife interactions, as well as to strengthen its programs in urban and community forestry and environmental education is essential to address natural resource issues that are relevant to the sustainability of these critical resources. Such an increase, targeted appropriately, would help producers better understand and implement the changes in the 1996 Farm Bill Conservation Provisions. Moreover, we are concerned that appropriate positions in the Natural Resources and Environment Unit have not been retained to provide needed national leadership for critical interdisciplinary resources such as range management.

The Association encourages continued close cooperation between State CES and the State Fish and Wildlife agencies, as well as other appropriate state and federal agencies and conservation organizations. Extension 4–H Youth natural resource programs and projects continue to increase with over 1,350,000 youngsters presently enrolled from both urban and rural communities across the Nation. Increased Smith-Lever funds targeted appropriately will enable CSREES to carry out its environmental education and NREM National Strategic Plan obligations nationwide.

The Association recommends restoration of the Rangeland Research Grants $500,000 budget for fiscal year 1999. The Association is disappointed that the practical and applied problems addressed by the Rangeland Research Grants (RRG) program were zeroed out in the President's 1998 budget and totally ignored in this fiscal year 1999 budget. The elimination of the only federal competitive grants program for rangelands has serious implications for wildlife, watersheds, and other natural resources. Modest appropriations for RRG in the past have supported some of the most important rangeland research conducted over the past decade, and wildlife issues on rangelands will present some of the more critical rangeland research problems over the next decade. This would help increase the interdisciplinary capacity of research and educational programs to help landowners better manage their land.

The Association recommends that an appropriate portion of the Pest Management budget should be dedicated to educational programs for prevention and control of vertebrate pests in urban and rural communities and to address invasive exotic species and noxious weed problems on rangelands. The Association notes that a combined total increase of almost $15.5 million has been recommended in the President's budget for Pest Management and related research and extension programs over and above increases received in fiscal year 1998. The Association strongly supports this increased commitment of funds. Vertebrate pests and invasive species have been identified in many states as posing the most significant problems, now

and in the future, that agricultural and related crop producers and private landowners face. This targeting of Pest Management funds for research and educational programs would advance the knowledge and capability of landowners to reduce significant losses to vertebrate pests and invasive species.

The Association recommends that the Hatch and McIntire-Stennis funds be restored to fiscal year 1998 levels and, if necessary, redirected from the substantial $32,800,000 proposed increase in NRI funding. The Association is pleased that the Administration proposes a $9.5 million increase in basic research identified under the National Research Initiative as Natural Resources and the Environment; however, what is proposed under this "Area of Special Emphasis" clearly does not address critical natural resource research needs that the Natural Resource Community and the public are vitally concerned about. The Association is alarmed at the significant reduction in both the Hatch Act and Mclntire-Stennis research programs of over $15.5 million. Both of these research programs, conducted by Land Grant University partners and other educational institutions, are crucial to addressing natural resource and environmental issues critical to agriculture and natural resource sustainability now and in the future.

PREPARED STATEMENT OF LUIE FASS, INTERNATIONAL SEAFOOD

Mr. Chairman, I appreciate the opportunity to submit this statement for the record.

I am submitting this statement to you to request the Committee's assistance on a legislative matter that will assist the commercial fishing and seafood industry in Virginia and other portions of the Atlantic coast. The issue involves the inclusion of seafood products within the current export credit assistance programs administered by the Foreign Agricultural Service (FAS) of USDA.

Senator Ted Stevens authored an amendment in 1990 that authorized seafood as a commodity that could be financed through USDA's GSM (General Sales Manager) credit programs. Seafood has been financed infrequently in recent years through this mechanism. I understand that it is a discretionary decision on which commodities to include in each year's program.

The Asian financial troubles have caused a tremendous reduction in seafood exports, which for some U.S. commercial fishermen is their main source of revenue. As you may know, the Department of Commerce has imposed restrictive quotas on popular fishery species to the extent that the industry will expire without the export market. The exported seafood consists of species (skate) and products (shark fins and tails) for which there is no domestic demand, but for which there is a viable and strong Asian market.

I represent a number of commercial fishermen and seafood processors and exporters who are in the same position: We are no longer able to export seafood products to Asia because the Asian importers cannot obtain credit to finance their operations. If the FAS program were to include seafood as a product on the approved list for this year, the U.S. export of seafood could resume.

We ask that in your fiscal year 1999 Appropriations action you instruct the Department of Agriculture to include seafood and seafood products on the approved list for the FAS-GSM export financing programs.

Thank you again for the opportunity to present this statement for the record.

PREPARED STATEMENT OF THE INTERTRIBAL AGRICULTURE COUNCIL

The Intertribal Agriculture Council (IAC) is an organization of dues paying member Tribes who together control over 80 percent of the 54 million acres held in trust by the United States for Indian people. Founded by 84 tribes in 1987 to promote improvement in Native American and Alaskan Native agriculture, IAC is governed by a Board of Directors elected by the Tribes from each of the twelve regions of Indian Country reflecting the diverse character of Indian agriculture. We appreciate the opportunity to provide written testimony on the Department of the Agriculture budget request for fiscal year 1999.

For the past eight years, the IAC has repeatedly submitted written comments and oral testimony which attacked the USDA budget request and pointed out areas where we felt there were significant deficiencies reflecting poor priorities for existing budget dollars. We have repeatedly sought increased funding for the Extension Indian Reservation Program authorized at $8 million but funded at only $1.6 million. We have sought to increase direct farm lending in Farm Service Agency (formerly Farmers Home Administration) as critically necessary to our people who are unable to obtain bank loans due to jurisdictional and land ownership issues. We have

sought improved participation in the new conservation programs collectively lumped under the Environmental Quality Incentives Program, and we have sought improved prioritization of the elements of the 1990 Fact Act collectively called Title 2501.

In this year we have the uncommon pleasure of not attacking the Department's budget request but applauding the revised priorities for existing budget dollars. The recent USDA undertakings in both civil rights and small farms issues have included direct participation by the actual targeted users of USDA programs. USDA should be commended for listening and making adjustments in priorities as reflected in this budget request.

The areas of primary budget concern for the membership of the Intertribal Agriculture Council are listed below.

COOPERATIVE EXTENSION SERVICE

Cooperative Extension Service Agents serve in the critical role of community liaison to all USDA and Land Grant University Agriculture Programs, supervise youth activities such as 4–H, and coordinate education and training programs. Until 1990, Indian reservations were excluded from this service. For the past several years the Intertribal Agriculture Council has worked with the Department of Agriculture to enhance Indian participation in Extension Service programs as a cornerstone to improving USDA/Indian relations.

The Extension Indian Reservation Program (EIRP) is authorized in Section 1677 of the 1990 FACT Act, and spearheads the IAC efforts at improving USDA involvement with American Indian communities. We in the IAC are proud of our participation in the effort to establish this critical Reservation Extension Agent program and are thankful that the department recommends increasing funding for this successful and cost effective program. The program started with the authorization and an appropriation of one million dollars in the 1991 budget. As a result of that authorization and appropriation, the Cooperative Extension Service, working in concert with Indian Tribes and State Extension Directors, implemented a program which in its first year resulted in the establishment of 13 fully operational Reservation Extension Projects with a total staff of 34, half of which were American Indians. In addition, each dollar of Federal seed money attracted $0.37 in Tribal Government support, and $0.41 in State Government support. States and Tribes hired nine individuals, in addition to the extension personnel, to assist in these projects. In that first year, during the start-up phase of this new program, the Extension Service received more than 75 proposals submitted jointly by cooperating States and Tribes to provide Extension services to the Indian communities. These cooperative proposals totaled more than 16 million dollars, for which only 1 million was available.

Congress recognized the value of this program and increased its funding by $500,000 in fiscal year 1992, and another $250,000 in fiscal year 1993. Since then, and despite great support among the Department, Congress and Indian leaders, the budget situation has prevented continuing expansion toward the full performance goal estimated at $8 million. Increasing costs, CSREES overhead costs and budget rescissions have caused the already tiny program to cut back repeatedly in recent years, with the cuts resulting in fewer programs and smaller budgets for the remaining Extension Agents. Since 1994 the program has had to reduce from a high point of 34 on-reservation projects to the current level of only 26 programs. Even so, and without a national program leader or other oversight, 26 extension programs are providing valuable and formerly unavailable services to Indian Communities in 20 states from Florida to Alaska, including especially the valuable 4–H programs for our next generation.

Funding requested by the Tribes and States for continuing the existing 26 projects at minimum levels was $1,872,600 in 1998. Only $1.6 million was available, resulting in an average shortfall of $11,000 for each on-site project, a reduction of over 17 percent below established need levels. The proposed funding level of $5 million in fiscal year 1999 will provide adequate funding to meet the needs of the existing projects and expansion to include another 26 or so reservations in this valuable Federal/State/Tribal cooperative effort. Although below full-performance levels, the proposed increase is a reasoned approach to build upon past success without overburdening the system within fiscal year constraints. We strongly support this initiative of the USDA.

FARM SERVICE AGENCY, FARM LOAN PROGRAMS

The decision of the USDA to ask for budget levels which reflect the full authorized level of Direct Farm Ownership Loans at $85 million and Direct Farm Operating Loans at $500 million will be of great service to millions of American farmers and

ranchers who, for a number of reasons, are unable to obtain direct bank financing. This is especially important for American Indian farmers and ranchers on Indian reservation lands because private sector commercial banks are frequently unwilling or unable to make loans using Indian trust property as collateral. However, these issues are not a factor in direct federal lending programs.

It has taken great courage for the Farm Service Agency to seek the full appropriation, in part because the published past performance of FmHA Direct Loans has been poor. However, it must be pointed out that the reported deficiencies cannot be compared directly with similar data for commercial banks or other lenders. There are two reasons for this discrepancy. First, the reported delinquency rate is cumulative, including all delinquent loans dating from the origination of the program, while excluding all past loans which performed fully and were paid off—a commercial financial institution would dispose of non-performing loans on a yearly basis, reporting at most the three current years. Second, the direct loan program was used in the late 1970's and early 1980's as an instrument of federal efforts to mitigate the high inflation and recession affecting the country during that period. Fully three quarters of the direct loan deficiencies are "Economic Emergency" loans made during this period to provide an infusion of federal dollars to rural communities through increased lending to farmers. These loans have not been made since 1984, so 75 percent of the delinquencies are more than 15 years old and result from federally-sponsored emergency efforts at economic recovery, not from poor borrower or agency performance.

Given the strength and historical contribution of the direct lending programs to America's agriculture base, we strong support the USDA's request to fully fund these critical programs.

INDIAN LAND ACQUISITION PROGRAM

The Indian Land Acquisition Program is listed under Farm Service Agency, Farm Loan Programs. It was created by Congress as a first effort at finding solutions to the jurisdictional and managerial crises facing Indian reservations which result from fractionated land-heirship and checker-boarded land-ownership patterns. This program has provided Tribes with the ability to purchase allotted lands within their jurisdictional area to consolidate ownership and management functions.

Congress raised the authorization for the Indian Land Acquisition program from $2 million to $8 million in the 1990 FACT Act. In recent years, the Department has funded this program at one million dollars, and reports limited activity. However, we are told by our member Tribes that FSA State officials have repeatedly turned away Tribal applicants by stating that no funds are available. Actually, the funding level has been so low that in many years a single loan to a single Tribe has taken the entire appropriation. Turning away potential applicants and operating a program in which a single loan may require the entire appropriation explains the low activity level.

The proposed 1999 budget again requests less than $0.5 million in budget authority for this important source of land consolidation assistance. We are requesting that Congress direct the Department to utilize the full authorization of $8 million for the purpose for which it was intended, the solution of long-standing land-ownership problems on Indian reservations. Since the Farm Service Agency has resources extending well into the billions of dollars we are not requesting an additional appropriation. We are requesting that the Committee and the Congress mandate that $8 million of the total budget in Farm Loan Programs be earmarked specifically for the Indian Land Acquisition Program as authorized in the 1990 FACT Act.

OUTREACH FOR SOCIALLY DISADVANTAGED FARMERS AND RANCHERS

A widely based coalition of minority, rural and American Indian organizations sought the support of Congress for the development of an improved outreach and service delivery system for disadvantaged agricultural producers. Section 2501 of the FACT Act is the result. This section contains specific direction in developing the program and lists Tribally Controlled Community Colleges among organizations eligible to participate in USDA education and outreach programs.

Improved education of our people has long been the over-riding priority for our Tribes. This relatively simple and straight forward section of the FACT Act finally recognizes this priority. For the first time since the passage of that authorizing legislation, the Department has included a full authorization budget request to implement this important outreach program for Americans everywhere. We strongly support this move by the Department to finally implement this Congressionally-mandated program.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

The combination of the various conservation programs previously administered by the USDA into the newly created Environmental Quality Incentives Program (EQIP) through the 1996 FAIR ACT has required some adjustment at the local and regional level during the implementation phase. Initially, most reservation lands were excluded from the special emphasis areas, largely due to a lack of Indian participation on the various state committees which set-up the original implementation plans. However, in several states with large Indian landownership and populations, including Arizona, Colorado, Montana and Nevada, the NRCS has placed special emphasis on the historically unmet needs of Indian reservation lands. Coupled with national office adjustments to include Indian lands, NRCS is making major progress in bringing its important conservation programs and expertise to previously underserved populations.

The response of the agriculture and landowner community to the opportunities presented to improve long term conservation through the EQIP program has stretched the ability of this program to accomplish its identified task. For this reason, and in specific response to the inclusion of Indian owned lands in the EQIP programs, we strong support the USDA's request to expand the program by $100 million, nationwide.

The Board of Directors of the Intertribal Agriculture Council, on behalf of our member Tribal governments, are grateful for the opportunity to submit written comments on these issues of importance to the Indian Agriculture community. We believe the USDA's decision to request reprioritizing its existing appropriation levels through the budget process is an excellent example of a federal agency which listened and acted upon its own special task force recommendations. The proposed budget will more directly meet the actual needs of America's farmers and ranchers than any budget in recent years, and will help solve serious problems affecting rural communities throughout America.

PREPARED STATEMENT OF DR. KENNETH E. QUICKEL, JR., PRESIDENT, JOSLIN DIABETES CENTER

Mr. Chairman and Members of the Subcommittee, we at the Joslin Diabetes Center in Boston appreciate the opportunity to provide a statement for the record about an innovative and cost-effective project of potential benefit to rural Americans throughout the country.

DIABETES

The facts about diabetes among Americans are these:

—Sixteen million people have diabetes:
—Diabetes is much more prevalent among some growing minority populations:
—The prevalence of diabetes is increasing 7 percent each year;
—Diabetes is the leading cause of blindness among working-aged Americans;
—Diabetes and complications from diabetes are among the five leading causes of death in the United States; and
—Half of those who have diabetes are not yet aware they have diabetes, which may first become known only when serious complications arise.

JOSLIN DIABETES CENTER

Joslin Diabetes Center, since 1898, has been the world's leader in the study of diabetes and in providing care for individuals with diabetes. With a staff of over 400 and an annual budget of $41 million, Joslin's clinical arm handled 65,000 patient visits in 1997. Joslin investigators contributed 108 original papers to the scientific literature in 1996. Joslin is affiliated with the Harvard Medical School and has trained over 900 diabetes specialists now practicing medicine and conducting research in 40 countries around the world.

Joslin has established thirteen Affiliated Centers across the U.S. in which Joslin physicians and staff train medical personnel in hospitals and clinics in the techniques Joslin employs for diabetes detection, prevention, and care. These thirteen Centers handled an additional 85,000 patient visits in 1997.

PROJECT PROPOSAL

We propose a two-state demonstration project that will institute pilot programs of diabetes detection, prevention and care at a very modest cost. The objectives involve a training and technology transfer exercise of Joslin's expertise utilizing prov-

en Telemedicine technologies, and an education and information program that utilizes the existing Extension Service system. We believe that the project should be at least two years in duration in order to place the equipment and train the personnel and access a sufficient proportion of the population to develop a viable model for application in other locations. The initial year of the project, fiscal year 1999, will cost an estimated $950,000. Second-year funding will be considerably less.

The two objectives of the project are (1) Screening for diabetes and diabetic eye disease among rural patient populations in Washington and Hawaii, using an innovative technology and low light camera; and (2) providing existing, extensive information on diabetes prevention and care for dissemination in the states of Washington and Hawaii.

We have begun a similar project with the Departments of Defense and Veterans Affairs for the current fiscal year. We are linked with TATRC, the Telemedicine & Advanced Technology Research Center at Fort Dietrick, Maryland. We have learned a great deal about providing training and technology to Federal agencies, and feel confident that the proposal we are advancing in this testimony can be accomplished by non-medically trained personnel.

The proposal involves two components that we have worked years to develop, refine, and operationalize through our research and clinical applications: The Joslin Vision Network (JVN) and the Information and Education component.

JOSLIN VISION NETWORK (JVN)

JVN provides the technology platform for accessing all diabetic patients into a program of high quality eye and diabetes care. The JVN utilizes a low light, non-invasive imaging of the retina. A technician, not medically trained, can be trained to use the camera to acquire retinal images in less than 30 minutes. The camera—it can be carried by one person and transported by automobile—can transmit the readings by telephone or satellite communications to a distant reading center to be interpreted by experts. The resulting retinal images are transmitted to regional centers of excellence for diagnosis and treatment plans. The process provides rural residents who may have or be prone to the development of diabetes access to diagnostic techniques and sophisticated equipment normally found only in urban settings where patient volume and traffic demand and can afford such highly specialized technology.

INFORMATION AND EDUCATION COMPONENT

Joslin has developed a comprehensive and extensive body of educational, informational and self-training (for those with diabetes) materials that are used with patients and those who have been found to be at risk for diabetes. These materials can be distributed to the population at large to educate and inform citizens of the warning signs and symptoms of diabetes. Many of the research findings that have practical, everyday applications to the sixteen million Americans who have diabetes are not known simply because the educational infrastructure is not in place. This brings me to why we are proposing this project for application within the Department of Agriculture. The Extension Service, the educational arm of USDA, provides millions of Americans valuable information that extends far beyond farming and soil conservation practices. The Extension Service has always been an active component of community life through such programs as the 4–H clubs and Home Economics activities. The Expanded Food and Nutrition Education Program seeks to improve nutritional intake through better educated consumers. Joslin's information and educational materials are the next step in the Extension Service mission of improved nutrition and better health. Joslin proposes to make available to the Extension Service in Washington and Hawaii materials that can be disseminated through Extension Service mailings, public awareness campaigns and other community activities that will result in a better educated public on the nature of and dangers of diabetes.

COSTS

We have prepared a preliminary budget to carry out this project in the two states of Hawaii and Washington. We selected these two states because Joslin has Affiliated Centers in each: Straub Clinic and Hospital in Honolulu and Swedish Hospital in Seattle. This will help keep costs at a moderate level and allow sufficient on-site monitoring on a regular basis.

We have estimated the costs to be $950,000 for the first year: $475,000 per state. The per state costs are comprised of the following: $260,000 for equipment and $215,000 for Joslin costs associated with travel, training, and monitoring for each state in the first year. The equipment costs are one-time, nonrecurring expenditures

that will result in lower second year costs. The equipment and the right to use the equipment become USDA's for continued use in these two states, or they can opt for a regional use of the equipment as the positive results of the project become proven.

Mr. Chairman, that concludes my brief statement. Thank you for this opportunity to place Joslin's statement in the hearing record for consideration by Members of the Subcommittee.

PREPARED STATEMENT OF QUON Y. KWAN, D. CRIM.

APPROPRIATION FOR THE STUDY OF FDA CONSOLIDATION

I am a resident of Rockville, Maryland. Although I am Secretary and Transportation Chairman for the Manor Lake Civic Association, I am writing as a private individual. I am currently employed as a senior environmental scientist for Energetics, Inc., a contractor for the U.S. Department of Energy, Assistant Secretary for Environment, Safety and Health. Neither my company nor I have received or will be receiving any contracts or grants from the Food and Drug Administration (FDA).

My interest in the FDA consolidation stems from my involvement as Vice-President for Action Committee for Transit (Montgomery County) for the past and current years. Again, my views do not represent the official position of Action Committee for Transit. I was opposed to the siting of the consolidated FDA campus at exurban Clarksburg primarily because of the lack of supporting infrastructure (especially, access to transit) and the commuting hardship posed on low-income and minority workers. My other reasons for opposing the Clarksburg site included the adverse impact in furthering sprawl development and the further deterioration on the inner city and urban areas. As you are well aware, the FDA abandoned Clarksburg as a potential site due to public outcry.

The FDA now seems to be focusing on the former Naval Surface Weapons Center at White Oak as a site for its consolidated campus. White Oak is also a poor choice for a number of similar reasons. My primary objection is the inadequacy of public transportation serving the White Oak site. Although it has bus service, workers would be using Metrobus service (route K6) and Ride-On service (route 22) to/from White Oak in the counterflow direction (AM northbound and PM southbound on New Hampshire Avenue). The frequency of counterflow bus service (on either route) is every 30 minutes even during rush hours. In my comments on the draft and final environmental impact statement for the proposed FDA consolidation at White Oak, I noted that such frequency of bus service is wholly inadequate to accommodate even 10 percent of the 6697 employees that would work at the site. The FDA misled the public by listing 19 bus routes and 4 rail lines that serve the study area, when in fact only the two aforementioned bus routes were within reasonable walking distance (¼ mile of the site. The closest rail station is the Silver Spring stations for the Metrorail Red Line and MARC Brunswick Line, which is three miles away. I noted that the no-action alternative (i.e., to keep the FDA at its existing locations) was better because the dispersed FDA sites are located near Metrorail stations and have far better access to public transportation than White Oak.

My second primary objection to the White Oak site is its location in the residential suburbs. The FDA consolidated campus does not belong in a residential suburb but in the inner city or central business district. President Jimmy Carter signed an Executive Order 12072, "Strengthening the Nation's Cities," which is codified by the General Service Administration into the Federal Property Management Regulations at 41 CFR 101–19.002. This Order calls for Federal agencies to site their facilities and utilize space in such a way as to strengthen the nation's cities. This Order has been upheld in Federal courts (rf *City of Reading, PA* v. *Austin* [816 F.Supp. 351 (E.D. Pa. 1993)]). Why does this Order make good sense? Abandoning the inner city for the suburbs causes deterioration of the inner city and exacerbates sprawl development in the suburbs. This in turn has the unintended adverse effect of furthering division between socio-economic classes and between races, with of course, the low-income and minorities—the less mobile—remaining in the inner city and the more affluent and majority white—the more mobile—fleeing to the suburbs. When Federal agencies as well as private sector businesses take flight from the inner city to the suburbs, they create a prodigious redistribution of wealth. The inner city loses its tax base and becomes enveloped in a downward spiraling cycle of decreasing job growth and abandoned buildings accompanied by increasing alienation, poverty, and crime. On the other hand, the suburbs grow in their tax base and become enveloped in an upward spiraling cycle of increasing job growth and construction but accom-

panied by cookie-cutter gated communities and sterile industrial parks that exclude "undesirables" and oppose diversity. We need cities because we need identifiable, physical centers of commerce and culture. We need cities because they provide diversity; places that thrive with diversity breed new ideas for exchange, growth, and prosperity. Cities—not suburbs—are where the poor can rub elbows with the rich, the blacks with the whites, the humble with the powerful, and the public with the government. These are the places where Federal agencies belong—inner cities and central business districts—not in the exurbs or suburbs. Cities are vital for democracy. The Federal government should set the example and take the lead in strengthening the inner cities.

As an alternative to the White Oak site, the FDA should be consolidated at a site in the city, Washington, D.C. (consistent with Executive Order 12072), and preferably near a Metrorail station. There are several sites that would fit this criterion. One is at the Southeast Federal Center, which is adjacent to the Navy Yard Metrorail Station and is no more than about a mile from the Hubert H. Humphrey building, headquarters of the Department of Health and Human Services, the department to which FDA belongs. The other advantages of the Southeast Federal Center are that it is already owned by the Federal government (General Services Administration) and it has adequate floor space to meet FDA's needs. Furthermore, the Southeast Federal Center is located in an economically depressed area of the District of Columbia that is in urgent need of revitalization. As you are quite aware, D.C. has lost many employers, including Federal agencies, and the President has directed his cabinet secretaries in March 1997 to not contribute to the economic decline of D.C. by not allowing any more Federal agencies to abandon D.C. Moreover, the National Capital Planning Commission's Plan for Washington's Monumental Core (March 1996) under the subject of economic development proposes that the Southeast Federal Center and adjacent Navy Yard be transformed into a lively urban water front of offices, restaurants, shops, and marinas.

In conclusion, it would behoove the Subcommittee to appropriate an amount of approximately $5 million for studying the feasibility of consolidating the FDA administrative and laboratory facilities at the Southeast Federal Center site.

PREPARED STATEMENT OF HELEN HOOPER, DIRECTOR OF PUBLIC POLICY, LAND TRUST ALLIANCE

On behalf of the more than 1,100 land trusts across the country, the Land Trust Alliance (LTA) would like to submit this statement as testimony for the record on the fiscal year 1999 appropriations for the conservation programs of the U.S. Department of Agriculture.

Land trusts are independent grassroots organizations dedicated to protecting land and the quality of life in their communities through private, voluntary action. Working within a cooperative, incentive-based strategy, these groups have helped save more than 4 million acres of wetlands and wildlife habitat, productive farm and forest lands, and other significant resources.

FUNDING REQUESTS

(1) Support the President's fiscal year 1999 request for the following programs that help interested private landowners conserve their farmland:

—Environmental Quality Improvement Program (EQIP)
—Wildlife Habitat Improvement Program (WHIP)
—Wetlands Reserve Program (WRP)
—Conservation Reserve Program (CRP)
—Conservation Farm Option Program (CFO)

(2) Include funding for the National Natural Resources Conservation Foundation created under the 1996 Farm Bill.

(3) Support the reauthorization of the Farmland Protection Program.

ENVIRONMENTAL QUALITY IMPROVEMENT PROGRAM (EQIP)

LTA supports the administration's request of $300 million for EQIP from the Commodity Credit Corporation. This voluntary conservation program provides technical, financial, and educational assistance to farmers and ranchers for environmental land management measures that address serious threats to soil, waters, and other natural resources. EQIP promotes locally-led conservation by encouraging interested citizens to determine program focus in their communities. EQIP has generated a great deal of support among farmers, ranchers, local conservation officials, and other residents.

WILDLIFE HABITAT IMPROVEMENT PROGRAM (WHIP)

LTA supports the administration's request of $20 million for WHIP from the Commodity Credit Corporation. This voluntary program provides technical and financial assistance to farmers to improve wildlife habitat on their land. WHIP funds often complement the activities of other USDA programs such as the Conservation Reserve Program or the Wetlands Reserve Program, increasing the overall effectiveness of the USDA's conservation efforts.

WETLANDS RESERVE PROGRAM (WRP)

LTA supports the administration's estimated request of $123.7 million for WRP from the Commodity Credit Corporation and urges the committee to not institute any new acreage caps or restrictions in fiscal year 1999. The administration's estimate would be used to enroll 164,214 new acres in the program. WRP is a program with a proven track record of successfully restoring farmed, converted, or other degraded wetlands on current or former agricultural land. LTA would like to stress the importance of permanent WRP conservation easements. A perpetual agreement is the best way to ensure that the efforts of the USDA and the landowner, as well as the taxpayers' investment, are not wasted by future actions that may degrade the wetland area that was restored with WRP funds.

CONSERVATION RESERVE PROGRAM (CRP)

LTA supports the administration's estimated request of $1.694 billion for CRP from the Commodity Credit Corporation and urges the committee to not institute any new acreage caps or restrictions in fiscal year 1999. CRP conserves precious top soil and promotes water quality by paying farmers to retire highly erodible lands from crop production for 10 to 15 years and providing cost-share funds to convert these areas to perennial vegetation. The program enjoys a tremendous level of support among the farmers it is tailored to, as demonstrated by the overwhelming response to the USDA's latest sign-up period.

CONSERVATION FARM OPTION PROGRAM (CFO)

LTA supports the administration's request of $25 million for CFO program from the Commodity Credit Corporation. This voluntary pilot program provides producers of wheat, feed grains, cotton, and rice with a one-time consolidated payment if they agree to implement farm management plans that address the conservation of soil, water, and related resources, water quality, wetlands, and wildlife habitat on their farmland.

NATIONAL NATURAL RESOURCES CONSERVATION FOUNDATION

LTA strongly supports including $1 million in fiscal year 1999 for start-up funds for the Foundation as authorized under the 1996 Farm Bill. Congress authorized this foundation to serve a role for the USDA's Natural Resources Conservation Service similar to that served by the National Fish and Wildlife Foundation for the U.S. Fish and Wildlife Service. This nongovernmental, charitable non-profit organization would raise private funds and accept gifts of real property to promote public-private partnerships, conduct educational and demonstration projects, and encourage innovative solutions to the conservation of natural resources on private agricultural lands. Unfortunately, to date no funds have been appropriated to the Foundation.

FARMLAND PROTECTION PROGRAM (FPP)

LTA supports the reauthorization of the Farmland Protection Program. This program, created under the 1996 Farm Bill, helps farmers keep their land in agricultural production by supporting the acquisition of conservation easements or other interests in farmland that is subject to substantial development pressure. In the program's first full year of operation it successfully conserved over 9,000 acres of threatened farmland in 10 states across the country. A much greater volume of farmland is expected to be enrolled in fiscal year 1998. After fiscal year 1998, all authorized FPP funding will have been consumed, but the need for the program will continue to increase. We ask that you support legislation to reauthorize this valuable program that helps keep threatened farmland in production.

We greatly appreciate your past and future support of USDA's conservation programs. We hope that you will keep in mind the views of LTA and the 1,100 volunteer citizen conservation organizations that make up the nation's private land trust movement as you make your funding decisions for the coming fiscal year.

PREPARED STATEMENT OF GARY A. GLENN, PRESIDENT, MASSACHUSETTS FOUNDATION FOR EXCELLENCE IN MARINE AND POLYMER SCIENCES

Mr. Chairman, and Members of the Subcommittee, thank you for the opportunity to submit a statement for inclusion in outside witness hearings. My statement concerns USDA funding for research on new biological methods for treatment of liquid wastes in rural America. On behalf of research partners in Mississippi, Alaska, and Hawaii, I request that USDA fund construction and testing of "living machines" in fiscal year 1999 at a level of $3.15 million.

LIVING MACHINES

Living machines are ecologically engineered systems for treating various kinds of wastes, especially waters. Living machines have been tested and proven effective in urban and industrial settings, and in particular locations. Living machines are ideal for small and localized applications such as are found in rural areas.

There is a need to test living machines in real-world settings. Data from specific rural demonstration sites will be collected and distributed so that large numbers of applications can take place. This data will enable local officials to confidently decide on adoption of living machine use for wastewater and other treatments, including reuse of waters.

NEED FOR GEOGRAPHICAL DIVERSITY

Living machines rely on plants and animals to purify wastewater; most of the plants used in a particular living machine are locally obtained. Living machine systems are therefore geographically and climatically specific. There is an urgent need to test and demonstrate living machines under regional conditions, where multiple applications exist. Specific locations in the United States where living machines have never before been tested or demonstrated include the following: rural Deep South, northern coastal, and sub-tropical.

SELECTION OF DEMONSTRATION SITES

In response to recommendations from program designers and ecological scientists, the following sites appear to be ideal for demonstration purposes:

Northern Coastal.—The region around Kodiak, Alaska is climatically similar to thousands of miles of sparsely population coastline in California, Oregon, Washington and Alaska. It is planned that a demonstration living machine will be installed in Kodiak, which will show how ecological technology can be adapted to rural areas in Alaska and elsewhere.

Southern.—Rural Mississippi, especially in the northern and eastern parts of the state, offers excellent opportunities for demonstration of living machine technology for rural areas, in part because of current economic transformations in the region, and in part because of new public concerns over appropriate levels of wastewater treatment and regulation. This location can serve as a central geographical demonstration site for many applications throughout the South.

Sub-tropical.—A living machine application is needed for sub-tropical and island areas, so a living machine will be constructed and operated in Hawaii as a demonstration for the state of Hawaii as well as for many other applications in United States territories such as Guam, Samoa, and Puerto Rico, and for Pacific Island usages such as the Northern Marianas.

CONSTRUCTION AND OPERATION OF LIVING MACHINES

So that data collected from the demonstration sites identified in this description can conform to accepted standards of scientific and engineering specifications, the design and construction engineering tasks will be carried out under the management of the organization that has previously funded and supervised living machine research, the Foundation for Excellence in Marine and Polymer Sciences. This Foundation has more than 10 years experience with living machine technology, and has previously managed urban area applications. The Foundation will work directly with host institutions in each of the geographical locations identified in this testimony, who will actually carry out the research needed to confirm the parameters for living machine utilization.

FINANCIAL CONSIDERATIONS

A total of $3.15 million is requested for fiscal year 1999, which will cover design, construction and operations costs for living machines in Alaska, Mississippi, and Hawaii.

PREPARED STATEMENT OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California (MWD) appreciates the opportunity to submit testimony regarding the U.S. Department of Agriculture's (USDA) fiscal year 1999 budget, for the Hearing on Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations. MWD is a public agency created in 1928 to meet supplemental water demands of those people living in what is now portions of a six-county region of southern California. Today, the region served by MWD includes nearly 16 million people living on the coastal plain between Ventura and the Mexican border. It is an area larger than the State of Connecticut and, if it were a separate nation, would rank in the top ten economies of the world.

Included in our region are more than 225 cities and unincorporated areas in the counties of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura. We provide more than half the water consumed in our 5,200-square-mile service area. MWD's water supplies come from the Colorado River via the district's Colorado River Aqueduct and from northern California via the State Water Project's California Aqueduct.

INTRODUCTION

MWD continues to favor USDA implementation of conservation programs, and is especially encouraged by the new actions identified in the recently released Clean Water Action Plan. The Clean Water Action Plan fosters integration of efforts by USDA, the U.S. Environmental Agency, and other Federal agencies to improve water quality. MWD firmly believes that inter-agency coordination along with cooperative conservation programs, that are incentive-based and facilitate the development of partnerships are critical to addressing natural resources concerns, such as water quality degradation, wetlands loss and wildlife habitat destruction. It is vital that Congress provide USDA with the funding necessary to successfully carry out its commitment to natural resources conservation.

Our testimony focuses on USDA's conservation programs that are of major importance to MWD. In particular, MWD urges your full support for funding for USDA's Environmental Quality Incentives Program (EQIP). Full funding for this program is essential for achieving Colorado River Basin salinity control objectives through the implementation of salinity control measures as part of EQIP. In addition, MWD requests your full support for the Wildlife Habitat Incentives Program, Conservation Reserve Program, Wetlands Reserve Program, Integrated Pest Management and related programs, and the Water and Waste Disposal Loans and Grants program. Sufficient federal funding for these USDA programs is necessary to achieve wildlife habitat restoration and source water quality protection objectives in the Colorado River Basin and in California's Sacramento/San Joaquin Bay-Delta (Bay-Delta) estuary.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

The Environmental Quality Incentives Program provides cost-sharing and incentive payments, technical assistance and educational assistance to farmers and ranchers for the implementation of structural practices (e.g., animal waste management facilities, filterstrips) and land management practices (e.g., nutrient management, grazing management) that address the most serious threats to soil, water and related natural resources. EQIP is to be carried out in a manner that maximizes environmental benefits per dollar expended. This assistance is focused in conservation priority areas identified by the Natural Resources Conservation Service's State Conservationists, in conjunction with state technical committees and Farm Service Agency personnel. MWD does have some concern with respect to this aspect of EQIP. Beginning with the first full year of EQIP funding in 1997, USDA's participation in the Salinity Control Program has significantly diminished. The mechanism by which funding has been allocated by USDA to date inherently overlooks projects for which benefits are interstate and international in nature. Clearly, Colorado River salinity control has benefits that are not merely local in nature, but continue downstream and EQIP as it is currently administered by USDA does not address national priorities. MWD supports the recommendation of the Colorado River Basin Salinity Control Forum as a way to remedy this situation. In Public Law 104–127, Congress amended the Colorado River Basin Salinity Control Act to direct the Secretary of Agriculture to carry out salinity control measures in the Colorado River Basin as part of EQIP. Sufficient federal funding for implementation of EQIP is critical in order to achieve Colorado River Basin salinity control objectives as well as

source water quality protection and ecosystem restoration objectives in the Bay-Delta estuary and watersheds tributary to the Bay-Delta.

The Colorado River Basin Salinity Control Forum (Forum), the interstate organization responsible for coordinating the Basin states' salinity control efforts, issued its 1996 Review, Water Quality Standards for Salinity, Colorado River System (1996 Review) in June of 1996. The 1996 Review found that additional salinity control was necessary with normal water supply conditions beginning in 1994 to meet the numeric criteria in the water quality standards adopted by the seven Colorado River Basin states and the U.S. Environmental Protection Agency. For the last four years (1994–97), funding for USDA's salinity control program has not equaled the Forum-identified funding need for the portion of the program the Federal Government has the responsibility to implement. It is essential that implementation of Colorado River Basin salinity control efforts through EQIP be accelerated to permit the numeric criteria to be met again under average annual long-term water supply conditions, making up the shortfall. The Basin states and farmers stand ready to pay their share of the implementation costs of EQIP.

The President's proposed fiscal year 1999 budget contains funding of $300 million for implementation of EQIP. MWD supports this level of EQIP funding which is also consistent with the USDA actions called for under the Clean Water Action Plan. The Forum has determined that allocation of $12 million in EQIP funds in fiscal year 1999 is needed for on-farm measures to control Colorado River salinity. This level of funding is necessary to meet the salinity control activities schedule to maintain the state adopted and federally approved water quality standards. MWD urges you and your Subcommittee to support full funding for EQIP as requested in the President's fiscal year 1999 budget for USDA, with the specific allocation to the Salinity Control Program. MWD also recommends that the Colorado River Basin be designated as a national priority area for salinity control.

WILDLIFE HABITAT INCENTIVES PROGRAM

Wildlife Habitat Incentives Program (WHIP) is a voluntary program, providing technical assistance and cost-sharing, to help landowners develop habitat on their properties that will support wetland wildlife, upland wildlife, threatened and endangered species, fisheries, and other types of wildlife. WHIP offers an opportunity to encourage development of improved wildlife habitat on eligible lands by providing assistance to landowners who wish to integrate wildlife considerations into the overall management of their operations.

WHIP cost-sharing assistance could be utilized to support ongoing interim conservation efforts both in the Bay-Delta estuary and for the Lower Colorado River Multi-Species Conservation Program. The CALFED Bay-Delta Program is a cooperative effort among state and federal agencies and the public to develop a long-term, comprehensive solution to ecosystem and water supply problems in the Bay-Delta. One of the main objectives of the CALFED Bay-Delta Program is to improve and increase aquatic, wetland and riparian habitats so that they can support sustainable populations of wildlife species, by implementing a system-wide ecosystem restoration approach. WHIP could benefit this program by providing cost-share assistance for the development of wildlife habitat on private lands in the Bay-Delta watershed.

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) is a broad-based partnership of state, federal and private entities in Arizona, California, and Nevada. Participants include water, hydroelectric power and wildlife resource management agencies, Tribal governments, and environmental organizations with interests in the Lower Colorado River. The LCR MSCP is focusing on the conservation of over 100 threatened, endangered and sensitive species and their habitats. WHIP would allow the combination of federal cost-sharing dollars and voluntary agricultural land-use practices to enhance habitat for listed and sensitive species of interest in the Lower Colorado River. This could be a valuable vehicle for gaining further agricultural support for conservation efforts and the goals of the LCR MSCP.

The President's budget requests $20 million for WHIP for fiscal year 1999. MWD recommends that you and your Subcommittee support WHIP at the level requested in the President's fiscal year 1999 budget for USDA.

CONSERVATION RESERVE PROGRAM

Continued support for the Conservation Reserve Program (CRP) is necessary in order to build on the past successes of this USDA conservation program. Under the CRP, incentive payments are provided to producers to remove highly erodible and other environmentally sensitive land from production. This program helps protect the quality of drinking water supplies and facilitates ecosystem restoration efforts

by reducing soil erosion, improving water quality, protecting wildlife habitats, and achieving other natural resource conservation measures. The National Buffer Initiative program will further maximize environmental benefits per dollar expended, and we are supportive of this effort.

Enrollment of eligible agricultural lands that are located in the Bay-Delta estuary and tributary watersheds in the CRP, could provide water quality improvement benefits for this important source of drinking water. We note, however, that the method which determines the rental rate for CRP enrollments effectively precludes the enrollment of much irrigated agriculture land and land with high value crops. As a result, states in the arid west do not benefit from the CRP in proportion to their contribution to agricultural production. While MWD urges you and your Subcommittee to support the President's budget request for the CRP of $1,718 billion for fiscal year 1999, we also strongly request that you review the method for rental rate determination We understand that one of the key actions under the Clean Water Action Plan is to review and increase, where appropriate, the incentives available for conservation buffers. Such review should also be undertaken for the CRP overall.

WETLANDS RESERVE PROGRAM

The Wetlands Reserve Program (WRP), first authorized in 1990, is a voluntary program providing incentives to landowners for the restoration and protection of wetlands with long-term or permanent easements. Wetlands restoration provides important water quality improvement and wildlife habitat restoration benefits that are important to the Bay-Delta estuary. MWD urges you and your Subcommittee to support appropriation of $124 million for the WRP in fiscal year 1999, as requested in the President's budget. Full support for the WRP is necessary to achieve the Administration's goal of enrolling an additional 164,000 acres into the program currently, for a cumulative enrollment of approximately 825,000 acres by the end of 1999 and 975,000 acres by the end of calendar year 2000.

INTEGRATED PEST MANAGEMENT AND RELATED PROGRAMS

The USDA's Integrated Pest Management (IPM) Initiative provides for the research and development of IPM practices and the coordinated implementation of IPM programs at the local level. The development and application of proven IPM practices offers the potential to reduce reliance on chemical pest controls and minimize the adverse water quality effects of pesticide use. Implementation of IPM programs could provide source water quality protection benefits in both the Bay-Delta estuary and the Colorado River Basin. The President's fiscal year 1998 budget includes funding for a variety of research and assistance programs contributing to the overall objectives of the IPM Initiative. MWD urges your full support for the $267 million included in the President's fiscal year 1999 budget for IPM and related programs.

WATER AND WASTE DISPOSAL LOANS AND GRANTS

The President's fiscal year 1999 budget includes funding for a number of USDA programs that provide loan, grant and technical assistance to rural communities. Of particular interest to MWD is the Water and Waste Disposal Program. This program provides loans and grants to small rural communities for water infrastructure projects, in order to assist those communities with drinking water quality and supply problems and help them achieve compliance with federal drinking water standards. MWD requests you and your Subcommittee to support the President's request of $1.339 billion for fiscal year 1999 for water and waste disposal loans and grants.

CONCLUSION

Thank you for your consideration of our testimony. We believe our comments emphasize the importance of continued funding for USDA's agricultural conservation programs. The USDA's conservation programs are critical for achieving Colorado River Basin salinity control objectives, as well as broader wildlife habitat restoration and source water quality protection objectives in the Colorado River Basin and the Bay-Delta estuary.

PREPARED STATEMENT OF RUDY K. RICE, PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

The National Association of Conservation Districts is a nonprofit, nongovernment organization that represents the nation's 2,950 conservation districts and more than 16,000 men and women who serve on their governing boards. Established under

state law, conservation districts are local units of state government charged with carrying out programs for the protection and management of natural resources at the local level. Conservation districts work with nearly two-and-half million cooperating landowners and operators each year and provide assistance in managing and protecting nearly 70 percent of the private land in the contiguous United States.

For more than sixty years, conservation districts and state conservation agencies have worked in close partnership with U.S. Department of Agriculture agencies to provide technical and financial assistance to help farmers, ranchers and other landowners and operators protect and enhance our land and water resources. This partnership has been carried out primarily with the Natural Resources Conservation Service (NRCS), but has also involved other agencies such as the Farm Service Agency, the Forest service and the Extension Service. The partnership bonds NRCS with local conservation districts and state conservation agencies and is recognized as an efficient and effective system for delivering conservation assistance to the nation's private landowners and operators.

The "Federal Agriculture Improvement and Reform Act of 1996" (the Farm Bill) strengthened USDA's conservation mission by expanding existing conservation programs and creating several new initiatives that significantly broaden the scope of the department's natural resource management responsibilities. It also reinforced Congress' commitment to building voluntary, locally driven conservation partnerships among private landowners and operators and the local, state and federal agencies that serve them. The Farm Bill programs, along with other USDA conservation programs, operate in tandem with myriad state and local conservation programs to address the nation's most serious natural resource problems.

NRCS's Conservation Technical Assistance Program, delivered through local conservation districts to cooperators and other land users, is the nation's foremost private lands pollution prevention program. It provides landowners and operators with much needed help in planning and applying conservation treatments to control erosion and improve the quantity and quality of soil resources; improve and conserve water; enhance fish and wildlife habitat; conserve energy; improve woodland, pasture and range conditions; and protect and enhance wetlands. Many federal and state agencies also rely upon the technical expertise unique to NRCS to carry out other conservation programs that complement the NRCS effort not only in the agricultural areas, but in rural, suburban and urban communities as well.

Conservation districts believe that the federal government must provide a base level of technical assistance funding to maintain its commitment to support locally led conservation initiatives that complement federal efforts to ensure a safe and productive environment. A federal technical presence such as NRCS is vital to ensuring that sound technical standards are maintained in our nation's conservation programs. It is also critical in the actual implementation of needed conservation practices.

This NRCS technical presence, along with federal cost-share programs, leverages a tremendous investment in conservation by state and local governments. State and local governments contribute nearly $1 billion in personnel and cost-share funding each year to support conservation programs carried out by the partnership. This is roughly equal to NRCS's annual budget and does not include the volunteer time of district officials. Many states are also working to increase this support, but depend on the federal government to provide its fair share.

In developing funding recommendations for specific agencies and programs, we recognize our own responsibilities to contribute a fair share of resources. Our recommendations on federal funding are based on information from our members, discussions with program managers and estimates based on workloads mandated by federal, state and local program authorities. Our recommendations are stated, in part as responses to selected items in the President's proposed budget for NRCS, as well as recommendations for selected other agency programs.

The Clinton Administration's fiscal year 1999 budget proposal includes $742.231 million for NRCS Conservation Operations (CO). It also includes several proposals that would make fundamental changes in the way NRCS delivers conservation services through conservation districts and state conservation agencies.

The President proposes $579.110 Million for America's Private Land Conservation (APLC), the Administration's new designation for Conservation Technical Assistance. Conservation technical assistance is the cornerstone of most NRCS programs, supporting activities such as the Farm Bill, as well as other programs to address state and local program priorities. The highest priority of the conservation partnership remains that of meeting the planning and technical assistance needs of farmers, ranchers and other land managers. Conservation districts recommend $580 million for Conservation Technical Assistance for fiscal 1999.

The President's proposal includes $20 million for "Competitive Partnership Grants" to locally based institutions, including watershed councils, cooperatives, etc., to enhance institutional capacity. In particular, it advocates hiring non-federal watershed coordinators (350) to develop watershed partnerships. It makes no mention of conservation districts, which are the legal entities established under state law for the specific purpose of coordinating and carrying out natural resource management programs. Every district in the nation has a Mutual Agreement with the Secretary of Agriculture that documents its unique working relationship with USDA. Further, each district also has a Cooperative Working Agreement with NRCS that outlines how conservation assistance will be delivered cooperatively to local landowners and operators.

This partnership delivery system should continue to be used for delivering conservation technical assistance on private lands. We strongly recommend that any such grants be channeled through conservation districts rather than putting in place an unneeded new delivery mechanism that would duplicate the current conservation district program delivery system.

The President's proposal also includes $20 million for "Incentives to States" to encourage them to increase their contributions to conservation programs. Of this amount, $10 million would be awarded to states to use for geographic information system and digital photo purchases. Conservation districts support the "Incentives to States" concept, but it should not result in a decrease in funding for NRCS technical assistance.

Under the President's proposal, NRCS would collect $10 million in user fees for providing certain technical assistance and data services to its clients. While we could support such fees for services and products provided to other federal agencies, conservation districts oppose NRCS's charging user fees for assistance and services provided to the agency's traditional clients and non-federal partners. We believe the imposition of fees for services would discourage landowners from seeking assistance and decrease the application of needed conservation practices. It is important to point out that this $10 million is embedded in the President's proposal as an offset and should be restored when funding the CO account.

The budget proposes $70.983 million for a new "Water Resources Assistance" line item and would decrease the Watershed Protection and Flood Prevention account by $52 million from the fiscal year 1998 appropriated level. This would effectively transfer the technical assistance funding from the watershed program account to the new line item under CO. Conservation districts oppose shifting technical assistance out of the Watershed and Flood Prevention Operations account. We believe that action would be the first step toward dismantling this important program and that Public Law 566 funds would likely disappear in future budget proposals.

We believe it is critical for NRCS to continue providing technical assistance for the more than 500 watershed projects established under Public Law 566, the authorizing legislation for the Watershed and Flood Prevention Operations program. Many of the projects, which have created an $8.5 billion infrastructure, are nearing the end of their evaluated lives. Approximately 5,000 of the floodwater retarding structures are 30 years old and many are in need of repair, rehabilitation, replacement or decommissioning. Project sponsors need design and construction assistance, as well as technical assistance for rehabilitating, upgrading or decommissioning aging structures. In order to address these needs, NACD recommends funding Watershed & Flood Prevention Operations at $120 million in fiscal year 1999, with at least $60 million of that amount directed to technical assistance.

Conservation districts are concerned over references in the President's proposal to focus NRCS activities on setting standards and providing certification, rather than directly implementing most activities. We believe this would exacerbate the trend toward targeting NRCS assistance to federal priorities while shifting more natural resource management responsibilities to state and local governments without providing adequate resources to address non-federal priorities. Conservation districts oppose this shift since conservation programs provide significant public benefits with responsibility shared at all levels of government.

The President's proposal requests no funding for the Forestry Incentives Program (FIP) because it "promotes timber production on private lands and is incompatible with the agency (NRCS) strategic plan, which is focused on water quality and habitat goals." Congress transferred FIP from the Farm Service Agency to NRCS as part of a major program restructuring in the Federal Agricultural Improvement and Reform Act of 1996 in recognition of NRCS as the Department's private lands management agency. Its technical assistance is used primarily to assist America's farmers in production agriculture as are other USDA cost-share programs. USDA recognizes private lands forestry as a farming activity, and the Internal Revenue Service treats

forestry cost-share payments as such. Conservation districts urge Congress to fund the Forestry Incentives Program at $10 million for fiscal year 1999.

Through the Resource Conservation and Development Program (RC&D), NRCS provides needed assistance to rural communities. Resource management and rural development initiatives undertaken by local RC&D's help revitalize economically disadvantaged rural areas. The President's budget proposes funding the RC&D Program at $34.377 million, the same level as for fiscal year 1998. Conservation districts support increasing RC&D funding to $40 million in fiscal year 1999 to fulfill outstanding applications for new RC&D areas. New funding should be directed towards expansion of the current RC&D program to meet locally identified needs.

The President's budget proposes enrolling 165,000 acres in the WRP during fiscal year 1999, to be funded through the Commodity Credit Corporation (CCC). Of the $127 million, roughly $11 million would be available for technical assistance. Conservation districts recommend funding the WRP at $163.597 million in 1999, which would allow for enrolling approximately 220,000 acres. At least $24 million of this amount should be available for technical assistance.

The Environmental Quality Incentives Program (EQIP), which replaced most existing USDA conservation cost-share programs in 1996, is a broad, multi-purpose national conservation financial incentives program. It is premised on local leadership and a voluntary, incentive-based approach. Conservation districts support using the locally led conservation paradigm, with leadership by conservation districts, as the model for carrying out EQIP and all USDA natural resource conservation programs.

The President's budget requests an additional $100 million per year ($300 million total per year) to support implementation of the recently unveiled Clean Water Action Plan: Restoring and Protecting America's Waters. This increase was also cited in the USDA CRAT report for outreach to socially disadvantaged producers. Conservation districts strongly support increasing EQIP funding to $300 million for fiscal year 1999. We also urge Congress to direct that, of this amount, at least $57 million must be used to provide adequate technical assistance to implement the program. Our long-range target is to increase EQIP funding to $500 million per year by 2004.

The President's proposed budget seeks $1.7 billion for CRP in fiscal year 1999 to bring enrollment up to 34 million acres—the current level is 28 million acres. In order to build upon the environmental investment and benefits from the CRP, conservation districts support achieving and maintaining full enrollment of 36.4 million acres in the CRP.

OTHER RECOMMENDATIONS NOT INCLUDED IN THE PRESIDENT'S BUDGET

Grants to Districts

The buying power of federal budgets has declined dramatically during the past ten years resulting in a decline in the number of NRCS employees at the field level. In addition to the decline in numbers, the federal work force has been redirected to focus efforts at targeted areas at the expense of local problems that affect national conservation priorities. Many conservation districts have offset this part of this decline by adding district employees financed with state and local funds. Much of the state and local funding is being diverted to help implement federal natural resource programs, often at the expense of local conservation priorities.

To help meet these ever-increasing demands being placed on the conservation partnership, NACD recommends that $100 million be budgeted through the NRCS Conservation Operations account for direct grants to conservation districts. This is one of conservation districts' highest legislative priorities in 1998. This action would help NRCS offset some of the costs of carrying out federal conservation programs and enhance conservation districts' ability to address national conservation concerns and priorities at the community level. We fully expect that state and local governments will step in and provide matching funds under grants program.

Private Grazing Lands

The capacity of the nation's rangeland to satisfy values and produce commodities is threatened or, in some cases, may have been lost nearly 60 percent of the nation's rangeland because of one or more resource problems such as brush, weeds and water or wind erosion. The amount of rangeland in a deteriorating trend increased from 15 to 22 percent since 1992 and nearly half of our permanent pastureland needs treatment to sustain or enhance resource values and production. In many cases, technical assistance to help landowners and land managers develop and implement improved grazing management is all that is needed to solve resource problems and improve or maintain grazing land health. Preventing degradation before

it occurs is extremely important on grazing lands because, once damaged, the cost of restoring these lands can exceed its economic value.

Section 386 of the 1996 Farm Bill authorized the Secretary of Agriculture to establish a voluntary program to provide technical, educational, and related assistance to owners and managers of private grazing land. The program, to be carried out through local conservation districts, will help landowners address resource problems that cannot be solved easily by individual efforts without technical and financial assistance. To help meet this need, NACD recommends that the Conservation of Private Grazing Lands Program be funded at $20 million as a new line item in the NRCS budget.

FUNDING FOR COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE

Several Extension programs represent critical components are significant in USDA's natural resource management delivery system. For example, the Renewable Resources Extension Act provides educational assistance to help private landowners manage their lands to meet commodity demands and needs. At the same time it provides many public values associated with the forests and rangelands of our nation

Research also remains one of the keys to the continued vitality of agriculture and effective management of the nation's resource base. U.S. competitiveness in world markets is contingent an aggressive research and development program for agricultural conservation and production techniques. We also recognize that conservation, environmental quality and production research needs vary across the United States. America's conservation districts support maintaining strong research programs in NRCS, the Agricultural Research Service, the Cooperative State Research, Education and Extension Service and other agencies as needed.

Attached to this statement is NACD's fiscal year 1999 Agriculture Appropriations Funding Resolution for Selected Programs Funded by the House and Senate Agriculture Appropriations Subcommittees. Conservation districts' fiscal year 1999 funding proposals will begin to build a deeper commitment to land and water stewardship in America. We have also cast an eye toward the future by forecasting the investment we will need to make five years from now to protect our resource base. Recognizing that currently we spend less than two percent of the federal budget on resource protection, we recommend doubling the overall funding for NRCS conservation programs by the year 2004.

We appreciate the opportunity to share our recommendations with the subcommittee.

PREPARED STATEMENT OF MARY CARLSON, PRESIDENT, NATIONAL ASSOCIATION OF FARMERS' MARKET NUTRITION PROGRAMS

On behalf of the 30-state membership of the NAFMNP, I am writing to urge your support for an appropriation of $15 million to permit continued expansion of the WIC Farmers' Market Nutrition Program (FMNP) in fiscal year 1999. We greatly appreciate the leadership you have provided in the past on behalf of this small but valuable program, and we can assure you that strong interest exists across the country for its further growth.

Thirty-five states and Indian Tribal Organizations (ITO's) have met the challenge of the Subcommittee's endorsement of a substantially increased funding level for the FMNP in fiscal year 1998—a 73 percent increase from $6.75 million to $12 million. Collectively, FMNP participating states and ITO's, including five new states—Alaska, Arkansas, Florida, Georgia, and Mississippi—requested over $12.2 million in federal funds for this year's program.

However, even with the higher funding level and broadened participation by WIC recipients and farmers, only an estimated 15 percent of the nation's nearly 7.5 million WIC participants and less than 50 percent of its farmers' markets will be able to participate in the FMNP in 1998. The Administration's proposed funding goal of $15 million, we believe, will allow for a reasonable and measured expansion toward the goal of making the program available nationwide.

The Administration's budget request would also shift the source of FMNP funding from the WIC Program account to the Commodity Assistance Program account. We believe this is a positive step that would provide fiscal security for the FMNP and allow funds to flow to state agriculture, health, and other FMNP agencies in a more timely fashion to assure proper program planning and operations. Under current appropriations language, funds can be made available for the FMNP only if USDA certifies they are "not needed to maintain current WIC caseload levels." This has resulted in chronic uncertainty on the part of farmers, farmers' markets, WIC families, and state and local agencies regarding the FMNP's year-to-year existence.

Moreover, the program's contingent status can delay USDA's FMNP funding decisions until late Spring—as occurred in 1997—making it difficult for participating states to effectively plan their programs and fully utilize their allocation requests. Because the proposed decoupling of WIC and FMNP funding streams would be mutually advantageous for the FMNP and for WIC, we ask that you support it.

The FMNP is of critical importance to over 8,000 small farmers, who redeemed more than $9 million in FMNP coupons in fiscal year 1996, for the more than 1,200 participating farmers' markets, many in disadvantaged urban and rural communities, and for the nearly 1.1 million low-income women and children participants who now have increased access to high quality, locally grown fresh fruits and vegetables. As a result of the FMNP, 88 percent of the participating farmers increased their sales of fresh produce and 43 percent increased their production. In addition, 71 percent of the WIC participants increased fruit and vegetable consumption due to the FMNP, with 82 percent indicating they plan to eat more fresh produce year-round as well. These are surely impressive results from a small program with an annual federal benefit level of no more than $20 per WIC participant!

Thank you again for your past support of the FMNP. We hope you will support our request to expand and secure the FMNP so that its success in improving maternal and child nutrition—and fostering agricultural and rural economic development—can be broadened again in 1999.

PREPARED STATEMENT OF DR. ALBERT VOGT, PRESIDENT, NATIONAL ASSOCIATION OF PROFESSIONAL FORESTRY SCHOOLS AND COLLEGES (NAPFSC)

The National Association of Professional Forestry Schools and Colleges (NAPFSC) represents the 67 universities that conduct the Nation's research, teaching, and extension programs in forestry and related areas of environmental and natural resource management. We appreciate this opportunity to comment on the three programs administered by CSREES which greatly enhance the abilities of our member institutions to effectively address forest and natural resource issues facing our nation: the McIntire-Stennis Cooperative Forestry Research Program (McIntire-Stennis), the Renewable Resources Extension Act (RREA), and the National Research Initiative (NRI). All three of these programs have stimulated the development of vital partnerships involving universities, federal agencies, non-governmental organizations and private industry.

NAPFSC submits the observation to the Committee that we are rapidly approaching a crisis situation in the nation in terms of the need for more university forestry research and extension.

THE CASE FOR ENHANCED FORESTRY RESEARCH FUNDING

The forests and other renewal natural resources of this country are primary contributors to the economic health of the nation; are reservoirs of biodiversity important to the well-being of our citizens; are significant to the maintenance of environmental quality of our atmosphere, water, and soil resources and provide diverse recreational and spiritual renewal opportunities for a growing population.

Tremendous strains are being placed upon the nation's private forest lands by the combination of increasing demands for forest products coupled with dramatic changes in timber policies concerning our national forests. Because of the changes in federal forest policy, private forest lands in the United States are now being harvested at rates not seen since the beginning of the 20th century.

Non-industrial private forest (NIPF) landowners provide a large array of goods and services throughout the country. Their contribution to market goods may actually be proportionately the largest in the West, where the public lands already provide great amounts of public recreation and amenity values. In the East, NIPF's are projected to increase their timber harvests almost 30 percent from the 1986 levels until 2010. Hardwood timber harvests on NIPF lands in the South are actually projected to increase more than 60 percent from 1986 to 2010. These spectacular increases will require large investments, higher prices, enhanced public educational programs—and hopefully much more regeneration and intensive timber management—at a scale never before realized on NIPF lands in the U.S.

The country's nine million private timberland owners control nearly two-thirds of all timberland in the country. And it has been to the universities, with strong support from CSREES, that landowners traditionally look for new information about managing their lands. The combination of research conducted by the forestry schools, combined with the dissemination of that research through the cooperative extension network, has never been more essential.

Until recently, wood and wood fiber demands have been met in significant part from federal lands. The changes in federal forest timber harvesting policy means the bulk of supply requirements has shifted to privately owned forest lands. To meet this challenge, research priorities must be adjusted to better address the needs of private landowners, and to specifically enhance the productivity of such lands through economically efficient and environmentally sound means. Increased fiber imports are not a viable option as the Nation cannot afford the trade imbalance, loss of jobs, or the importing of potentially serious plant, animal, and human diseases and pests. These challenges, however, can be met by the university community through the building of integrated research and extension programs assisted by McIntire-Stennis, RREA, and NRI.

The non-industrial private landowners are not prepared to practice sustained forest management so critical to the health of our environment and economy. Enhanced forestry research and extension activities at the nation's universities are needed now! Although the McIntire-Stennis, RREA, NRI and Fund for Rural America programs address these concerns, there is need to increase funding for these programs within CSREES.

NAPFSC is very concerned about the three percent reduction proposed in President Clinton's fiscal year 1999 budget for the McIntire-Stennis forestry program. That is the wrong direction in light of the important challenges requiring enhanced forest resource research and extension. While much of the President's budget calls for increases in federal research and development funding, agriculture and forestry research were targeted for decreases. We believe that reducing the McIntire-Stennis program to the proposed level of $19,882,000 is unwise and short-sighted. The National Association of State Universities and Land-Grant Colleges (NASULGC) has recommended a McIntire-Stennis funding level of $21,665,000. We also support funding at least at this level.

For more than 25 years, McIntire-Stennis funds have been a critical part of University-based forestry research. McIntire-Stennis funds leverage significant additional state and private support and assure long-term forest resource research, graduate training, and outreach across the country. Each dollar in federal appropriations has been leveraged by a factor of nearly five in non-federal dollars in support of research programs having state, regional, and national significance.

IMPORTANCE OF FORESTRY RESEARCH AND EXTENSION

Research has improved the understanding of (1) the biology of forest organisms; (2) the structure and function of forest ecosystems; (3) human-forest interactions; (4) wood as a renewable raw material; (5) economics, environmental policy, and business management related to the forest industry; and (6) international trade, competition, and cooperation. McIntire-Stennis programs have advanced our knowledge of the forest ecosystem including the basic chemical, physical, and biological forces that influence forest health and productivity. At the same time, they have expanded the marketing horizons for environmentally friendly and renewable wood and fiber-based products. Very recent work has examined the economic and ecological benefits of combining agricultural and forestry practices into integrated land-use systems termed "agroforestry." Furthermore, these programs have significantly aided the development of new forest management systems for multiple-uses including timber, water, wildlife, grazing, recreation, and aesthetic purposes. The following two projects are recent examples of the benefits of McIntire-Stennis funding:

—Agroforestry—the practice of grazing cattle, growing agronomic crops and growing trees on the same land can help landowners earn a higher return per acre from their land while seeing environmental benefits (such as less erosion). One Coastal Plain study showed returns per acre from grazing were approximately $9 per acre, but when trees were added to the land, timber profits were more than $80 per acre. To make the most out of alley cropping (where cattle can graze in and around the trees) producers need legumes and grasses that perform well under shade. University of Missouri scientists have identified appropriate species.

—North Carolina State University's Forest Nutrition Cooperative discovered that present levels of pine productivity are more than 50 percent below the biologic and economic potential in the southeastern United States, that poor nutrition and not water is the principal factor that limits pine production, defined nutrient requirements for a desired level of production, and developed silvicultural systems that include fertilization. Thanks to these research results, fertilization of loblolly pine plantations has increased from 100,000 acres in 1989 to over a million acres in 1997. The increased wood production due to fertilization in 1997 alone will exceed four million cords over the next eight years.

The Renewable Resources Extension Act (RREA) provides funds for technology transfer and technical assistance to ensure that the benefits of forestry research are made available to private timberland owners and forest industries through CSREES. NASULGC has recommended funding RREA at a level of $4 million for fiscal year 1999. President Clinton recommended a funding level of $3,192,000 in his fiscal year 1999 budget. We urge the Committee to support the NASULGC request.

RREA funds have created programs and provided expertise that benefit private timberland owners and the timber industry throughout the country. For example:

—In Arkansas, over $5 million has been estimated to have been earned or saved by timberland owners and the forest products industry because of RREA educational programs.

—In Virginia, 98 percent of the 341 landowners who participated in ecosystem management field days indicated that they would use ecosystem management practices to improve their own land. Those landowners collectively own 68,000 acres.

Similar stories can be found in all 50 states. It is vital that Congress continue proper funding for this important program for distributing the knowledge gained through our research institutions to the private landowners.

Lastly, we urge your support of the Competitive Grants Program administered under the National Research Initiative of the USDA. Peer competition for grants is at the heart of the university system and this program has become very important to natural resource scientists working within NAPFSC institutions. Research funds from NRI enable NAPFSC institutions to build upon the base provided by McIntire-Stennis. President Clinton's budget calls for a funding level of $130 million for fiscal year 1999, a level also recommended by NASULGC, and we urge your Subcommittee to fund the program at the requested level.

The House and Senate Agriculture Committees recently completed work on the reauthorization of the Research Title of the Farm Bill. Both committees called for increased programs and activities for forestry research to address the increasing challenges facing the non-industrial private forests. The Senate bill encourages the Forest Service to allocate a greater share of its future research budget for collaborative research conducted by the land-grant universities, and urges the development of new cooperative programs between CSREES, the Forest Service and the land-grant universities. The House bill also directs the USDA to focus more attention and resources on efforts to increase the productivity of non-industrial private forest lands.

We are delighted that the authorizing committees have recognized the importance of expanding forestry research. However, the current and proposed levels of McIntire-Stennis and RREA funding are well below their authorized levels of one-half the Forest Service research budget (McIntire-Stennis) and $15 million (RREA) respectively. Congressional action to increase these two important sources of federal support to universities toward their authorized levels would enable universities to address the expanded research and educational needs for privately owned forest lands.

WHO BENEFITS?

Forestry research provides many direct and indirect benefits to society by increasing forest productivity, improving forest health, and providing diverse employment opportunities—all while enhancing environmental quality and improving environmental protection. Forests contribute substantially to the economic well-being of the United States. Forestry related employment constitutes a large sector of our work force, including manufacturing, research, and recreation. Forest product companies alone employed 1,580,000 people in 1988, representing 8.5 percent of the Nation's manufacturing work force. Many of these benefits accrue in rural areas of the United States where economic and social viability remain a widespread concern. Private timber landowners depend on the generation of critical forestry research information and its accessibility through extension to support and improve the wide range of public and private benefits arising from their investments. Society as a whole benefits from the improved recreational opportunities and amenity values provided by healthy forests. By increasing our understanding of forest ecosystems, the forestry research-extension partnership also improves our ability to protect the environmental amenities associated with forest lands, including the protection of biodiversity and the improvement of water and air quality.

The past, present, and future success of forestry research and extension activities arising from the NAPFSC member institutions results from a unique partnership involving federal, state, and private cooperators. Much of the funding of forestry and

forest products research comes from the private industrial sector. However, such funding is commonly allocated for research within the companies themselves and is typically focused on near-product development where the benefits of investments are readily captured. Federal agencies have concentrated on large-scale national issues while state funding has emphasized applied problems and state-specific opportunities. University research in contrast, with the assistance of federal, state and private support, has been able to address a broad array of applied problems related to technology development and fundamental biophysical and socioeconomic issues and problems that cross ownership, state, region, and national boundaries. Schools and colleges with programs in forestry, forest products, and natural resources have the expertise in-house to address a broad range of problems and opportunities related to the forest resource and its utilization.

We encourage continued federal participation in this partnership with NAPFSC institutions through McIntire-Stennis, RREA, and NRI. We respectfully urge you to fund the McIntire-Stennis Cooperative Forestry Research Program, the Renewable Resources Extension Act, and the National Research Initiative at the levels requested by NASULGC for fiscal year 1999 and respectfully suggest increasing McIntire-Stennis and RREA to their maximum authorized funding levels.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF STATE FORESTERS

Thank you for the opportunity to present this testimony regarding the Agriculture Appropriations bill. We thank the Subcommittee for their support of our priorities in recent years, and we will need your help this year to correct yet another serious mistake on the part of the Administration in requesting the elimination of the Forestry Incentives Program. We are also supporting several other programs which are designed to ensure future timber supplies and improve the management of the Nation's non-Federal Forests.

As you know, these forests make up over 70 percent of the country's forested land base, and non-industrial private forests account for well over half of the Nation's timber supply. As you are also no doubt aware, the level of harvest from Federal lands has dropped precipitously in recent years, while demand for wood fiber has not. Several programs within this bill are critical to ensuring that the shift of demand to these non-industrial private lands doesn't impair their ability to produce forest resources sustainably over the long-term.

Most critically, programs such as the Forestry Incentives Program (FIP) are needed more now than ever. With its clear focus on reforestation, it is capable of helping keep large acreages of land in continuous forest cover, ensuring long-term timber supplies while protecting soil productivity and enhancing water quality. We strongly oppose the Administration's request to eliminate the Forestry Incentives Program and reject their rationale that the program is not compatible with the Natural Resources Conservation Service's strategic plan. Keeping lands forested, and assisting landowners in overcoming these serious obstacles to reforestation, most certainly will help NRCS meet its objectives of protecting watersheds and soils. We also note that Congress specifically reauthorized FIP during the 1996 Farm Bill, and the NRCS has a statutory responsibility to carry out the program.

We also note a great deal of concern amongst State Foresters over the NRCS administration of the FIP program. While the State Forestry delivery mechanism remains fundamentally sound, we are concerned that NRCS is not committed to making the program a success. We would encourage the USDA to re-evaluate the transfer of this program from the Farm Services Agency to NRCS, and to consider either returning the program to the FSA or transferring it to the Forest Service.

In fiscal year 1997, FIP helped plant trees on over 141,000 acres, and performed timber stand improvement on more than 22,000 acres. The program has been underfunded at around $6 million for the past several fiscal years. NASF opposes the Administration's request to eliminate the program and urges you to fund it at $10 million, its historic level.

We are happy to see that the Administration has requested renewed funding for the Renewable Resources Extension Act program (RREA), and we applaud the action of this subcommittee in restoring that program in spite of the Administration's request to eliminate it last year. NASF strongly supports this program, which we believe can help reach landowners, loggers, and foresters with sound advice that can help improve the productivity and management of the Nation's non-Federal Forests.

A particularly important function of this program is funding the Logger Education to Advance Professionalism (LEAP) program. While professional resource managers are involved in only a relatively small percentage of timber sales, loggers are involved in every timber sale, and it is critical that we reach as many of them as pos-

sible to ensure that these sales are conducted in an environmentally sensitive manner.

NASF is pleased that the Administration has included funding for this program in their fiscal year 1999 request. However, we urge the Subcommittee to fund the program at its full authorization level of $7 million, above the continuing level suggested by the Administration.

NASF is also pleased to offer support for the Resource Conservation and Development program at slightly higher than the continuing level proposed by the Administration. This program has enormous potential to help develop sustainable business opportunities that can take advantage of underutilized forest resources.

NASF would also like to submit the following recommendations for forestry-related research programs that are funded through this appropriations bill:

Cooperative Forestry (McIntire-Stennis) Research.—This program supports forestry and wood fiber related research conducted by the Nation's public universities. University-based research is an important and growing part of the collaborative research effort involving Federal, State, and industry scientists. It is critical to the creation of new technologies that will increase the efficiency and productivity of forest management on all forest ownerships. McIntire-Stennis Research funds are granted directly to public colleges and universities on a matching basis. This program has provided an important foundation of funding for research that has not been supported through other means. NASF recommends increasing McIntire-Stennis Research to $25 million, to reflect the high priority we place on forest research that will help us meet fiber demands in a sustainable fashion.

National Research Initiative.—This competitive grants program funds research on key problems of national and regional importance in biological and environmental sciences. The NRI awards grants on a matching basis to university researchers using modern biological, environmental, and engineering sciences to address critical problems in agriculture and forestry. NASF strongly supports at least 20 percent of the NRI funds being dedicated to natural and renewable resources research.

Figures for NASF's Budget Recommendations are listed below. Thank you for considering our requests.

	Fiscal year—		
	1998 enacted	1999 admin.	1999 NASF
NRCS Conservation Programs:			
Forestry incentives	6.000	.....	10.000
RC&D Program	34.377	34.377	35.000
CSREES Forestry Related Programs:			
RREA	3.400	3.400	7.000
Mc-Stennis Coop. Res	21.000	20.000	25.000
NRI	105.700	130.000	115.000

PREPARED STATEMENT OF CHARLES G. SCALET, PRESIDENT, NATIONAL ASSOCIATION OF UNIVERSITY FISHERIES AND WILDLIFE PROGRAMS, SOUTH DAKOTA STATE UNIVERSITY

The National Association of University Fisheries and Wildlife Programs (NAUFWP) submits this statement on the proposed fiscal year 1999 budget for the Cooperative State Research, Education, and Extension Service (CSREES), U.S. Department of Agriculture.

Members of NAUFWP include 53 Universities. We seek to enhance public understanding of the needs for improving natural resource management and to advance the science and practice of sustainable uses and management of the resource base. Our efforts focus on cooperative work with partners and customers to advance research, education, and extension to benefit people and communities throughout the country. This service and outreach are among the most time-tested, successful, community-based conservation efforts in the U.S.

These proven research, educational, and extension programs of the CSREES and its Land Grant University partners initiate relevant, positive changes in attitudes, and stimulate constructive actions to implement new technologies and sound approaches and practices by private landowners, resource managers, community decision-makers, and other members of the public. Accumulated experiences show that investments of funds and time yield significant benefits to individuals and to the

states and nation by building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture industry.

The pressing challenge is to have the CSREES/Land Grant University System, with its grass roots credibility and delivery system, reach more of the approximately 10 million private landowners and managers who control more than two-thirds of the U.S. lands, or approximately 1.35 billion acres. Regrettably, the proposed fiscal year 1999 budget for CSREES is far less than adequate to help private landowners and managers move forward in achieving sustainable uses of the resource base. More emphasis on proper uses of natural resources is needed to achieve a more sustainable society, thereby avoiding costly restoration efforts.

In view of these shortcomings, NAUFWP strongly recommends that the following five adjustments be made in the proposed fiscal year 1999 budget.

1. That the Renewable Resources Extension Act (RREA) be funded at a minimum of $9.5 million in fiscal year 1999. This level of funding (1) is less than the $15 million authorized level, and (2) is essential to enable the Cooperative Extension Service system to accomplish the goals and objectives set forth in the mid-1990's Report To Congress. Needs for RREA educational programs continue to mount as land holdings become more fragmented, more landowners need information, and concerns of society grow for managing natural resources on a sound basis to enhance water quality, fisheries, wildlife, and human health, while sustaining the productive capacity of the resource base. Among the resource management needs is outreach of information to ensure continuation of the flow of goods and services from the 490 million acres of nonfederal forests owned by millions of nonindustrial private forestland owners. Responses to these accumulating needs are supported by state and local partners who contribute an average of $4.00 to each RREA $1.00.

Making $9.5 million available would permit the Cooperative Extension Service to expand its outreach services to assist more than 500,000 private owners to improve their decisions and management on an additional 35 million acres, while increasing productivity and revenue by an estimated $200 million.

2. That Smith-Lever 3(b)&(c) base program funds be increased to $280,950,770 (+9 percent), with at least one-third of this increase targeted to Extension's Natural Resource and Environmental Management (NREM) programs. This adjustment in the proposed fiscal year 1999 budget is needed to provide more adequate "block grant" funds for Land Grant Universities to extend essential educational outreach based on assessments of local needs. An increase in these funds is required to develop the critical level of NREM staff services at state and local levels to focus and leverage limited funds to address critical natural resources situations that involve farmers and small landowners in both rural and urban communities nationwide.

Among pressing needs for Extension's attention and services are a host of natural resource management challenges and public issues, including forest health, wetlands maintenance and restoration, water quality, endangered species, and people/wildlife interactions. More adequate Extension responses to these topics and others have been called for in the 1990 FACT Act, as well as in various Farm Acts.

Continued close cooperation among the State Cooperative Extension Service, State Fish and Wildlife Agencies, and other appropriate state and federal agencies, conservation organizations, and local people is critical to build responses to pressing needs in managing natural resources on a sustainable basis. One cooperative effort, the Extension 4–H Youth Natural Resources program and its many projects, continues to attract participants, with more than 1,350,000 young people from both urban and rural communities presently enrolled. Additional Smith-Lever funds targeted appropriately would enable CSREES to respond to more of its goals and responsibilities, especially those in the NREM National Strategic Plan.

3. That $500,000 be restored to the fiscal year 1999 budget for Rangeland Research Grants. Elimination of the only federal competitive grants program for rangelands, as proposed in the fiscal year 1999 budget, has serious adverse implications for watersheds, water quality, fisheries, wildlife, and other natural resources. Restoration of funds, as recommended, is necessary to focus some needed practical attention on the more than half of the U.S. land area in rangeland. Modest appropriations for Rangeland Research Grants prior to fiscal year 1998 supported some of the most important rangeland studies and services carried out in the past decade. Many additional situations requiring evaluation and technical services deserve immediate attention.

4. That at least 25 percent of the total increase in funds for Pest Management be directed to technical services and educational outreach programs to prevent damages and control vertebrates, such as deer and other animals, in urban and rural communities, and to address invasive exotic species and noxious weed problems on rangelands and elsewhere. This focus on vertebrates and invasive species in pest situations has been identified by private landowners, including agricultural producers.

Merely increasing funds for pest management would provide no assurance that the most pressing problems are addressed. Targeting a percentage of the Pest Management funds for vertebrate and invasive species would help ensure that research and educational programs advance the knowledge and capability of landowners and managers to prevent and reduce losses in situations involving these species. These programs require strengthening to restore, manage, and sustain the biological integrity of the U.S. natural resource base upon which our agricultural and natural resource economies depend.

5. That the Hatch and McIntire-Stennis funds be restored to at least fiscal year 1998 levels by adding $15,677,000 to the proposed fiscal year 1999 budget. Both of these research programs, conducted through Land Grant University partners and other educational institutions, are essential to address natural resource situations and issues important in achieving sustainability in agriculture and other uses of the resource base.

We are pleased that the Administration has proposed a $9.5 million increase for natural resources and the environment studies through the National Research Initiative (NRI) Competitive Grants. However, what is proposed to be done under this "Area of Special Emphasis" does not address critical natural resource research needs of deep concern to the natural resource community and the public. In view of this mismatch, and if necessary, redirect funds from the total increase for NRI to fund the Hatch and McIntire-Stennis programs at fiscal year 1998 levels.

SUMMARY

Based on considerations outlined above and to strengthen community-based conservation and management of natural resources, the National Association of University Fisheries and Wildlife Programs recommends the following for the CSREES fiscal year 1999 budget.

1. Fund the Renewable Resources Extension Act at least at $9.5 million;
2. Increase funding for the Smith-Lever 3(b) and (c) base program by 9 percent ($23,197,770);
3. Restore $500,000 for Rangeland Research Grants;
4. Designate at least 25 percent of the total increase in funds for Pest Management for prevention and control of damages by vertebrates and invasive species; and
5. Restore Hatch and McIntire-Stennis funds at least to fiscal year 1998 levels.

These funding levels would help in responding to current public needs and legal responsibilities, and assist in carrying out programs more effectively. NAUFWP respectfully requests that the Appropriations Committee approve these adjusted figures.

PREPARED STATEMENTS OF THE ASSOCIATION OF AMERICAN VETERINARY MEDICAL COLLEGES AND THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES

This testimony represents the concerns of both the Association of American Veterinary Medical Colleges (AAVMC) and the NASULGC Board on Veterinary Medicine.

The AAVMC coordinates the affairs of the 27 U.S. veterinary medical colleges, the four Canadian colleges of veterinary medicine, departments of veterinary science and comparative medicine and the animal medical centers. In addition, the Association fosters the membership's teaching, research and service missions both nationally and internationally. The principal goal of the AAVMC is improving the quality of life for both humans and animals. The AAVMC realizes this goal by addressing the needs of both consumers and the producers of food and fiber, as well as the needs of all animal owners.

The Board on Veterinary Medicine is a component of the Commission on Food, Agriculture, and Renewable Resources within the National Association of State Universities and Land Grant Colleges. Membership on the Board on Veterinary Medicine is comprised of colleges of veterinary medicine located at land-grant institutions. This includes 25 of the 27 United States Colleges of Veterinary Medicine. Heads of departments of veterinary science, comparative medicine, or pathobiology in NASULGC member institutions also are members of the Board on Veterinary Medicine. The purpose of this board is to address the concerns of animal health and disease, animal welfare, public health and regulatory medicine, zoonotic diseases, environmental issues, public policy related to the use of animals and products for the benefit of animals, public policy related to funding of higher education, and other issues as identified by any of veterinary medicine's diverse constituencies.

Within the AAVMC and the Board on Veterinary Medicine, we believe that these comments will highlight and support priorities set forth by the advisory board, particularly those dealing with environmental stewardship, emerging animal issues, national agricultural genome research, food safety research, and education and outreach. We also believe that many of the implied goals of the priorities can be met through a number of initiatives that will be discussed later.

Food safety is an issue of paramount importance, not because it is currently a popular political topic, but because it affects each and every person in this room and in this nation. In terms of food safety, everyone is a stakeholder, the grower, the producer, the packer and finally the consumer. While in many cases food safety concerns are traced to improper handling by the consumer, we can and should do more to assist farmers and ranchers produce food that minimizes food borne illness at the consumer level. We need to develop a body of knowledge from applied on-farm research that will prepare producers, extension specialists, and veterinarians to be better "applied practitioners" of food safety for on-farm interventions. These on-farm interventions are important to all stakeholders and especially to veterinarians, extension specialists, and the producer themselves.

Another major theme that should be considered is the development of integrated solutions to problems of air and water quality. Solutions can come from multidisciplinary research in Veterinary Medicine, Animal Science, and Environmental Science. The integration of these fields will allow for many types of possible breakthroughs that will benefit all agricultural stakeholders, both producers and consumers. This type of research program should include species specific issues allowing a focusing on the uniqueness of production and pathogens to that individual species.

At this time we will briefly mention four proposals by the AAVMC and the BOVM that will address the priorities of major importance to us.

First, a major new programmatic thrust is needed in animal health and disease, under section 1433 contained within Title VIII of the Federal Agriculture Improvement and Reform Act of 1996. This new programmatic effort, will be to insure the production of healthy animals for a healthy food supply. We are calling this initiative animal health to healthy humans. Due to the increasing realization that biological systems are ultimately linked in some form or fashion, it is timely to approach problems in a multi-disciplinary manner. The causes of and the methods to control food borne illness have become perspicuous examples of this fact. The agricultural industry is going to increasingly be asked to step up and shoulder responsibility for the food safety aspects of public health. Therefore a national commitment by Congress, funded through the Department of Agriculture, dedicated to the continual goal of identification, control, and elimination of food borne illness is a moral if not an economic must for those involved in production agriculture. The establishment of a new animal health to healthy humans initiative that is continuously funded under animal health and disease research base funding is indicated. The described new initiative should be established with the addition of five million in new funding awarded to Section 1433, which is the continuing Animal Health and Disease Research Program, with yearly increases over a three year period up to a sustained 15 million dollar level.

Base funding that supports ongoing research efforts into the ecosystem of infectious agents, such as Salmonella and E. coli O157:H7, that pose a serious hazard to human health via contamination of food stocks, is needed. In addition, improvement of on-farm and environmental knowledge of these known pathogens and understanding the methodologies to control these food borne pathogens will become increasingly important to protect U.S. export markets. The increase funding initiative for Animal Health and Disease will facilitate the gaining of an improved understanding of microbial ecology as it relates to the contamination of food supplies. With the information derived from this newly focused animal health to healthy human research effort, a foundation of knowledge will be in place to support new training programs, both at the professional and graduate levels, so that adequate numbers of people with backgrounds working with HACCP systems, ISO–9000 standards, and Sanitary/Phytosanitary Standards. The fundamental knowledge as well as the programs creating experts in food safety intervention methodologies are in high demand and sorely needed for U.S. agriculture. The creation of a new animal health initiative in the form of ongoing national core funding is warranted considering the global marketplace.

Our second proposal is to develop on-farm pre-harvest food safety systems for each of the five major animal product commodities, including eggs, poultry, dairy, beef, and swine. We recommend that this initiative be funded by a $25 million-dollar increase in the National Research Initiative (NRI), on a sustained basis, split between the two mission areas of animal systems and natural resources and the environment. This new emphasis in the NRI should dedicate at least $2 million for

work in each described animal commodity area. Collaborative studies need to be carried out with a variety of experts and disciplines studying on-farm systems to develop strategies for understanding the ecology of pathogens and avoiding contamination of animals and animal products before they leave the farm gate. Information gained in the study of microbial ecology will assist in the development of HACCP procedures or other on farm intervention procedures that result in risk identification and assessment, and risk management of pathogens in each commodity area. This type of collaborative research that encompasses multi-disciplinary approaches to problem solving is increasingly necessary. It is important to realize the problem solving capabilities that can be derived from integrative biology approaches. Therefore, funds are needed to support ecosystem studies by veterinarians, animal scientists, and environmental scientists. Development of sustainable systems for intensive food animal production that result in minimal impact on the quality of air and water and result in a safe food supply are the goals. We are concerned that the draft research priorities do not adequately address the need for on-farm, pre-harvest research and application of knowledge at this stage of animal production

Thirdly, we recommend that we protect our domestic food supply and prevent non-tariff trade barriers to our export markets by using knowledge generated by research on foreign animal diseases and new and reemerging diseases. Funds required for this type of research could flow intramurally as well as extramurally through ARS and CSREES. Considering the global economy and increasing recognition that foreign animal diseases may not be so foreign, it is paramount that we ready ourselves for challenges that may threaten entire domestic animal agricultural sectors, whether they be a real epidemiological problem or just politically based. On the export side, the General Accounting Office (GAO) has recently cited a USDA survey estimating up to $5 billion in legitimate US agricultural exports have been prohibited because of non-tariff trade barriers.[1] One of the best ways to prepare ourselves for issues of a sanitary or phytosanitary nature, whether they be import or export, is via knowledge. This nation's research mission can and should advance this knowledge. An increased awareness represented by specific funding of research into foreign animal disease, as well as those diseases that qualify as new and reemerging, is fundamental in order to protect markets and maintain a favorable balance of trade for this nation's agriculture. Our medical colleagues that work only on one species, the physicians, have recognized for years there is no such thing as exotic or foreign disease in human medicine. All human ailments fall on to a single list with various levels of concern attached to them because anyone of those ailments can end up in the middle of this country with one airplane ride. This is becoming the case for our animal agriculturists. Remember, the days of our animal agriculture isolation are quickly disappearing. Therefore research funding directed toward understanding and preparation for new and emerging animal disease threats is not only warranted, it is a proper use of public funds and should be considered a form of national defense.

Proposal number four is a recommendation to determine the food safety impact of various animal production management strategies so that sustainable practices with the lowest possible risk to consumers will be widely used. The Fund for Rural America would be a logical avenue of funding for this type of applied learning research. Research is needed that fairly evaluates various production techniques for effects on human health, such as animal feeding of low level antimicrobial agents and the development of antimicrobial resistance. Furthermore, research that may elucidate the need for cultural and management modifications to traditional animal production systems will potentially be more widely accepted if publicly funded on a national level. We include under this proposal those genomic studies that would enable rapid identification of microbes through molecular fingerprinting. This is an example of collaborative efforts at the applied level. Development of molecular fingerprinting strategies for microbe identification would be an essential element to management systems for livestock, and natural resources and the environment. This type of knowledge is paramount if pathogenic organisms, including Salmonella and E. coli O157:H7, are to be controlled or even eliminated in the human food supply.

In conclusion, we would like to thank the Subcommittee for giving the AAVMC and the BOVM this opportunity to discuss stakeholder issues in this forum. We hope that our comments will be helpful to you in prioritizing research initiatives within the USDA.

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[1] GAO Report/NSIAD–98–32, Agricultural Exports, January 1998. pp. 9.

PREPARED STATEMENT OF DR. JAMES H. MORTENSEN, ASSOCIATE DEAN, RESIDENT INSTRUCTION, PENNSYLVANIA STATE UNIVERSITY, ON BEHALF OF THE ACADEMIC PROGRAMS COMMITTEE ON ORGANIZATION AND POLICY (ACOP)

Mr. Chairman, members and staff of the subcommittee, I appreciate the opportunity to address the important issue of science education in the United States and the 1999 budget for USDA. Few issues are of more importance to the well being of our country and the future of our food and agriculture system.

Over the last several years, three White House reports and three presidential administrations have called for more emphasis by federal agencies on undergraduate education and K-through-twelve science education. In 1992, the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) recommended that federal agencies should examine the impact of federal research support on university undergraduate and graduate education and identify strategies to ensure against unintentional degradation of the educational mission and excellence of the research-intensive universities. In the same year, the President's Council of Advisors on Science and Technology (PCAST) recommended that federal agencies should ensure that their programs encourage universities to reemphasize education rather than discourage them. President Clinton called for increased emphasis on education at all levels in his 1997 State of the Union message and placed even greater emphasis on education in his 1998 State of the Union address.

Federal agency involvement with higher education is especially critical to American agriculture. The great size of the American food and agricultural system and its very favorable competitive position in the world economy is due in large measure to our ability to substitute scientific knowledge for natural resources and labor. Theodore Schultz, using agriculture as his model, won the Nobel Prize in economics for demonstrating that the return on human capital was much higher than the return on physical capital.

The Board on Agriculture Budget Committee of the National Association of State Universities and Land-Grant Colleges carefully constructed a list of priorities for funding of USDA programs in research, education and extension. Preeminent again in this list is the Higher Education Challenge Grants Program administered by the Science and Education Resources Development unit of the Cooperative State Research, Education, and Extension Service.

—This program is a matching program, generating dollar-for-dollar non-federal funds, thereby doubling the federal investment.
—It is a highly competitive program, assuring only the most appropriate, highest quality projects will receive funding.
—It supports innovative and model projects that can and are transferred to other campuses throughout the system.
—It promotes partnerships among universities and colleges as well as with private industry.
—It promotes faculty development in order to be better able to serve student educational needs in the biological and social science area.
—The program allows us to enrich curricula to meet needs of potential scientists,technicians, and future informed non-science citizens.

A multitude of outstanding examples of successful Challenge Grants can be cited, however, noting but two illustrates the innovative nature and important role these grants play in our agriculture and natural resource system.

New Mexico State University.—Improving Undergraduate Science Education in Horticulture and Agriculture Education.

Iowa State University.—Web-Based Education: Creating Authentic Learning Environments in Agriculture.

Present funding for this Higher Education Challenge Grants Program is $4.35 million. The Academic Programs Section and the Board on Agriculture Budget Committee of NASULGC recommend funding for fiscal year 1999 of $7.0 million This increase will allow the agency to award more and larger grants which will encourage cooperative grant proposals from participating schools. The percentage of submitted proposals funded in the life of this program is about 20 percent. This year, the number of proposals submitted has increased from 117 to 171, indicating the tremendous need for the increased funding.

The Challenge Grants Program is the cornerstone of the higher education effort of the USDA. This program complements and enhances the successful efforts of the 1890 Capacity Building Program and the new programs for the 1994 land-grant institutions.

The very successful Institution Capacity Building Grants Program for 1890 Institutions strengthens the linkages among historically minority institutions and other colleges and universities, the U. S. Department of Agriculture, and private industry.

This program is presently funded at $9.2 million. The Academic Programs Section and the Board on Agriculture Budget Committee recommended fiscal year 1999 funding at $10 million. Building and enhancing the capacity of the 1890 institutions to educate undergraduates in agriculture and natural resources provides a sound base from which these institutions can enrich their programs through the Higher Education Challenge Grants Program. Similarly, the 1994 land-grant institutions are building and enlarging their capacity to educate Native American students in agriculture and natural resources, primarily through the 1994 Education Equity Grants Program and the interest from the Native American Endowment Fund. In addition, the 1994 land-grant institutions have authorization for a $1.7 million Capacity Building Grants Program to further develop their educational capacity and encourage cooperation with 1862 and 1890 institutions. These programs, aimed at substantially improving educational efforts of the 1994 institutions, many of which are only 20 years old and all with a scarce resource base, complement perfectly the Higher Education Challenge Grants Program. The Higher Education Challenge Grants build upon the educational foundation provided by the 1994 Education Equity Program, Endowment, and Capacity Building Programs. The Academic Programs Section and the Board on Agriculture 1998 Budget Committee recommends full funding for all of these necessary programs.

The Hispanic Education Partnership Grants Program is a highly competitive program that helps bring educational opportunity and innovation to institutions and is heartily endorsed by the Academic Programs Section. Projects such as that funded at Miami Dade Community College to create a Food and Beverage Export curriculum in conjunction with the Caribbean Basin Agriculture Trade Association, the World Trade Center, the Miami Free Zone and other partners is an example of the liaisons created to serve our students. The partnership between Rancho Santiago College, California Polytechnic State University, and the United Agribusiness League to promote diversity in Food Systems Education is also an example of public/private cooperation to better serve students in agriculture. The Academic Programs Section and the Board on Agriculture Budget Committee recommends funding at $2.5 million.

Another cornerstone of this educational effort is the Multicultural Scholars Program. This program allows institutions to encourage a variety of educationally outstanding minority students to enter the field of agriculture and natural resources. Again, it further extends the cooperation between 1862, 1890, and 1994 land-grant institutions. Presently, the program is funded at $1 million, with funds carried over to allow for a $2 million program every other year. We recommend continued funding for this important program.

The Graduate Training Fellowships is the only federal program targeted specifically to the recruitment and education of pre-doctoral students for critical food and agricultural science positions in areas identified as having a shortage of expertise. The Academic Programs Section and the Board on Agriculture Budget Committee recommend funding at $4 million.

The above-mentioned programs have been extensively reviewed by the USDA-land-grant partnership members and have received a high priority ranking by both the Academic Programs Section and the Board on Agriculture of the National Association of State Universities and Land-Grant Colleges.

We appreciate the opportunity to submit this testimony and encourage your positive response to these prioritized requests.

PREPARED STATEMENT OF DR. JAMES J. ZUICHES, CHAIR, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES

Mr. Chairman, I am James J. Zuiches, Dean of the College of Agriculture and Home Economics at Washington State University, and Chair of the National Association of State Universities and Land-Grant Colleges' fiscal year 1999 Budget Committee. I represent the 75 universities that work in close cooperation and partnership with the USDA Cooperative State Research, Education, and Extension Service. These universities comprise the State Agricultural Experiment Stations, Cooperative Extension, and Academic Programs of the land-grant universities, representing the 1862, 1890, Tribal Colleges, and Hispanic-serving institutions. We employ over 24,000 professional staff who directly affect over 40 million Americans annually through our Cooperative Extension Service, educate more than 100,000 students in colleges of agriculture and life sciences, and conduct research projects central to the Nation's interests in food, agriculture, natural resources, and the environment.

My colleagues and I appreciate the support that the land-grant university system has received from this Subcommittee in the past; and I expect that the continued

investment in agricultural research, extension, and education programs will continue to benefit both farmers and consumers.

Our programs are designed, in cooperation with USDA and the constituencies who support our programs from the state, county, and private sector.

Our goal is to maintain a strong American agriculture. Through research and education, we support the U.S. food, fiber, and environmental system.

Unfortunately, the research and development funding for agriculture has eroded in the last decade. The funding for Agricultural Research and Extension programs, the lifeblood of our food supply system has shrunk by 8 percent in constant dollars. The President's proposal for USDA for fiscal year 1999 continues this deterioration of funding for agricultural research and extension. Comparatively, the research and development for space exploration, the environment, basic science research, and health research has increased in constant dollars from 23 to 58 percent over the last ten years.

NASULGC is requesting an 8 percent overall increase in support of research and education for the food system.

BASE FUNDS—FORMULA FUNDS: THE CORE SUPPORT OF THE SYSTEM

Federal funds, appropriated as Hatch, McIntire-Stennis, Animal Health, Smith-Lever (3b and c), Evans-Allen (1890) and 1890 Colleges and Tuskegee Extension are critical base funding of the partnership. These funds leverage state, county, and grant funds, and support the faculty and staff to address urgent problems facing agriculture and consumers.

NASULGC is specifically requesting a 5.7 percent increase in base funds to invest in long-term food security, global competitiveness, and environmental quality. Our request contrasts sharply with the President's budget request for fiscal year 1999. Unfortunately, the President's request proposed reductions in Hatch, Smith-Lever, and McIntire-Stennis, and no increases in other areas. These base funds have eroded by 16 percent in the last decade. Secretary Glickman's recent analysis confirms this erosion. Yet, these are the funds that leverage over $4.00 of state, county, and private sector money for every dollar of federal funds. Without this critical funding to conduct research on everything from pest management to controlled atmosphere storage, we are putting the world's most abundant and safe food supply at risk to new diseases, new pests, and less efficient storage and handling techniques. We are also putting at risk our competitiveness in international markets.

The investment in agricultural research and extension through these mechanisms, has resulted in the cheapest and safest food supply on the planet. When compared with our discretionary income, Americans spend only 11 percent of our disposable income on food. This is the result of research and extension for a food system which enables the consumer dollar and the welfare families' food stamps to purchase inexpensive, safe, and nutritious food. This is a food system that creates jobs, competes worldwide and conserves its natural resource base.

ACCOMPLISHMENTS OF AGRICULTURAL RESEARCH AND EXTENSION

The scientists and educators involved in agricultural research and extension have contributed to the expansion of food exports and the creation of new jobs, both on- and off-farm. Specific examples include the opening of the Japanese market for U.S. beef and apples. In Brazil, imported apples are now accepted from the United States. Seed crops are sold worldwide because the United States farmers' ability to meet seed health standards of countries.

Every year, millions of individuals are affected by food-borne diseases. The research conducted at land-grant universities has contributed to the development of the Hazard Analysis and Critical Control Point System (HACCP). Recent federal regulations require meat and seafood processors to use HACCP to identify processing points where bacterial contamination is likely to occur and can be prevented. Land-grant university faculty are helping food processors, producers, and handlers to implement HACCP programs.

A specific example of food contamination that was solved by Washington State University occurred in 1997 when over 90 cases of salmonella thypherium DT–104 were experienced in Yakima Valley. The median age of cases was 4 years old and 91 percent of the illness occurred in the Hispanic community. We discovered the cause was homemade soft cheese made from unpasteurized milk. Developing an alternative recipe and communicating it to the Hispanic community through volunteers resulted in a 90 percent reduction in salmonella infections. Support from federal Smith-Lever and EFNEP funds, state and county funds, and the private sector made this food safety success story possible.

The challenge to agriculture is also to reduce and eliminate waste and protect the air, soil, and water quality on which agriculture depends. Collecting and disposing properly of unwanted pesticides and their containers, managing wood waste, composting, and wastes of agricultural by-products, as well as bio-solids, have all contributed to reduced costs to cities, consumers, and farmers. These efforts have also helped protect the environment from improper disposal of wastes.

These success stories are a result of the ongoing research funded through the base programs.

NATIONAL RESEARCH INITIATIVE COMPETITIVE GRANTS (NRI)

NASULGC supports the continued and expanded funding for the NRI. Special emphasis will be given to plant, animal, and microbial genomics and food safety in support of the President's initiatives and consumer demands. The food genomics effort, or agricultural genomics more generally, would complement funding by the National Science Foundation, NIH, and the Department of Energy. This food genomics program would focus on understanding the genes responsible for economically important traits in plants, animals, and microbes that are essential to agriculture. The program would also support preservation of diverse germplasm necessary to meet changing environmental and market needs while insuring biodiversity. Our specific request is to raise the NRI from $97.2 million to $130 million by expanding the funding for each of the program areas and adding the agriculture (food) genomics program.

Priorities for Higher Education in USDA.—Funding science education in food, agriculture, and natural resources is essential to attracting students from diverse backgrounds. These programs in higher education, in particular the institutional challenge grants, build the curriculum and local instructional capacity. Other programs provide student scholarships. We are requesting an increase for priorities for higher education to $27.65 million. I have attached the specific budget requests for each program area.

The NASULGC community supports the President's budget request to address the USDA Civil Rights action team recommendations. These programs strengthen research, education, and extension assistance to minority and limited resource populations.

Targeted priority areas.—Major national priorities in food safety, pest management, water quality, and sustainable agriculture are joint research and extension efforts. Research investigates and discovers ways to improve the food production system and protect agriculture's natural resource base. Extension programs increase consumer awareness and understanding of national priorities. Other areas that deserve continued support include farm safety education to reduce farm accidents and deaths; managing risk issues in a changing agriculture; studying global change and soil quality; supporting rural development and economic development; and assisting children, youth, and families at risk.

The crux of successful agriculture is going to be the management of pests, whether diseases, weeds, or insects. Increased support for integrated pest management (IPM) and pesticide clearance (IR–4) is essential. The pest control strategies will also support the re-registration process for use of pesticides on minor crops and the registration of safer and more environmentally compatible pesticides. The successful re-registration or registration of new pesticides are necessary to meet the requirements of the Food Quality Protection Act. The pest management alternatives and expert IPM decision support systems programs continue to identify lists of crops/pests/control combinations where only one or limited number of controlled options are available. Finally, the pesticide applicator training program educates growers, commercial applicators, and home owners about IPM practices.

Other on-going programs.—USDA's research and extension efforts on rangeland issues, aquaculture, renewable resources, supplemental and alternative crops, tropical and subtropical agriculture reflect the diversity of agriculture in the United States. Communicating these programs also requires support from the agricultural telecommunication system, called A*DEC at $900,000. The Expanded Food and Nutrition Education Program (EFNEP) is essential nutrition education program used in all 56 states and territories. EFNEP continues to be a vital and necessary way to teach low-income families about diet, nutrition, and financial decisions concerning food and health.

Finally, the federal administration category includes development of a new management information system to increase accountability and assessment efforts.

I have submitted the detailed request for fiscal year 1999 in each of these areas for your consideration.

The leaders of agricultural research and extension are extremely proud of the role that we have played in keeping agriculture competitive worldwide, in protecting the environment, and in combating food-borne illnesses. As I indicated in my opening comments, the USDA and Agricultural Research and Extension system, in partnership with the land-grant universities, is the heart of the U.S. food system. Our budget request recognizes the continued concerns of the public and agriculture to remain competitive and successful. Base funding, competitive funding, and targeted programs represent multiple vehicles to achieve the goals of a successful agriculture that keeps our nation's food system productive, safe, and competitive.

Thank you for this opportunity to communicate our concerns and needs. Thank you for your consideration of our request.

PREPARED STATEMENT OF DR. THOMAS L. PAYNE, DIRECTOR, AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER, OHIO STATE UNIVERSITY, ON BEHALF OF THE EXPERIMENT STATION COMMITTEE ON ORGANIZATION AND POLICY (ESCOP)

Mr. Chairman, members of the committee, we, The State Agricultural Experiment Station System, representing fifty-nine State and Territorial Experiment Stations, sixty-three Schools and Colleges of Forestry, seventeen 1890 Land-Grant Institutions and Tuskegee University, twenty-seven Colleges of Veterinary Medicine and forty-two Schools and Colleges of Home Economics, need your help! Our research programs are vital to our nation's agriculture, and yet federal support of those programs has declined 16 percent in real dollars over the past decade. Now, in the Executive Budget for fiscal year 1999, our base programs a slated for more reduction. I can't understand this. Our research programs are one of the best investment money can buy. Estimates range from $1.30 to $1.60 in return benefits for every dollar invested in our research. We need your help to re-instate the reductions and provide needed increases. (Please refer to research budget details in the NASULGC fiscal year 1999 Budget included in the testimony of Dr. James Zuiches, Chair, Board on Agriculture Budget Committee).

Our fiscal year 1999 budget request was developed through a partnership with our stakeholders, federal research partners and our Extension partners. The budget focuses on our responsibilities as the state partners to assist and support the food and fiber systems of our nation. These systems face challenges unparalleled in our nation's history. The realities of NAFTA and GATT coupled with proposed changes in farm programs are creating an environment of revolutionary, not evolutionary, change in American agriculture. The products of research, including new and innovative technologies, are needed more than ever before. These research products must reduce economic and environmental risks, improve competitiveness in the international marketplace, develop ways to add value to raw agricultural products, maintain and enhance a safe and nutritious food supply, and increase that food supply to meet the demands of our ever-increasing human population around the world.

The fiscal year 1999 request for research focuses on the following critical areas targeted for increases:

—Base Programs;
—National Research Initiative;
—Food Safety;
—Pest Management Control Strategies: Pest Management Alternatives (IPM)/Biological Control, Minor Crop Pest Mgt.-IR–4;
—Soil Quality Initiative;
—Water Quality Initiative;
—Sustainable Agriculture; and
—Small Farms Initiative.

Base Programs.—Our budget request includes a 5.7 percent increase in base programs. It is our number one priority! Base programs form the foundation on which all of our research efforts are built. The base programs, by analogy, are the fire departments and trucks of research standing ready for immediate response to agricultural needs at the state, regional and national levels. We support the need for competitive grants programs, but such programs do not provide support for immediate response. We are able to respond quickly to the crises of disease and pest threats to our crops, for example, because of the infrastructure available through base program funding. The crops would be gone if before we could respond if our scientists had to write a grant proposal, wait for the review and eventual funding. These programs are very important!

This priority has broad-based support from the customers of the system, and the research conducted under these programs undergoes review by scientists and ad-

ministrators. And very importantly, the research priorities are determined based on input from customers at the local, state and national level.

National Research Initiative.—Our budget shows a significant increase for the National Research Initiative. It continues to be a high priority as we ask for your support in reaching the authorization level of funding. The program is the vital competitive of federal research support for agriculture. Included in the program is the new initiative for Agriculture (Food Genomics). The Food Genome program will support research to identify and develop a functional understanding of genes responsible for economically important traits in plants, animals, and microbes of importance to agriculture. Knowledge of genome organization and gene function is critical to ensuring future genetic improvement of agriculturally important genes. The program also will support preservation of diverse germplasm important to meeting the changing environment and market needs while ensuring biodiversity. It is essential for this to be funded if our nation is to continue to maintain its lead and global competitiveness in the development of biotechnology in agriculture.

Food Safety Initiative.—Our budget request reflects the need for increased research on food safety. Research shows that 90 to 95 percent of foodborne illnesses can be prevented by proper food handling and preparation. Yet each year in the United States, food-borne illnesses affect some 33 million people. Most susceptible are the young, and the old and people with compromised immune systems. The cost of health care associated with these illnesses ranges from $2.9 billion to $6.7 billion. The USDA/Land-Grant partnership is providing a holistic, "field-to-fork" approach to reducing food-borne illness.

Pest Management Control.—We request increases in the Pest Management Control Strategies categories to support the USDA IPM initiative that has as its goal farmer implemented IPM methods on 75 percent of total crop acreage by the year 2000. These programs identify the Land-Grant university system, both research and extension, as major entities in the development and implementation of this program. IPM places emphasis at the regional and local levels with major involvement of producers and private industry to set the priorities for research and technology transfer.

Soil Quality Initiative.—We request support for a new research initiative on Soil Quality. This initiative is proposed in support of efforts toward whole farm and ecosystem level planning. Understanding of the role of soil in forest, range, and pasture, crop and wetland ecosystems is critical in the development of management plans on these lands. Currently, resources are not available to conduct the needed research.

Water Quality Initiative.—This national initiative addresses the major research and educational concerns relating to water quality and management. Sufficient high-quality water is often taken for granted, yet recent threats to its stability profoundly affect the future of agriculture, the economy, and the health of our population. Research programs examine the roles of forestry and agriculture as suppliers, users, polluters, and recyclers of both surface and ground water. Scientists are developing methods to restore contaminated aquifers and prevent additional contamination. Using research information, extension specialists provide educational programs and demonstrations on water quality and management options for soils, pesticides, nutrients, and animal wastes that will provide safe drinking water supplies. Resources are used to increase Extension's educational programs in 74 hydrologic zones and 16 demonstration sites in a coordinated multi-agency effort at the state and national level.

Sustainable Agriculture Initiative.—This program relates to and complements food safety, integrated pest management, water quality and other environmentally-related activities, and rural development. Sustainable agriculture is a systems framework of technologies, practices, and procedures that provides for continuing productivity. Sustainable agriculture systems are site-specific and require skillful management. Sustainable practices that are effective will be based on all factors that affect a specific site, such as soil type and fertility, cropping history, microclimate conditions, surrounding vegetation and pest pressures. The goal for sustainable agriculture is to develop systems that are economically sound, socially acceptable, and environmentally benign.

Small Farms Initiative.—Also in our budget is a request for funding to initiate an integrated small farm research and education program to address the resource constraints experienced by small farm producers and those of diverse ethnic and racial origin. The new program is designed to help these producers to operate their farms more efficiently and in an environmentally sound manner.

Our budget was developed with our USDA partners and reflects recommendations of a system-wide joint planning effort. The research planning process, leading to the development of the research budget, involved more than 200 "Customer Input

Groups" including commodity and farm organizations, professional and scientific societies, institutes, foundations and councils (both public and private), and policy makers. Research partners included USDA/Cooperative State Research, Extension, and Education Service, USDA/Agricultural Research Service, and Schools and Colleges of Veterinary Medicine, Forestry, and Home Economics.

The Federal/State partnership through the combination of research programs in this budget proposal, when coupled with state and non-federal support, continues to provide the flexibility to address a wide array of issues and has resulted in the high rate of return on public investment in agricultural research ranging from 30 to 65 percent. These data are based on independent studies of return on investment in agricultural research and development. Research programs of the Agricultural Experiment Station System perform approximately 68 percent of all public funded agricultural research in support of the $600 billion agricultural industry. The federal investment represented in this budget is leveraged by approximately $1.5 billion in state and non-federal funds.

Thank you for the opportunity to provide this testimony on behalf of the Board on Agriculture of the National Association of State Universities and Land-Grant Colleges. The 109 year partnership of state and federal research, along with the support of Congress, will continue to meet the challenges of the future and create opportunities for agriculture. I strongly encourage you to consider and adopt this budget recommendation. Your continued support is appreciated and we are committed to continue playing a major role in sustaining a strong agriculture for the benefit of all citizens of this country and people of the world.

PREPARED STATEMENT OF RICHARD D. WOOTTON, ASSOCIATE DEAN AND ASSOCIATE DIRECTOR, COOPERATIVE EXTENSION SERVICE AT KANSAS STATE UNIVERSITY, ON BEHALF OF THE EXTENSION COMMITTEE ON ORGANIZATION AND POLICY (ECOP)

Mr. Chairman, I am Richard D. Wootton, associate dean and director of the Cooperative Extension Service at Kansas State University. I present this statement as the chair of the fiscal year 1999 Budget Committee of Cooperative Extension System and its leadership throughout our Nation.

The Cooperative Extension System has a rather extensive and intensive process for program priority setting; the budget represented in this statement has been through this same scrutiny. Our budget development committee is comprised of representatives from all regions of the country, as well as representation from our citizen advisory committee, the Council on Agricultural Research, Extension and Teaching (CARET). Each line item in this budget was carefully examined. We have focused on issues which require a solid research base and applied education. We have strengthened our resolve and commitment not only to agriculture, but to the entire food and fiber system while maintaining strong programs in family, youth and community issues.

Considering the fiscal climate in which we make this budget presentation, we have limited our requests for increases to a few key critical areas. However, based on the fiscal problems in many states, reductions in the Extension budget at the federal level are not apt to be offset by state, county or private funding partners. These partners now provide over seventy percent of the Extension System's annual budget across the nation. Thus, each federal dollar is very important because it leverages several more dollars from state, local, and private sources and serves as the "glue" of this unique partnership.

BASE PROGRAMS

Smith-Lever 3(b)(c).—The highest priority for the Cooperative Extension System is a 5.7 percent increase in the funding for base programs. We are requesting a funding level of $283.8 million or $15.3 over fiscal year 1998. Base program funds, along with matching state and local funds, provide the nucleus for maintaining the scientific and community-based network which is critical to the implementation of the base programs and the national initiatives. This increase will help to maintain a strong base for Extension programming across the country and provide the important funding to undergird the national initiatives, such as Integrated Pest Management, Food Safety and Quality, and Youth and Families at Risk.

The network of faculty and staff of 74 land-grant universities represents an intellectual resource unmatched by any other country of the world. No other national education system has the capabilities of reaching citizens in some 3,150 counties in the United States. In addition, nearly three million trained volunteers work with the Cooperative Extension System in areas such as health, nutrition, gardening, financial planning and youth development.

1890 Colleges and Tuskegee University.—The requested 5.7 percent increase in base funding for these institutions is also a top priority. These institutions maintain base programs geared to the needs of culturally diverse audiences, especially those limited in resources. Funds provided these institutions have helped them prioritize highly essential educational initiatives focused on families, community leadership, small scale farms and youth programs. These programs are designed to address new directions for what has become a large audience of people at risk and generally out of the mainstream of society. This 5.7 percent increase for the 1890's would enhance programming capabilities in key areas.

NATIONAL PRIORITY INITIATIVES

Significant increases are requested for three currently funded national priority initiative programs: Water Quality, Food Safety and Quality, and Integrated Pesticide Management.

Water Quality.—We are requesting a $2.0 million increase for the Water Quality initiative to focus specifically on assisting farmers, ranchers and homeowners identifying environmental risks and taking voluntary action to prevent pollution. The increased funding would be used to expand a proven program called Farm*A*Syst/Home*A*Syst that helps people conduct pollution prevention assessments on their property and take appropriate voluntary action. These assessments involve well water protection, agricultural compliance assistance, livestock waste management, and related factors that can impact environmental surroundings. This program is conducted in coordination with a number of other state and federal agencies with responsibilities for water quality and other environmental issues.

Integrated Pest Management.—We request that funding be increased for Integrated Pest Management (IPM) from $10.783 million to $15.0 million. Pesticide use in agriculture, as well as in urban America, continues to be a major public issue. IPM programs set the stage for innovative crop protection programs that meet economic and environmental needs. Additional resources are needed if the goal of establishing effective IPM practices on 75 percent of the crop land is to be achieved by the year 2000. The increase will address this concern and supports the Department of Agriculture's initiative.

Food Safety.—A safe food supply is of utmost importance to consumers as well as food producers, processors and distributors. Public concern about food contamination has escalated during the last decade. Even so, information about the causes and prevention of food-borne illnesses is still very limited. Furthermore, much of the current knowledge is inadequately applied and practiced. Extension education programs focus on protecting the safety of food from production to consumption. These programs assist food producers and processors, food service establishments and consumers in understanding safe production, handling and preparation practices. The HACCP (Hazard Analysis Critical Control Point) model is used as the primary basis for these educational programs. We are proposing $7.365 million for fiscal year 1999; the fiscal year 1998 appropriation was $2.365 million.

Reservation Extension Agents.—The support of Congress to assist with the placement of Extension agents on the Indian Reservations as a collaborative effort between the Tribal Councils and the State Cooperative Extension Services is going very well. The limiting factor is the number of agents does not meet the tremendous demand for this expertise on each of the Reservations. Thus, in accord with a plan jointly developed by representatives of the Tribal Councils and State Extension Services it was determined an appropriation of $5.0 million, which is $3.0 million more than the current appropriated amount, was a realistic fiscal need. These monies are awarded on a competitive basis.

Extension Services at the 1994 Institution.—This program is in its second year of operations and progressing well. The initial appropriation of $2.0 million in fiscal year 1998 has been allocated and being put to use in a very high need education arena. The 29 Native American Institutions of higher education are targeting agriculture, forestry, human nutrition and health, and economic development. A $1.5 million increase is requested for fiscal year 1999 to build on the base Extension staffing at these 29 Native American Institutions, which is being done in full collaboration with the State Cooperative Extension Services.

Other National Priority Programs we are requesting a very modest increases are:

Children, Youth and Families at Risk.—The Extension System uses preventive educational programs to help youth and families become healthy, productive, financially secure, and responsible members of their community. Extension has built linkages and networks with many agencies that provide services to children and families. Currently, 49 states and six territories conduct Youth-at-Risk programs. The federal Youth-at-Risk appropriation of $9.55 million leverages an additional $40

million and captures the support of nearly 37,000 volunteers for its programs. We request that the $9.55 million appropriation be increased to $10.0 million, so this important work of salvaging and rebuilding human capital may reach more youth and families.

1890 Facilities.—The annual amount of funding for this facilities program has been level or declining each of the past several years. The facility needs at the 1890 institutions still needs considerable attention for renovation and new construction to fully capitalize on the partnership between the USDA and these Historically Black Colleges and Universities. Thus, an increase of about $4.5 million above the fiscal year 1998 appropriation is requested.

Renewable Resources.—We request that the Renewable Resources Extension Act funding be increased from the current level of $3.214 million to $3.3 million. Public forests and rangelands now emphasis production of non-commodity values and commodity production has decreased. Concurrently, federal requirements for environmental protection on private lands have increased (Endangered Species Act, Wetlands Protection). Private landowners are, therefore, challenged to provide both increased commodity output to meet the nation's needs and increased environmental protection. Intensive management of non-industrial private forests for greater profitability, commodity resource output and environmental protection will be enhanced by this expanded educational effort. The impact on currently declining rural communities will be positive.

NEW PROGRAM INITIATIVES

Funding is requested for two new program initiatives: Pesticide Application Training and Managing Change in Agriculture:

Pesticide Applicator Training.—The funding for this program is a collaborative effort between the Department of Agriculture and the Environmental Protection Agency. Each is requesting $1.5 million to support, in part, the training the users of restricted use pesticides so they can be certified users. This is a very demanding program because of the number of people that require training each to become certified or recertified. The participants needing this training are growers, commercial applicators and homeowners. The total cost of operating this program exceeds $9.0 million a year. Thus, other state and local public funds and private funds are heavily committed.

Managing Change in Agriculture.—This program addresses how the Cooperative Extension System can assist the U.S. agricultural sector in managing in a dramatically changing global and domestic economic and environmental policy environment. These changes include public concerns and expectations for production and processing of safe food at reasonable prices, while protecting the environment; rapid technological advances; accelerated industrialization of agriculture; globalization of markets; and declining governmental "safety nets."

Within the agricultural sector, the forces of change are causing significant shifts in how business is done. These include: structural integration of input suppliers, producers and processors through increased use of contracts, alliances and other linkages; more product specificity driven by consumer tastes and preferences, and technological advances in the distribution and retailing of food and fiber products; and the rise of a new class of entrepreneurs who focus on the assembly and distribution of inputs and products without being centrally involved in the production processes.

The Cooperative Extension System, in concert with the agricultural private sector, will provide the leadership for the initiative. Funding will be sought from three sources; $2.0 million through your committee, Mr. Chairman, with matching funds from the state government and private sector. This will leverage the initiative into a $6.0 million plus program.

SPECIFIED PROGRAMS

We are recommending level funding at the fiscal year 1998 level for the following budget items:

Sustainable Agriculture	$2,365,000
EFNEP	58,695,000
Rural Development Centers	908,000
Pesticide Impact Assessment	3,313,000
Farm Safety/Agribility	2,855,000
Agricultural Telecommunications	900,000

Mr. Chairman and Members of the Committee, the Cooperative Extension System is mindful of the significant economic, technological, and societal changes happening

in our nation. Thus, we have redirected programs to better serve the needs of agriculture and rural America, to address directly the growing needs of children and families facing difficult situations, and to help communities work for a better future. We are focused on issues of national importance, identified at the grass roots level. We very much appreciate your past support and urge your continued support to keep our base programs strong and to continue to invest in initiatives of national importance.

We thank you for the opportunity to present this statement about our fiscal year 1999 budget needs.

PREPARED STATEMENT OF DR. RICHARD L. GUTHRIE, ASSOCIATE DEAN AND DIRECTOR, INTERNATIONAL PROGRAMS IN AGRICULTURE, AUBURN UNIVERSITY, ON BEHALF OF THE INTERNATIONAL COMMITTEE ON ORGANIZATION AND POLICY (ICOP)

I am the Associate Dean and Director of International Programs in Agriculture at Auburn University. I am also the current the chair of the International Committee on Organization and Policy. I testify here in support of the fiscal year 1999 Agriculture Appropriations. Our committee is particularly interested in several programs, including the Markets, Trade & Rural Development program under the National Research Initiative (NRI) and the National Needs Competitive Grants program under Higher Education.

These programs will contribute significantly to an increased U.S. capacity to compete in the global economy. The GATT, NAFTA and other international free trade agreements are designed to increase trade and investment flows between nations. I submit that they provide a compelling rationale for these programs.

As we all know, the world has witnessed radical transformations in recent decades. Mass communication technologies, transportation networks and the disappearance of major ideological cleavages in the world have led to greater interdependence in the world economy. The globalization of markets for agricultural products has been a major consequence of them.

The failure of centrally planned economies has increased the significance of market economies of the West. These economies, including ours, now form a global system through which agricultural products are increasingly moving. Furthermore, the nature of these products is rapidly changing from raw materials to value added products.

We currently export over thirty percent of our agricultural output. This represents a very significant contribution to the U.S. balance of payments. Furthermore, our agribusiness interests consider these markets to be critical to their future. The health of the U.S. food system, including the farm sector, will depend in large measure on how well we compete in overseas markets. Alabama farmers, food industries and consumers are increasingly aware of the significance of these trends. They are increasingly asking our universities to respond to the challenges represented by them. They are demanding from us the knowledge base and training that will help make them better participants. Our College of Agriculture at Auburn University has made globalization of its programs a priority objective.

Free trade agreements imply that production efficiencies, adding value to export products, and increasing the ability of our agribusinesses to participate effectively in international markets will be major determinants of successful competition. We need to strengthen science and technology and human capital development in ways which strengthen these factors. These investments must be part and parcel of the research, extension and higher education agenda.

Land grant universities, as partners with the U.S. Department of Agriculture, have been major contributors to the incredible success of our food system. Teaching, research and outreach products have ensured a steady flow of quality human capital and technology to this sector. However, the genius of the land grant university system, namely its focus on state constituencies, has greatly limited its scope of activity to their immediate, everyday concerns. Media and transportation dimensions of the technological revolution experienced by us now require that we give greater attention to broadening its focus to global markets.

The National Research Initiative and the National Needs Competitive Grants programs are designed to help us expand our capacity to increase production and marketing efficiencies, and to extend them to users in the food system. The Globalizing Agricultural Science and Education Program for America (GASEPA) agenda, which is sponsored by our Committee, focuses specifically on how to harness available land grant university resources, including those to be provided through the NRI and the National Needs Competitive Grants, to increase our capacity to compete in these

global markets. I would like to end my formal presentation by briefly reviewing the major components of the GASEPA agenda.

Under the GASEPA agenda, U.S. land grant universities will work with various agencies of the U.S. Department of Agriculture to jointly internationalize our staff and programs. We will seek ways to use existing program funds to promote these outcomes.

The GASEPA agenda also proposes to provide sustainable, core funding to initiate and to strengthen globally relevant and useful agricultural teaching, research and outreach programs at land-grant and other qualifying institutions. Specific objectives are:

—Enhancing global competitiveness of U.S. agriculture through human resource development;
—Development and dissemination of information about market, trade and business opportunities;
—Mutually beneficial collaborative global partnerships;
—Promoting trade through global economic development; and
—Promoting global environmental quality and stewardship of natural resources.

Access to these funds will be through a competitive grants framework, administered by an agency of the U.S. Department of Agriculture. This framework will ensure that quality standards are maintained and that program activities are integrated with those of other related initiatives.

Examples of types of activities that will be supported under the GASEPA agenda are those which will: increase the international content of teaching programs; provide university faculty and staff with cross-cultural, professional experiences in areas related to their expertise; increase the ability of faculty and staff to adapt agricultural technologies developed overseas for use in the U.S.; increase faculty, staff and student ability to support the marketing of U.S. agricultural products and services overseas; help U.S. agribusinesses identify overseas opportunities; and provide students in agriculture and related fields with study and work experiences related to international competitiveness.

The GASEPA agenda will enable U.S. land-grant colleges to extend instructional, technology and marketing outputs to clientele, including students and agribusinesses, in ways which will increase the competitiveness of U.S. agribusinesses in global markets. We are eager to serve our public. We are eager to address global issues that will become increasingly important to our future national prosperity.

Thank you.

PREPARED STATEMENT OF DR. MCARTHUR FLOYD, RESEARCH DIRECTOR, ALABAMA A&M UNIVERSITY, ON BEHALF OF THE 1890 RESEARCH DIRECTORS

Senator Thad Cochran, Chairman, and distinguished members of the Committee, The Association of Research Directors (ARD) strongly supports the budget recommendations for fiscal year 1999 submitted by the Budget Committee, Board on Agriculture, NASULGC. The top priorities recommended by the NASULGC for fiscal year 1999 are to strengthen the base programs for research, extension and higher education, and to sustain current high-priority initiatives and to mount a few new programs in much needed critical research areas. A modest increase of 5.4 percent in base funds for research is being requested. These programs represent the long-term commitment of Land-Grant Universities to maintain a stable research base including personnel and facilities in the food and fiber and agricultural and environmental sciences, and natural resources.

1890 Evans-Allen Research Program ($29,316,000)

We strongly support the recommendation for an increase of 5.4 percent in base funds for the Evans-Allen Program for the 1890 institutions in fiscal year 1999. These funds provide the primary and principal support to conduct basic and applied research to ensure a safe, economical and adequate food supply, promote a sustainable environment, conserve the natural resource base, and contribute to the improvement of the socio-economic well being and overall quality of life of diverse rural and urban populations. These funds also contribute to the development of professional expertise (especially, minority persons) in the food and agricultural sciences through focused programs.

1890 Capacity Building Grants Program ($10,000,000)

We strongly support the recommendations for funding the 1890 Capacity Building Grants Program at $10,000,000 in fiscal year 1999. This program is critical in enhancing teaching and research programs at the 1890 Land-Grant Colleges and Universities and in advancing partnerships with industry, USDA agencies and other in-

stitutions of higher education. This is a highly competitive program which helps to build greater capacity in research and teaching in food and agricultural sciences at these Institutions.

1890 Research and Extension Facilities Grants Programs ($12,000,000)

We strongly support the 1890 Extension and Research Facilities Grants Program at a funding level of $12,000,000. The facilities program enables the 1890 Institutions to develop state-of-the-art facilities and acquire needed equipment for scientific research and outreach for training of students.

Rural Economic and Social Development—1890 ($2,000,000)

We also strongly support the initiative for 1890 Institutions on Rural Economic and Social Development at $2,000,000 in fiscal year 1999 which is included in the Small Farm initiative for $4,000,000. Over 55 percent of the rural poor 97 percent of the rural black poor live in the South. Targeted research is needed that will specifically address the disadvantaged and underserved communities and families in the following areas: barriers to family and community development; incentives for new linkages and partnerships; infrastructure needs; business and job opportunities; enhanced development of human capital and leadership; use of natural resources for community development; and new markets for agricultural products.

Mr. Chairman, on behalf of the ARD, I wish to express our thanks to you and the distinguished members of the Committee for this opportunity to submit this testimony.

PREPARED STATEMENT OF TERESA MAURER, PROJECT MANAGER, NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY (NCAT)

Summary: I am offering testimony today in support of USDA's proposed $2 million appropriation for the ATTRA program.

Full text of testimony: Farmers, ranchers, agricultural information providers and other members of the agricultural community continue to seek greater and more convenient access to information on sustainable agriculture production and marketing practices. Since its inception as a unique public-private partnership in 1987, the ATTRA (Appropriate Technology Transfer for Rural Areas) program has responded to more than 118,000 requests for information from callers across the U.S. The program is funded through Rural Business-Cooperative Service (RBS) and is operated by the National Center for Appropriate Technology (NCAT). NCAT is a private, nonprofit organization, which provides information and technical assistance in the areas of sustainable agriculture, energy conservation, and resource-efficient housing. The USDA budget requests $2 million for the ATTRA program for fiscal year 1999, which we urge you to support.

Through a national toll-free telephone line, ATTRA receives requests and then provides written or electronic delivery of unique combinations of diverse sustainable agriculture resources. In answer to questions posed by a variety of farmers, ranchers, information providers, extensionists, state and federal agency staff and others, ATTRA synthesizes and summarizes innovative practices and research results. User requests cover a wide range of topics, including crop, livestock and horticultural practices, and may include aspects of production, soil fertility, pest management, enterprise additions, etc.

In addition to preparing materials on frequently requested topics, staff also research specialized questions from producers. Responses draw from studies, publications and experiences spanning the spectrum of hundreds of sources including: (a) individual, innovative farmers, extensionists and researchers from a national network that we have developed (b) grassroots organizations (c) specialized sustainable agriculture publications (d) electronic communications (e) funded research and education from a variety of agencies and programs inside and outside USDA. Much of this information is not readily available from a single source, so ATTRA helps link and provide keys to this information in a timely way. ATTRA also seeks to extend the reach of SARE, NAL, Integrated Farming Systems and Cooperative Extension, who often refer their clients to the ATTRA program.

ATTRA was initially authorized in the 1985 Farm Bill and was first funded in 1987. Compared with request levels around 4,000 per year (fiscal year 1989), program staff now respond to 18,000–22,000 requests annually. ATTRA has been level funded at $1.3 million for the last 7 years. We have seen increased interest particularly in: marketing methods for sustainably produced crops and animals (including organic production), pest management options, and farmer-generated, experience-based information. Our callers are more frequently seeking electronic or other round the clock access to ATTRA's resources and training materials.

Improved efficiency in request handling helped to meet a portion of the demand, but request volume continues to outstrip the gains made. While a Website was opened in fall, 1997, and increases some of ATTRA's capabilities, it also requires specialized skills to maintain, reformat or develop suitable new materials for that outreach method. Because many rural callers, and especially small and minority farmers, still have limited electronic access, ATTRA will remain committed to providing information on paper to caller's mailboxes or by using other technologies or outreach which does not require the caller to have expensive equipment or specialized computer knowledge. The recent report of the USDA National Commission on Small Farms (A Time to Act, January, 1998): (1) recognized the special value and accessibility of the ATTRA program, and (2) recommended a role for ATTRA in providing feedback to USDA on research and education needs of small farmers, and (3) recommended an annual funding level of $3 million.

However, at the present time, we ask support for the proposed USDA funding level of $2 million. It is the minimum required to meet demand for additional diversity and access for ATTRA's services. It would support a very modest staffing increase which we project would give us the capability to respond more effectively to an increased variety of topics and service requests. The Website has already enhanced exposure to ATTRA's work, with thousands of visits in the few months since it opened in September, 1997. However it will also clearly require more specialized attention to respond effectively to the requests and feedback that the Website is generating, both in calls and electronic responses. The program has also been severely understaffed for the last 4 years in the areas of: agronomy, pest management, marketing, general technical writing, and computer and information management support services. Questions that we receive now, compared to early years of the program, include more sophisticated questions from farmers and require a greater range and depth of expertise.

A small portion of the proposed increase would allow completion of upgrading in phone, addition of voice mail, and computer hardware and software. This would result in more diverse access for callers varying from those with no computer resources to educators and extensionists who may have both the computer access and ability to multiply ATTRA's information. It would also allow better organization and access to thousands of materials (include many collected nowhere else nationally) in ATTRA's resource center and response archives.

The program offers callers from across the US a unique, cost-free, 1-stop access point to information about ways to farm with innovative techniques and technologies that combine environmental and economic benefits. With recent changes in farm legislation, farmers want information on more diverse options for what they produce, how they produce it, and how they can add value and market their products. Farmers also continue to look for practices that help them keep more of their farming income by reducing production costs. The written materials provided by ATTRA's 25 staff members meet those informational needs and bring choices right to the mailbox or computer, which can help them make their own important farming and economic decisions.

We are convinced that ATTRA provides a national service that is very valuable to broadening the acceptance of more sustainable and profitable approaches to agriculture. We appreciate the past support that Congress has provided, which enables this unique service to continue to provide information that helps farmers with the many choices they face. We urge you to continue to support this work at the USDA proposed level of $2 million, and we pledge to continue to improve the efficiency of the program, as well as the quality and usefulness of information we offer to farmers.

PREPARED STATEMENT OF MARGARET S. MAIZEL, PRINCIPAL INVESTIGATOR, NATIONAL CENTER FOR RESOURCE INNOVATIONS

As ever, we appreciate this opportunity to provide testimony to the Senate Appropriations Subcommittee on Agriculture and Related Agencies.

The National Center for Resource Innovations (NCRI) was established in 1990 through a joint private/federal initiative in an appropriation to USDA's Cooperative State Research, Extension and Education Service (CSREES). The consortium now includes seven sites (including one added this year at the Southwest Indian Polytechnic Institute, Albuquerque, NM) and an administrative office in Rosslyn, Virginia. Each site in the consortium contributes unique expertise to this national program. NCRI capabilities include integration of large data sets in a Geographic Information Systems (GIS) framework from the national level down to the farm field as

well as weather analysis, land use planning, resource management at state and local levels, and support for public and private policy development.

THE MISSION OF NCRI

The mission of NCRI is to provide collaborative and innovative transfer of geographic information systems technologies to support local government and other public policy development and decision making.

NCRI FUNDING HISTORY, MATCHING FUNDS AND COST EFFECTIVENESS

In the past, NCRI has consistently requested $1.8 million annually for minimum program operations. Grants have been awarded from funds appropriated as follows: Fiscal year 1990, $494,000; fiscal year 1991, $747,000; fiscal years 1992 and 1993, $1,000,000; fiscal year 1994, $1,011,000; fiscal year 1995, $877,000; fiscal year 1996, $939,000; fiscal years 1997 and 1998, $844,000.

NCRI has matched federal funds or had to reduce program objectives. The total non-federal support generated for fiscal years 1990 to 1998 was in excess of $5,500,000. The total federal appropriated amounts for the same period were $8,600,000. In fiscal year 1997, NCRI prepared at the request of Congressman Joe Skeen, a cost-benefit study. Results showed that for every federal dollar invested, $7.40 in benefits through innovative projects was realized.

NCRI SITE EXPERTISE AND ACCOMPLISHMENTS

The advantage of the consortium of seven regional centers that makes up NCRI is that each site has unique expertise and shares technical support with other sites. In this way, projects are strengthened through shared resources and the experience needed to build complex and comprehensive information systems. Site-to-site technology transfer and networking build NCRI's overall capabilities, aids in problem solving and facilitates consistency.

JOINT ACTIVITIES (SEVEN SITES)

All of the NCRI sites plan to engage in two major activities this year: a Distance Learning Program at the Southwest Indian Polytechnic Institute site April, 7th and a Resources Technology Fair on Capitol Hill on April 21 in the House Science Committee Room. Congressmen and Senators are being invited to act as sponsors for the fair, which will include exhibits by the seven NCRI sites as well as by federal agencies and private sector companies who have been partners in technology implementation with NCRI sites.

NCRI-Great Lakes, University of Wisconsin-Madison, Madison, Wisconsin

The NCRI-Great Lakes project site is located at the Land Information and Computer Graphics Facility (LICGF) in the College of Agriculture at the University of Wisconsin. The Facility was instituted in 1993 to function as a research, teaching, and outreach resource in land and geographic information systems (LIS/GIS). Researchers at LICGF explore uses of LIS/GIS for local and regional land and resource planning to support social, economic, and environmental decision making processes.

During 1998 and 1999, NCRI-Great Lakes has established the following objectives:

—Conduct seminars for the Wisconsin Land Council to develop citizen-based land use planning and the use of Land Information Systems to facilitate such efforts.
—Work with rural governments to develop reliable and cost-effective access to LIS/GIS technology to address locally defined land-use and watershed management problems.
—Accelerate the use of GIS technology by governments with coastal zone jurisdictions.
—Update existing data to prepare the state of Wisconsin for the 2000 Census and subsequent redistricting.

NCRI-Chesapeake, Inc., Rosslyn, Virginia

NCRI-Chesapeake builds cooperative integrated information systems "from the nation to the neighborhood" with federal and state agencies, universities and others to provide new information for better decision-making. These systems focus first, on the farm, productivity and the farmers in their own very specific neighborhoods as related to natural systems and their socio-economic position in the landscape. NCRI-Chesapeake has established the following goals for 1998–1999:

—Conduct continuing research in the Northeast States, and in the Delmarva Peninsula in particular, of impacts of animal manure on water quality, evaluation of agro-ecoindices, and assessment of watershed priorities.

—Conduct expanded studies in North Carolina, the Washington-Baltimore metropolitan area, and other urban areas of the country regarding the impact of urban sprawl on ecosystems.
—Determine the effects of future land use planning on economic and agricultural resources, potential impacts on other natural resources.

NCRI-Northwest Central, Washington University, Ellensburg, Washington

NCRI-NW continues to concentrate on the local and regional resource issues of the Yakima Valley and eastern Washington. These issues include irrigation of agricultural lands, county planning needs, Native American interests, and the management of inter-mixed public and private lands. The site works in close cooperation with the faculty and staff of Central Washington University as well as the GIS lab.

NCRI-NW plans for 1998–1999 include:
—Work with the Natural Resources Conservation Service to speed the delivery of digital soils maps to GIS users, precision farmers, and others.
—Cooperate with USGS to complete digital hypsography (contour lines) for the state.
—Continued assistance to the Kittitas Reclamation District for data development and data exchange.

NCRI-South West, University of Arkansas, Fayetteville, Arkansas

NCRI-SW has been based at the University of Arkansas at Fayetteville since its inception in May of 1990. Through university support and hardware and software grants, the program has a fully equipped research, training, and outreach facility capable of demonstrating a wide range of software for geographic information systems, remote sensing, spatial statistics, and database management. In the fall of 1994, expansion of Center facilities was completed to include five state-of-the-art teaching and research laboratories, ten offices, and a library/reading room. A variety of advanced computer equipment now facilitates the center's teaching, outreach, and cooperative project capabilities. NCRI-SW continues to focus on technology transfer through training, the development of statewide GIS databases and representative projects demonstrating the cost benefits and efficiency of GIS technology.

NCRI-South West has proposed the following objectives among those to be achieved in 1998–1999:
—Provide technical support to the Arkansas Land Records Modemization Board as well as serving as a member of the Board.
—Participate with a consortium of private and public sector partners to initiate the Seamless Warehouse of Arkansas Geodata (SWAG) so that users will be able to access any selected area of the state with the data provided over the net in OGC Simple Features Format.
—In conjunction with the Natural Resources Conservation Service, develop a web accessible "County Soil Survey" that will provide information comparable to the traditional county soils survey publication.

NCRI-North Central, University of North Dakota, Grand Forks, North Dakota

NCRI-NC's interdisciplinary research and technology transfer programs are located and supported at the University of North Dakota Regional Weather Information Center. From this facility, NCRI-NC is linked to the UND Aerospace Scientific Computing Center which houses a CRAY 190. The resource issues in the region are related to the enhancement and protection of farming and ranching, which are principal contributors to the region's economy. The work performed by NCRI-NC and the Regional Weather Information Center has resulted in their being recognized by the Ford Foundation as a semifinalist in the 1995 Innovations in American Government Awards Program.

During 1998 and 1999, NCRI-NC has set the following objectives:
—Provide decision support to precision agriculture and other forms of farm management by providing GPS data and implementing a farm specific rainfall model derived from Doppler radar.
—Participate in flood recovery of the city of Grand Forks by providing technical assistance in the development of the combined Grand Forks City GIS system.
—Participate in the North Dakota Weather Network program.

NCRI-South East, South Georgia Regional Development Center, Valdosta, Georgia

NCRI-SE's program is an integral component of the South Georgia Regional Development Center—a regional agency that supports local governments across ten counties. NCRI-SE's primary objective is to encourage the use of geographic information for ecologically responsible decisionmaking in this primarily rural region. "Real world" presentations by NCRI-SE using actual local geographic data have proven to be an effective method of demonstrating the value of GIS. This, coupled

with the experience gained by NCRI-SE personnel from implementing GIS for local governments, has proven invaluable to government managers in the South East region. NCRI-SE also provides direct technical and Hands on. advice and training for any regional entities working in the GIS realm.

NCRI-SE's goals include:

—Demonstrate the value of GIS to local governments using information that applies directly to their own situations, using the existing regional database and GIS applications built by NCRI-SE.

—Provide leadership in the GIS development process by promoting local government cooperative agreements in order to increase involvement and defray costs, and to promote standards that allow simple transfer of GIS data among state, local and federal agencies.

—Continue to refine data and databases for regional wetlands.

NCRI-Native Americans, Southwest Indian Polytechnic Institute, Albuquerque, New Mexico

NCRI-SIPI is the newest of the NCRI sites, having been added in 1997. SIPI is a National Indian Community College, funded by the federal government. Nearly 50 percent of all American Indians live within a 500-mile radius of the school. SIPI's overall objective is to provide technology transfer through distance education in conjunction with the development of precision farming on the SIPI campus and on Indian reservation lands in New Mexico and southern Colorado.

For fiscal year 1999, SIPI has the following objectives:

—Undertake a pilot project to develop GIS curricula with the Southern Ute Tribe using distance learning telecommunications.

—Develop and begin the implementation of a precision farming demonstration project to be used as part of the GlS/GPS-Precision Agriculture technology transfer curriculum.

—Offer GIS and GPS training/short courses locally for tribal personnel.

CONCLUSION

The current level of funding for NCRI (fiscal year 1998) is $844,000. We request that the level of funding through USDA/CSREES be restored to $1.2 million for fiscal year 1999. This provides uniform funding levels for all seven NCRI sites, and allows NCRI-Native Americans American (SIPI) to join the NCRI consortium as a fully funded project site.

The NCRI Consortium appreciates this opportunity to provide testimony to the Senate Appropriations Subcommittee on Agriculture, Forestry, Nutrition and Related Agencies.

PREPARED STATEMENT OF GORDON MILLER, PRESIDENT, NATIONAL COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP) ASSOCIATION

Mr. Chairman and Subcommittee members, I am Gordon Miller, President of the National Commodity Supplemental Food Program (CSFP) Association. The Association of State and Local CSFP operators has worked diligently with the Department of Agriculture Food and Consumer Service to insure a quality supplemental nutrition assistance commodity food package program for mothers, infants, children and elderly men and women. The program, which was authorized in 1969, serves 400,000 individuals monthly in 19 states and the District of Columbia.

During fiscal year 1997 there were two significant steps forward:

—Revision of the food package to provide more nutrients and cheese with a budget-neutral effect on funding.

—A new Regulation for a combined caseload for Mothers, Children and Seniors which will give local and state agencies a better opportunity to fully use assigned caseload.

The President's budget for fiscal year 1999 requests $96 Million for CSFP. We ask that your subcommittee recommend $105 Million so that the CSFP may provide for:

—New states who already have approved state plans but no funds.

—Additional mothers, children and seniors on waiting lists in existing programs.

Again, Mr. Chairman and Subcommittee members, the National CSFP Association wants to thank the Subcommittee for its past support. It is our signal you recognize that CSFP is the most cost-efficient, nutritionally designed food package program of the food and Nutrition Service. The program uses foods purchased with wholesale dollars or donated foods, requires low administrative funds stretched by many volunteer labor hours and facilities, and reaches the most vulnerable mothers, children and seniors who otherwise would not receive nutrition assistance.

PREPARED STATEMENT OF W. RON ALLEN, PRESIDENT, NATIONAL CONGRESS OF AMERICAN INDIANS

INTRODUCTION

Good morning Chairman Cochran, Vice-Chairman Bumpers and distinguished members of the Appropriations Subcommittee on Agriculture. Thank you for the opportunity to present testimony regarding the President's budget request for fiscal year 1999 Indian programs and services. My name is W. Ron Allen. I am President of the National Congress of American Indians ("NCAI"), the oldest, largest and most representative Indian advocacy organization in the nation, and Chairman of the Jamestown S'Klallam Tribe located in Washington State. The National Congress of American Indians was organized in 1944 in response to termination and assimilation policies and legislation promulgated by the federal government which proved to be devastating to Indian Nations and Indian people throughout the country. NCAI remains dedicated to advocating aggressively on behalf of the interests of our 230 member tribes on a myriad of issues including the critical issue of adequate funding for Indian programs.

THE PRESIDENT'S FISCAL YEAR 1999 BUDGET REQUEST

Department of Agriculture

In 1996, Congress passed and the President signed into law the Federal Agriculture Improvement and Reform Act of 1996 (FAIR) (Public Law 104–127). This law provides new mandates for the Department of Agriculture's Rural Development Mission on infrastructure, housing, and business needs in remote areas. FAIR also recognizes the needs of tribal governments for capital and infrastructure and authorizes a 3 percent set-aside for tribal infrastructure, housing, and related rural development projects.

Mr. Chairman, as you well know, Indian country is very poor with the great majority of tribal communities characterized by severe unemployment, high poverty rates, ill-health, poor nutrition, and sub-standard housing. The availability and condition of reservation physical infrastructure is similarly lagging behind non-Indian communities. Indian communities lack roads and highways, electricity, potable water and other utilities, and most other physical infrastructure and this, in turn, serves as a strong disincentive to employers and investors who demand basic infrastructure prior to making investment commitments.

As a direct result, Indian people are suffering because they lack these basic necessities and also because the lack of infrastructure keeps reservations economies mired in poverty and hopelessness. The tribal set-aside in the FAIR Act could unlock critical resources to being the long-term rebuilding of sustainable tribal homelands.

In fiscal year 1999, the Administration proposes to give tribes more flexibility in how they use Department of Agriculture's rural development grants and loans for business and critical infrastructure businesses, a proposal NCAI fully supports. The fiscal year 1999 budget proposes $715 million for the Rural Community Advancement Program from which the set-aside to tribes is approximately $21.45 million. Securing adequate appropriations for these programs is the key to their success in Indian country. NCAI urges this subcommittee to ensure that these funds are appropriated.

CONCLUSION

Mr. Chairman, we urge the Congress to fulfill its fiduciary duty to American Indians and Alaska Native people and to uphold the trust responsibility as well as preserve the Government-to-Government relationship, which includes the fulfillment of health, education and welfare needs of all Indian tribes in the United States. This responsibility should never be compromised or diminished because of any Congressional agenda or party platform promises. Tribes throughout the nation relinquished their lands as well as their rights to liberty and property in exchange for these ongoing services as well as this trust responsibility. The President's fiscal year 1999 budget is a positive step towards acknowledging the fiduciary duty owed to tribes.

We ask that the Congress consider the funding levels in the President's budget as the minimum funding levels required by Congress to maintain these services and the federal trust responsibility. The consensus of Indian country is that the federal government's budgetary process has failed to provide for effective services and minimum to raise the living standards of Indian communities consistent with non-Indian communities. In order for federal government to reasonably expect tribal government to truly achieve the self-determination, self-governance and self-sufficiency

goals mutually identified by the federal government and the tribal governments will not be achieved unless meaningful increases are provided for Indian programs and services.

Mr. Chairman, this concludes my statement. Thank you for allowing me to present for the record, on behalf of our member tribes, the National Congress of American Indians' initial comments regarding the President's fiscal year 1999 budget.

PREPARED STATEMENT OF RUSSELL C. NOTAR, PRESIDENT AND CEO, NATIONAL COOPERATIVE BUSINESS ASSOCIATION

Mr. Chairman, members of the committee, we appreciate the opportunity to present testimony as you prepare to consider appropriations for the Department of Agriculture for fiscal year 1999. I would like to discuss the Grants for Rural Cooperative Development program and the centers for cooperative development that receive funding from that program; and I intend to offer some strong arguments for increasing funding for the Grants program.

The National Cooperative Business Association (NCBA) is proud of its role in assisting the creation of a network of rural cooperative development centers across the country. We know that Congress is equally as proud of its role in fostering a cooperative development support network throughout rural America. Congress and this Administration recognize the vital role that cooperatives play in providing economic opportunity to rural Americans.

The program I am referring to was originally authorized by section 2347 of the 1990 farm bill as a program of Grants for Technology Transfer and Cooperative Development. In fiscal year 1993, this committee began to provide funding for the program, and report language over the years has indicated your strong support for the concept of using this funding for the purpose of creating a network of centers for rural cooperative development.

NCBA's members, along with other supporters of cooperatives around the nation, joined together as the National Rural Cooperative Development Task Force to advocate for support for a national network of centers and to develop the linkages among the centers and between the centers and local partners to sustain the network's development. NCBA also launched the CLUSA Institute for Cooperative Development to coordinate our development efforts and focus resources on cooperative economic development. The CLUSA Institute is now working with ten regional centers providing vital technical assistance and support for the development of cooperative enterprises in rural America. The CLUSA Institute also signed a partnership agreement last year with USDA's Cooperative Services program to coordinate strategies to assist rural cooperative development.

In 1996, Congress demonstrated its strong commitment to the centers approach when it passed the FAIR Act, also known as the 1996 farm bill. The program is now called Grants for Rural Cooperative Development in section 747(c)(4) of Public Law 104–127. The program focuses on supporting "nonprofit institutions for the purpose of enabling the institutions to establish and operate centers for rural cooperative development." It is authorized to provide funding at $50 million per year. The new statutory language defines the goals of these centers as "facilitat[ing] the creation of jobs in rural areas through the development of new rural cooperatives, value added processing, and rural businesses."

With the support of funding received from the program over the past few years, the rural cooperative development centers we work with have demonstrated quantifiable results. Centers in different regions of the country have given crucial help to the formation of farmer cooperatives building value added processing facilities, community development credit unions, partnerships among cooperative financial institutions, flexible manufacturing networks, and cooperatives providing housing and child care for impoverished farmworkers.

This coming year, centers will be involved in replicating successes they have achieved and breaking new ground in areas where cooperative development is needed. The electricity industry is rapidly being deregulated in every part of the country. Consumer-owned rural electric cooperatives have provided reliable and affordable electricity to rural Americans since the rural electrification program began directing federal resources for them in the 1930's. Once again, a small federal investment can provide essential assistance to develop consumer-owned energy purchasing cooperatives so that Americans are able to provide themselves with access to electricity. Centers are providing the opportunity for people to own and control these cooperative businesses.

Other cooperative development projects include the formation of new value-added agricultural cooperatives, new child care cooperatives, and cooperative housing projects. Value-added agricultural cooperatives give farmers more of the consumer dollar. Child care cooperatives provide former welfare recipients and other low-income people the opportunity to reduce the cost of child care and give them control over how their child care facilities are operated. Cooperative housing gives seniors and others in rural areas the chance to save money on their housing and live in safe communities.

The President's budget request has proposed allocating $1.7 million to this program. This would represent four straight years of level funding at a very low level indeed. In fiscal year 1996, 87 proposals submitted for program funding qualified for approval under USDA's selection criteria. The total amount of funding requested for these meritorious applications was $13 million. Last year, fewer applications were submitted because of an unusually short application period. However, a Cooperative Value-added Program within the Fund for Rural America drew 104 eligible applications totalling $19.4 million. Only $1.1 million could be distributed to 18 of those worthy projects.

USDA's National Commission on Small Farms recently recommended that this program "be increased by $10 million annually up to $20 million." The Commission's report calls the program "one of the few that supports rural cooperative development at the grassroots level." The program is authorized to be funded at $50 million annually.

We urge this committee to do what over 100 organizations are urging Congress and the Administration to do: increase funding for this valuable program. Mr. Chairman, I ask that the letter signed by those organizations be included in the record of this hearing along with my testimony.

NCBA is a national cross-industry membership and trade association representing cooperatives—over 100 million Americans and 47,000 businesses ranging in size from small buying clubs to businesses included in the Fortune 500. Founded in 1916 and known for many years as the Cooperative League of the USA (CLUSA), NCBA's membership includes cooperatives in the fields of housing, health care, finance, insurance, child care, agricultural marketing and supply, rural utilities and consumer goods and services, as well as associations of cooperatives. NCBA's mission is to develop, advance, and protect cooperative enterprise.

PREPARED STATEMENT OF THE NATIONAL CORN GROWERS ASSOCIATION

We appreciate this opportunity to provide the Subcommittee with our views on the fiscal year 1999 agricultural appropriations bill. The National Corn Growers Association (NCGA) represents 30,000 corn growers in 47 states. For the fiscal year 1999 agricultural appropriations bill, the NCGA supports the Administration's budget request for increased funding for plant and animal genomics, especially the request for $10 million for the creation of a new, Food Genome, competitive grants program. The NCGA, also, supports the Administration's request for increased funding for ARS genomics research and increased funding for genomics under the National Research Initiative (NRI) competitive grants program. The plant component of these funds will be used for USDA's participation in the multi-agency National Plant Genome Initiative.

While many Federal agricultural programs are important to the Nation's corn growers, the National Corn Growers Association believes that the future of the corn industry is written in corn's genetic code. The NCGA believes that the most important appropriations issue for fiscal year 1999 is funding for coordinated, plant genomics research. Genomics consists of mapping, sequencing, and analyzing genomes to determine the function of genes. The complete genetic makeup of any organism is known as its genome.

In January 1998, the National Science and Technology Council issued an Interagency Working Group report on the National Plant Genome Initiative. The report stated that the time was right for the implementation of a comprehensive, five-year National Plant Genome Initiative to meet the major challenges that will face mankind in the 21st Century. In the transmittal letter accompanying the report, the President's science advisor, Dr. John H. Gibbons, stated the following:

> The timing of this initiative is critical, since our international private sector partners are moving forward aggressively. A significant public sector program . . . carried out in partnership with industry will ensure plant genome data and materials are openly accessible to all scientists. It is a critical step toward promoting future scientific breakthroughs in plant biology and their practical application.

To accomplish the short-term goals of the National Plant Genome Initiative that focus on building plant genome research infrastructure, the Interagency Working Group on Plant Genomes estimated that $400 million in funding was needed, over five years, to meet the anticipated needs of the Initiative. The Administration's budget request for increased funding for USDA plant and animal genomics will help to ensure that the short-term and long-term goals of the National Plant Genome Initiative are met.

The National Plant Genome Initiative will help scientists, geneticists, and plant breeders identify and utilize genes from corn and other economically significant crops that control important traits, such as nutritional value, stress tolerance, and resistance to pests. The far-reaching benefits of this Initiative include:

—Protection of U.S. interests and access to important biotechnology and gene patents;
—Revitalization of rural America due to a more robust agricultural sector;
—Expansion of plant-based renewable resources for energy and raw materials;
—Significant reductions in crop losses and reliance on pesticides through improved biological methods to control and alleviate serious industrial threats and targeted pests;
—Improved yields and reduced crop losses caused by adverse environmental conditions such as heat, drought, and salt;
—Improved nitrogen-use efficiency, thereby, limiting the potential for nitrates in the water supply;
—Reduced environmental problems confronted by livestock producers, such as modifying the digestibility of phosphorous in feed corn to reduce the amount of phosphorous that enters our ground water;
—Improved animal nutrition leading to healthier meat and increased meat productivity;
—Reductions in the occurrence of mycotoxin contamination by significantly improving resistance to fungal infection;
—Development of tailored hybrids with valuable specialty starches, oils, and protein content; and
—Reduced worldwide malnutrition due to higher yielding and more nutritious crops.

The National Plant Genome Initiative is critical to the long-term viability of U.S. agriculture. To compete in the global market, the U.S. must continually strive to efficiently and economically improve production capabilities—to maximize yield and combat serious threats from disease, pests, and climate changes—without harming the environment. Genomics research holds the key to achieving this goal.

The National Corn Growers Association urges you to provide increased funding for plant and animal genomics research at USDA to ensure that our growers have the tools to meet the challenges and demands of the 21st century.

We appreciate the opportunity to present our views and look forward to working with you.

PREPARED STATEMENT OF THE NATIONAL COTTON COUNCIL OF AMERICA

COTTON INDUSTRY FUNDING—BRIEF BACKGROUND ON REQUEST FOR FISCAL YEAR 1999

Boll Weevil.—The industry requests fiscal year 1999 funding which would allow APHIS to provide up to 30 percent federal cost share for the operation of the eradication program. The industry also requests sufficient funds so USDA's Farm Service Agency can provide up to $50 million in loans for boll weevil eradication activities in fiscal year 1999. We also request funding be made available on a no-year basis. The industry's request for funding and loan authority will fill needs resulting from operation and continued expansion of the highly successful boll weevil eradication program. The industry also renews its request that the Committee instruct USDA to collect and make available statistics on acreage planted to cotton to ensure producer assessments can be collected fairly and efficiently.

The accelerated plan for eradication of the boll weevil was initiated in fiscal year 1995. The plan calls for cost-share programs to be operated simultaneously in the Southeast, Mid-South and Texas-Oklahoma-New Mexico regions. In addition, the plan provides for completion of the eradication effort in Alabama/Middle Tennessee and Texas' Southern Rolling Plains zone.

Funding for fiscal year 1997 was reduced from $18.084 million to $16.209 million in part because of the discontinuation of the program in east Mississippi and the Lower Rio Grande Valley. Funding for fiscal year 1998 was maintained at $16.209 million. For fiscal year 1999, the industry requests sufficient funding be provided

to restore the federal cost share to as close to 30 percent as possible. The fiscal year 1998 appropriation allowed APHIS to contribute an average of approximately 10 percent cost share, however some areas did not receive any cost share. With declining prices and narrow margins, growers are struggling to finance the program. The 30 percent federal/70 percent grower cost share arrangement was critical to the timely completion and lasting success of the program in the Southeastern states and Arizona. Since 1997 producers have approved referenda to restart the program in east Mississippi, to initiate the program in two additional regions of Mississippi and Southwest Tennessee, to initiate the program in the Red River Valley of Louisiana along with Southwest Arkansas, to initiate the programs in South Texas/ Wintergarden and Texas' Rolling Plains Central zone. New Mexico and Oklahoma have passed referenda and plan to begin programs in the Fall of 1998. Arkansas producers in all but 4 northeast counties have passed a vote to begin eradication with Mississippi's Delta and north Louisiana. Referenda covering additional areas of Mississippi's delta and Louisiana narrowly missed achieving the necessary 2/3's approval and will be reviewed for possible revotes in the future.

To succeed, the program requires a highly coordinated program supplied with equipment and trained personnel. USDA/APHIS/PPQ, the federal action agency with unique expertise for conducting such programs, has been invaluable ever since the 1978 eradication trial in Virginia and North Carolina by providing leadership, experience, and direction to the Boll Weevil Eradication Program. Their involvement now is more important than ever as multiple overlapping programs are initiated.

Elimination of the boll weevil places U.S. cotton producers in position to be cost competitive with any other cotton producing country. A strong cotton economy means strong state and local economies with more jobs and an increased tax base. The program is credited with generating $12 in economic activity for every $1 expended. It has also been documented to significantly reduce the cost of production and improve producer income. The environmental benefit has been documented in the Southeast by reduction of insecticide use by 40–85 percent. With the introduction of worm resistant Bt cotton, elimination of the boll weevil takes on added significance—particularly in the Delta regions of Mississippi, Louisiana and Arkansas and in Texas.

Thanks to cooperation between regional Boll Weevil Eradication Foundations who coordinate program operations, and with APHIS, limited funds have been invested as effectively as possible. While the loan program initiated in 1997 to supplement the short fall in direct Federal cost share contributions has been helpful and is needed again in fiscal year 1999, some areas are under severe stress. In fact, some eradication zones are operating with little or no Federal cost share and minimal loan funds. Virtually all programs are operating with significantly less than the 30 percent Federal cost-share which was available to earlier program areas. According to calculations, the current average Federal share is approximately 10 percent.

There has been excellent cooperation from FSA in initiating and operating the loan program. It would be extremely helpful if the loan program could be available on a no year basis so that any unused authority will not be lost. We also request that the Committee increase the available loan authority for fiscal year 1999 since expanded operations in Tennessee, Louisiana, Arkansas, Texas and New Mexico are expected to begin in Fall of 1998.

The Committee included language in the fiscal year 1997 appropriations measure urging USDA to assist with collection of acreage data so collections of boll weevil assessments could be made effectively, fairly and at the least possible cost. As of March 1998, USDA has not advised the Foundations that it would assist with the collection of acreage data. The Foundations lack the necessary facilities and resources to carry-out this function and ask the Committee to renew its instructions to USDA to provide assistance to the Foundations in collecting data critical to the administration and collection of assessments.

Pink Bollworm Programs.—The pink bollworm is a serious economic pest in West Texas, New Mexico, Arizona and the southern desert valleys of California. California growers for more than two decades have joined USDA/APHIS in a cost share partnership known as the cooperative pink bollworm containment program. Through comprehensive cultural and biological controls, pink bollworm infestation has successfully been prevented in the San Joaquin Valley. Sterile moth releases are an essential component of this program. Use of bio-rational methods includes sterile adult moths, pheromone traps and cultural methods which allow control of the pink bollworm without use of pesticides. Over 6 million moths are reared and sterilized each day in Phoenix facilities owned by California producers. Equipment, methods and partial support for rearing and operations are furnished by APHIS.

Investments in new rearing capacity will provide opportunities for USDA/APHIS/ ARS, state organizations, and producers to demonstrate area-wide management of

pink bollworm infested areas by integrating genetically engineered Bt cotton, cultural controls, making disruption with pheromones and sterile moth releases. Eradication is feasible using this technology in a highly coordinated, area-wide basis. The Council's Pink Bollworm Action Committee has endorsed the area-wide approach, and is currently developing an action plan to be used to communicate to producers about the proposed area wide pink bollworm management program.

Funding for USDA/APHIS/PPQ pink bollworm programs has been cut by over 50 percent compared to fiscal year 1994 levels resulting in delays in completing area-wide demonstration programs in southern California. Demonstration of wide area control technology is essential before producers can consider expansion of the program into other infested areas in the U.S. Area wide management of the pink bollworm with maximum suppression, possibly eradication, is becoming a reality. The goal of reduced pesticide use, optimum use in Integrated Pest Management (IPM), and reduced production costs are within reach if the partnership between states, the Federal government and producers can be continued. California producers in the lower Colorado River Basin area will, in cooperation with USDA APHIS, California Department of Food and Agriculture, and California Cotton Pest Control Board, conduct a trial pink bollworm maximum suppression program including Bt cotton, cultural controls, pheromone treatments, and sterile moth releases during this growing season. Producers in other areas will carefully observe the results from this trial.

The industry requests that fiscal year 1999 base funding be maintained at fiscal year 1998 level of $1.069 million. If producers continue to request assistance for conduct, supervision and cost sharing for areawide pink bollworm programs, the industry will request an increase in funding likely beginning in fiscal year 2000.

Silverleaf Whitefly.—The whitefly is a cotton pest of significant importance, particularly in Arizona, California and Texas, causing yield, disease, grade and contamination losses for growers. Sticky cotton, caused by whitefly honeydew is a serious problem for textile mills who at the least impose price discounts and in some cases will refuse cotton originating in areas with whitefly infestation. The Council strongly supports funding the continuation and extension of USDA's Whitefly Research, Action and Technology Transfer Plan which calls for a multi-disciplinary approach consisting of basic research, biological controls, integrated pest management, plant breeding for resistance, and insecticide controls with expedited technology transfer.

Market Access Program (MAP) and Foreign Market Development (FMD).—The cotton industry has consistently employed a long-term export market development strategy. Cotton Council International, the overseas promotion arm of the U.S. cotton industry, is a participant in the Market Access Program (MAP) and Foreign Market Development Program (FMD). Activities carried-out under MAP and FMD have been responsible for increased export sales of raw cotton and cotton products including cotton textiles. The U.S. cotton promotions have not only increased sales, they have generated more than $2.50 in matching contributions for every $1 spent. In operating programs under MAP, the industry insists on the following: (1) purchases of U.S. cotton and textile products must be documented, (2) sales impact must be well-documented, (3) no funds are provided to foreign or domestic firms, (4) matching contributions must be documented, and (5) no funds may be used to promote exports to the United States.

Raw cotton exports now average over 8 million bales annually and approach $4 billion in value. Exports of value-added cotton products have quadrupled and add another $4 billion to the value of overall cotton exports—creating thousands of jobs. The cotton industry urges that $90 million be made available for MAP for fiscal year 1999. We also urge that FAS be provided sufficient funds so the FMD program can be operated at the same level in fiscal year 1999 as in fiscal year 1998. The FMD program is an important long-term component of a successful market development effort for U.S. agriculture. CCI utilizes FMD funds to conduct education activities which help build long term relations with potential customers for U.S. cotton and cotton products. The industry also strongly supports adequate funding so cover activities of FAS personnel who carry-out important export enhancement functions at headquarters and abroad.

Export Credit Guarantee Programs.—Congressional foresight in authorizing use of $5.9 billion for GSM–102 export credit guarantees and USDA's timely employment ofthat program has allowed U.S. exporters to preserve sales to Asia. Cancellation ofthese sales would have had a devastating effect on exporters and farmers. For fiscal year 1999, GSM–102 will again play a critical role in facilitating U.S. export sales.

Valued Added/Quality Cotton Textile Research.—The competitiveness of agriculture depends not only on efficient production, but value added processes as well.

ARS labs have been forced to sharply reduce support staff, equipment purchases, and scientist positions due to rising costs and shrinking budgets. The industry urges continuation of value-added quality oriented research at the SRRC in New Orleans and at Clemson University.

Germplasm Enhancement.—The United States cotton germplasm collection is maintained at the ARS Southern Crops Research Laboratory in College Station, Texas. This collection serves public and private researchers nationwide as they attempt to meet increasingly serious challenges for yields, quality and solutions to environmental problems.

The ARS has developed a long-range comprehensive plan for revitalizing the germplasm enhancement program at College Station. While we fully support the overall ARS plan, the most urgent need is for support of the germplasm enhancement and evaluation program for winter increases.

To meet crucial short term operational needs for the germplasm program, ARS has temporarily shifted funds for other high priority research projects.

Oilseed Processing and Quality Research.—The USDA ARS Southern Regional Research Center (SRRC) in New Orleans has a long history of research for adding value to commodities including improvements in processing and utilization of cottonseed and its products. In addition to its fiber research, the ARS has developed, in cooperation with the crushing industry, a set of goals for improving process efficiency, maintaining product quality and enhancing food safety.

Specifically, research at the SRRC is working in three areas important to cotton and other oil seeds. First, is research to remove gossypol, a naturally occurring component of cotton seeds which is toxic at high levels to some animals. Removing gossypol from cotton seed and its products is technologically feasible, however research is needed to determine optimum processes of removal. The ability to market a high quality protein product for animal consumption is a key ingredient to enhancing markets of U.S. cotton products at home and abroad.

Aflatoxin control is also an important part of the SRRC research goals. Eliminating food and feed risks of the mold which produces aflatoxin is a high priority for cotton, peanuts, corn, tree nuts and other crops. Pioneering research conducted by researchers in New Orleans is leading the way to solving this multi-million dollar problem of U.S. agriculture.

Finally, work to enhance processing efficiency while assuring environmental responsibility is the third component of the SRRC mission in oilseed utilization research. Developing new and novel approaches for extraction of oil while meeting new environmental objectives is important for cotton and other oil seed commodities.

We request that Congress continue to recognize the USDA/ARS work at the Southern Regional Research Center for its contribution to agriculture and ask that the unit continue to be funded at least the current level.

Plant Science Research.—Agricultural Research conducted by the in-house program of USDA's ARS and the State Agricultural Experiment Stations with CSREES support is essential for the long term viability of agriculture. While we are strongly supportive of the ARS and CSREES we also recognize the benefits of the basic research—sometimes at the molecular level—made possible by the National Research Initiative (NRI). The NRI is a key component of the USDA's research portfolio and complements other programs in the ARS and CSREES.

We appreciate your strong record of support for vital plant science research made possible through the NRI, the ARS and CSREES.

PM–10.—A variety of studies allege that agriculture is a major source of PM–10 emissions. The cotton ginning industry is already making significant investments to reduce emissions and develop air quality compliance plans. The research conducted by USDA is critically important to assist Sinners and producers in making cost effective decisions. We urge funding for CSREES' PM–10 programs be continued at not less that fiscal year 1998 levels.

CRP, WRP, EQIP.—The new farm bill extends authority for the operation of the CRP and WRP. It also authorizes a new program, EQIP, to provide assistance for projects designed to protect water, soil and related resources. We urge funding be made available at levels necessary to operate these important programs without threatening other important cotton specific programs.

FSA Offices.—The industry is concerned that the ability of FSA to deliver critical services could be impaired by further office closures and personnel reductions. USDA has already implemented a significant re-organization as a result of 1994 legislation. The cotton industry urges the Secretary to consult with all affected parties to ensure that further consolidation, closures and personnel reductions do not jeopardize the agency's ability to deliver services to farmers.

Ginning Labs (ARS).—The industry requests the Committee to urge ARS officials to provide sufficient funds to the ginning labs at Stoneville, Mesilla Park and Lub-

bock so the important work at these facilities can be continued and enhanced. Each lab conducts research which is important to gins and producers. Each lab has unique capabilities and care has been taken to ensure there is no duplication of effort. The fiscal year 1998 appropriations measure provided funds specifically to improve research capabilities at the Lubbock lab. We ask that language be included in the fiscal year 1999 legislation to ensure ARS continues to make these funds available to the Lubbock facility.

Office of Pest Management Programs.—NCC supported the role USDA was given when the new Food Quality Protection Act was passed. We were encouraged that the Department announced the creation of the Office of Pest Management Policy, but continue to be concerned that responsibilities under FQPA are not being met expeditiously enough to assure cotton producers do not lose access to important crop protection tools (such as the organophosphate insecticides) unnecessarily. The OPMP should be funded at the $2.6 requested and to assure the greatest efficiency all requirements, including the Integrated Pest Management Coordinators, should be coordinated through that office.

PREPARED STATEMENT OF THE NATIONAL DRY BEAN COUNCIL

NDBC EXECUTIVE SUMMARY

Phaseolus beans are a unique short season, high value food crop that niche will into shorter production seasons of the northern and intermountain states, providing vital alternatives to growers where crop options are limited. Dry beans are grown on 2M acres with an annual production of 32M hundred weight in 1991 valued at $650M. Snap beans, both processed and fresh market, are produced on 300,000 acres with an estimated value of $200M.

Beans offer the consumer a healthy, tasty inexpensive food choice as either dry bean seed or green bean pods (snap beans). Dry beans are a protein rich source of complex carbohydrates and fiber, available in a variety of canned and dry products differing in color, size, shape, and flavor. Snap beans are rich in vitamins and minerals but low in fat and calories. Clinical studies have documented that the soluble fiber of dry bean seed can reduce serum cholesterol, and the National Research Council suggests that beans will be the fiber food of the 1990's. Beans are currently endorsed by the American Heart Association, the American Cancer Society, and the American Diabetes Association. Sixty percent of the U.S. dry bean crop is processed as canned baked beans with a value of $900M. Currently 40 percent of U.S. production is exported, with certain commercial classes grown exclusively for export. Their value as an acceptable protein staple in famine relief is being recognized.

The research to improve beans is achieved through a highly integrated system involving state, federal, and industry scientists. Currently states furnish 24 scientist years (SY's) and the federal Agricultural Research Service (ARS) furnishes 5 SY's. Industry contributes very significantly to snap bean research, but it is also actively involved in dry bean improvement.

Beans need to be improved in three primary research areas: pathology, quality genetics, and biotechnology, if they are to remain a viable crop alternative and industry in the 20 production states. The research must remain multidisciplinary, occur across geographic areas, and continue to foster collaboration among states, ARS, and industry. Three critical USDA-ARS positions involved in two of the primary research areas; bacteriology (E. Lansing, MI), culinary and canning quality genetics (E. Lansing, MI), and fungal pathology (Beltsville, MD); need additional funding. A new ARS position, located in the Plains states, focusing on molecular technology for bean improvement would address the third research area.

To achieve these critical research goals, the National Bean Research Task Force recommends:

1. No further reduction in current level of ARS support to bean research.
2. Maintain the current ARS bean vieral pathology position at Prosser, WA.
3. Appropriate an additional $80,000 in fiscal year 1999 for the under funded ARS bean fungal pathology position at Beltsville, MD.
4. Appropriate an additional $300,000 in fiscal year 1999 for the ARS Sugar Beet and Bean Research Unit, Michigan State University, East Lansing, MI.

Implementation of these recommendations would be a positive commitment to the future of bean research and the bean industry in the U.S. It would create more cooperation between federal, state, and private sections in their goal towards bean production improvement and utilization. The ultimate beneficiaries would be the American consumer with a reliable economic and nutritional food source and the American taxpayer with positive returns on balance of trade.

STRATEGIC PLAN FOR U.S. BEAN RESEARCH

Dry & Snap bean (Phaseolus vulgaris L.) are versatile short season, high value food crops that niche well into shorter production seasons of the northern and intermountain states, providing vital alternatives to growers where crop options are limited. Beans offer the consumer a healthy, tasty and inexpensive food choice as either low fat, low calories vitamin/mineral rich green bean pods or as a protein rich source of complex carbohydrates and fiber in a variety of canned and dry bean products differing in color, size, shape, and flavor. Clinical studies have documented that the soluble fiber or pectin content of dry bean seed has potent effects in the prevention and treatment of chronic medical conditions such as cardiovascular disease, diabetes mellitus, and obesity, hypertension, cancer and diseases of the digestive tract. Beans are currently endorsed by the American Heart Association, the American Cancer Society, and the American Diabetes Association. The beans are touted by these Agencies as the fiber food of the 1990's. The canning and freezing industry for both seed and pod types is diverse and located across the country offering employment outside the 20 major production states. The same processing industry which cans over half the dry bean crop as beans in either clear brine, sauce with pork, or chili has seen an increase in production in the last 10 years of 10 million cases. This volume represents an increase of $160 million to a current value in excess of $900 million.

Production:

Phaseolus dry edible beans are planted on approximately 1.5 million acres (1.1–2.6) in the U.S. Production fluctuates around 26.7 million hundred weight (cwt) annually, ranging from 19 million cwt in 1988 to over 32 million cwt in 1990, 1991, and 1995. On-farm value of this crop ranges from $350 to $700 million, depending on the season and price. The major production states ranked in order of acreage are: ND, MI, CO, NE, CA, ID, MN, WY, WA, NY, and KS. Ten dry bean commercial classes are produced in the U.S. and these are differentiated by color, size and shape of the bean.

In addition to production of phaseolus dry beans, green bean, or snap bean production occurs in several regions of the U.S. (approximately 220,000 acres), with an estimated value of $110M annually. States leading in snap bean production for processing are WI, OR, IL, MI, NY and ID. Snap beans for fresh market are grown primarily in FL, with smaller acreage in NJ, AR, and TN. Snap beans for fresh market are grown on approximately 80,000 acres nationwide with an additional value of $80 million annually.

Utilization and Exportation:

Approximately 60 percent of the total U.S. dry bean production is consumed nationally. Over 90 percent of the navy bean crop is processed as canned baked beans, while only 20 percent of the pinto bean market class is processed as a canned food. Dry bean consumption has increased from 5.7 to 7.2 lbs since 1984. This represents a 26 percent increase which is largely due to the recognition of the food and health value of beans.

A large share of the U.S. dry bean production is now targeted at export markets. Exports peaked in the early 1980's at over 12 million cwt. Currently, 40 percent of the U.S. production is exported with certain commercial classes grown exclusively for export. Cultural preferences in certain export markets for specific commercial classes of dry bean allows for diversification of U.S. dry bean agricultural production. Bean exports have played an important role in reducing the balance of payment deficit the U.S. suffers in world trade. Bean exports are becoming increasingly important because they are an indispensable protein source in Latin America and many developing countries particularly those in East Africa. Their value in famine relief in these countries is vital. The array of seed types currently grown in the U.S. makes beans an important choice to meet the energy and protein needs of estimated 21 million people at risk of death from starvation and disease in Central Africa.

CURRENT SCOPE OF U.S. BEAN RESEARCH

A major strength of the U.S. economy is its agricultural production. Stable U.S. agriculture production helps maintain a vibrant economy because food costs to consumers can be kept low yet still profitable to the producer. In addition, agricultural exports contribute substantially to reduce trade deficits. Continued U.S. dominance in agriculture will require major efforts to improve both crop productivity and quality while stabilizing or improving the physical environment. This process will allow U.S. agriculture to supply both domestic and world markets with affordable, high quality products and preserve precious natural resources for future generations.

These efforts can only be accomplished by investing in strong agricultural research technologies. Beans can only continue to be a vital part of the U.S. agricultural economy if research to keep them competitive with other commodities continues.

The number of state and federal scientist years (SY's) devoted to bean research in the U.S. in all disciplines is approximately 27 (20 SY's—dry beans, 7 SY's—snap beans). The specific locations of the larger programs are shown on the attached table, along with the agencies involved, SY's, and primary research emphasis at each location. A network of federally-supported USDA positions were established through the Agricultural Research Service (ARS) in the 1920's to support both public and private programs dedicated to dry bean and snap bean research. The ARS research mission for beans is to solve specific high priority problems of a national scope. A national research mission cannot be addressed by any single Agricultural Experiment Station. Moreover, since the bean industry is regionalized, ARS is in a better position to develop the necessary research teams to address problems that extend far and beyond state and regional boundaries. The national leadership extended by ARS scientists in areas of pathology, germplasm maintenance and enhancement and food quality genetics has strengthened the entire bean industry nationally. The present national bean research effort is operating at a minimal level but is effective because of the unique collaboration among state, federal and industry partners, fostered in part by the Western Regional W–150 project and nurseries and the Phaseolus Crop Advisory Committee.

A National Bean Research Task Force (NBRTF) has been formed to identify needs and concerns within the research community and to make recommendations to correct the deficiencies. The task force recognizes and appreciates the continued federal support for the ARS bean research positions at Prosser, WA; Beltsville, MD; and Mayaguez, PR, and for the increase in funding for the ARS food quality genetics position at E. Lansing, MI, but NBRTF is concerned by the lack of critical research areas of bean pathology. New and more virulent strains of bean pathogens have made a major onslaught in several bean production areas. There is critical need for research to characterize the new pathogens and develop strategies for resistance in the plant.

The NBRTF requests that the National Dry Bean Council (NDBC) lobby for support for federally supported research programs which are currently under funded and for the creation of a new position to solve critical problems caused by foliar, bacterial and fungal pathogens.

USDA-AGRICULTURAL RESEARCH SERVICE BEAN RESEARCH WORKERS AND FACILITIES

Goals and Recommendations for fiscal year 1999:

The National Dry Bean Council (NDBC) is urging Congress to approve funding in fiscal year 1999 for the USDA Agricultural Research Service (ARS) Plant Science Program that increases funding from fiscal year 1998 levels to the $300,000 required by ARS to fund a CRIS project. This will enable the ARS to provide adequate support for these bean scientists.

Specifically, the NDBC is recommending Congress address the following priority needs in bean research.

Operations Budget:

1. Maintain the current ARS bean viral pathology position at Prosser, WA with the $300,000 level of funding required by ARS to maintain a viable CRIS project. This position will enable ARS to effectively conduct research on common bean virus problems and resistance breeding and expand activities on bean root rots and allow ARS to address critical needs pertaining to disease resistance in the major bean seed production area in the U.S.

2. Appropriate an additional $80,000 in fiscal year 1999 for the under funded ARS bean fungal pathology position at Beltsville, MD. The appropriation will bring the funding of this position up to the $300,000 level required by ARS to maintain a viable CRIS project and enable the scientist to effectively conduct his research on bean rust pathology and genetics and expand activities on bean golden mosaic virus recently introduced into the U.S. and allow the ARS to successfully refill the position upon the retirement of the scientist.

3. Appropriate an additional $300,000 in fiscal year 1999 for the ARS Sugar Beet and Bean Research Unit, Michigan State University, East Lansing, MI to correct a critical federal need in bean pathology, particularly in the area of foliar bacterial and fungal pathogens namely common blight, halo blight, bacterial brown spot, anthracnose, and white mold disease pathogens. The appropriation will enable the hiring of a bean bacteriologist/microbiologist to conduct the needed work pursued

formerly by the late Dr. Saettler in the area of bean pathology. This critical position has been vacant for several years.

Background:

A well-balanced approach to the nations's bean research needs requires the maintenance of a team of ARS bean research workers in diverse disciplines including genetics, germplasm enhancement, germplasm evaluation, pathology, quality, and molecular biology. In order to maintain an adequate team of ARS bean research workers, it is important that ARS research workers presently engaged in bean research not be redirected to other crops and that vacancies created by retirements and deaths be filled and these programs maintained for bean research.

During the period from 1970 to 1990, the number as USDA-ARS bean research workers declined substantially, from 13.0 to 5.0 positions, a decrease of 56 percent. This decline severely hampered the ability of ARS to meet national bean research needs, and the SAES to meet state bean research needs.

The total ARS budget increased by 67 percent from fiscal year 1980 to fiscal year 1990 while the bean appropriation remained constant at just under $1.6M. Total bean appropriations as a percent of total ARS budget in fiscal year 1980 was 0.43 percent which dropped to 0.25 percent by fiscal year 1990.

Unfortunately, the number of ARS bean researchers is again on the decline, due to the untimely death of Dr. Saettler in East Lansing, MI and the impending retirements of incumbents at the USDA, Prosser, WA and Beltsville, MD facilities. Action by Congress is needed to restore the national ARS bean research team to a level that can meet the nation's bean research needs.

In a real sense, the bean industry (dry and snap beans), although vitally important in specific other geographic regions, does not have the resources of the major crops to establish pathological or basic mission oriented expertise in every region where beans are grown. The USDA can mend this void by maintaining the vital network of scientists currently working and dealing with important regional pathogens, problems and opportunities which are of a national importance.

USDA/ARS BEAN PATHOLOGY RESEARCH POSITION, PROSSER, WASHINGTON

The ARS BEAN Project at Prosser, Washington has been long standing with a presence under the legacies of D.W. Burke and M.J. Silbernagel. Under the leadership of these scientists, programs were developed to study the pathogenic variability of common bean mosaic virus (BCMV) and the introgression of diverse resistance genes into snap and dry bean germplasm, and the development of screening techniques for germplasm enhancement of root rot complex pathogens. The ARS Prosser, WA bean project has released over 10 snap bean lines and 18 dry bean lines in six distinct market classes. A number of the dry bean lines have become successful dry bean varieties in the West and Intermountain states (CO, ID, and WA) and the upper-Midwest (ND). The dry bean varieties developed by ARS, Prosser, WA have generated about $1 billion in income to farmers in the Pacific NW over the past 20 years. Othello pinto bean is grown on about 50 percent of the pinto acreage in the west and intermountain region and has generate $68 million revenue in the state of Idaho in the last 5 years. The ARS Prosser, WA bean project is currently under the leadership of Dr. Phillip Miklas who in addition to screening for root rot and introgressing genes form diverse germplasm, is conduction basic genetic studies on the resistance to different strains of BCMV, bacterial blight, rust and white mold. Mr. Miklas has developed effective cooperative research efforts with ARS and SAES scientists at several locations in the U.S. and Puerto Rico, and commercial plant breeders in CA and ID. Over 90 percent of the foundation and certified bean seed (dry and garden) is produced in California, Washington and Idaho. The ARS bean project at Prosser, WA has saved the Western bean seed industry considerable sums of money that could have been lost to disease epidemics. Over the years the facilities at Prosser, Washington have evolved to a point where there is an excellent infrastructure in which dry bean disease and germplasm enhancement research is conducted productively, efficiently, and has garnered a wide customer base. A rapport has been established with this customer base that is extremely supportive of ARS research efforts. In addition, nurseries have been established that facilitate long term research on the complex of bean root rot organisms and curly top virus.

Recommendation:

In order to meet the President's budget requirements for ARS in fiscal year 1998, the Vegetable & Forage Crops production Research unit has been slated for closure. Under this plan, there is talk of moving bean research to Pullman, WA. The NDBC calls on ARS to maintain bean research at Prosser, WA and fund this project at $300,000, the ARS guideline for programs. Prosser is near the bean production area

and several long term nurseries have been established at or near Prosser to conduct bean pathology research. Many of the facilities at the Prosser Station have been developed to conduct bean research and are highly suitable to conduct the "cutting-edge" research that is fundamental to Dr. Mikias' CRIS. There are sufficient greenhouses to conduct the genetic introgression work and disease screening efforts.

The NDBC thinks its at a "water shed" in regards to federal support for bean research. Over the years ARS bean research positions have eroded to the point the NDBC wonders whether a critical mass of federal scientific expertise exists in the USA to conduct the type of research vitally needed to keep our industry healthy.

The NDBC urges Congress to maintain this vital ARS position and insure funding at $300,000 in fiscal year 1999 for this position.

USDA/ARS BEAN FUNGAL PATHOLOGY RESEARCH POSITION, BELTSVILLE, MARYLAND

Dr. J.R. Stavely, full-time ARS Research Plant Pathologist at Beltsville, devotes 100 percent of his research effort to the study of fungal pathogens attacking beans. Historically, Dr. Stavely has studied the foliar fungal pathogen causing rust disease in dry and snap beans. Dr. Stavely has developed important technologies for introgressing rust resistant genes into adapted and useful germplasm. He is also studying the new viral disease, Bean Golden Mosaic Virus, introduced in 1993 in South Florida. This disease has the potential to "wipe-out" the snap bean industry in Florida.

This highly productive ARS project has released 43 processing and 15 fresh market snap beans and 24 dry bean germplasm lines in three market classes. Research has focused on the introgression and pyramiding of resistance genes into both snap and dry beans as the most effective control of the variable rust pathogen. This long-term germplasm enhancement project involves identification of novel sources of resistance present in the USDA Plant Introduction collection, incorporation of these resistance genes, both individually and as groups, into snap bean and several dry bean market classes, and field evaluation of elite material in major production areas. In addition, basic plant pathological studies on the epidemiology and genetics of the rust fungus are conducted. The current project leader cooperates effectively with other USDA scientists, SAES researchers in at least nine states, and commercial plant breeders. This position serves the national needs for bean research in the area of fungal pathogens attacking beans and provides leadership to SAES and industry and snap bean breeding efforts.

Dr. Stavely's position is currently under funded, with a major portion of the funding utilized for salaries and greenhouse rental, leaving very little for research operating costs. An increase appropriation of $80,000 is needed to enable Dr. Stavely to effectively conduct his research, by bringing his CRIS into line with the $300,000 level of funding required by USDA.

Recommendation:

The NDBC calls on ARS to maintain the program in bean rust pathology germplasm enhancement research at Beltsville, MD and expand the program into anthracnose disease pathology and study the bean golden mosaic virus disease. Increased funding to current ARS level of $300,000 per year would allow this project to perform at optimum efficiency to develop improved rust, anthracnose, and bean golden mosaic resistant germplasm lines. An increased emphasis on the genetics of pathogen virulence will offer insights on the development of strategies needed to obtain stable rust and broad based genetic resistance to variable fungal and viral pathogens.

The NDBC urges Congress to appropriate an additional $80,000 in fiscal year 1999 for this position to bring the funding level to the $300,000 required by ARS to maintain a CRIS.

USDA/ARS BEAN PATHOLOGY RESEARCH POSITION, EAST LANSING, MICHIGAN

There is a urgent need to create a new position in bean pathology at E. Lansing, MI recognizing that an increase in bacterial diseases is negatively affecting bean production in the Midwest and intermountain areas. An ARS Plant Pathology position addressing national problems caused by foliar bacterial pathogens was closed-out in 1992 due to the untimely death of then incumbent (Dr. A.W. Saettler). There are no funds to "backfill" this position. Dr. Saettler worked to determine the molecular and genetic basis of host and non-host resistance to the bean common bacterial blight pathogen, *Xanthomonas campestris* pv. *phaseoli*, develop molecular and immunological diagnostics to determine the epidemiology and population biology of common and halo bacterial blights, and design alternative control strategies, includ-

ing biological, chemical, and cultural practices that will complement the move toward sustainable agricultural practices.

Dr. Saettler was an international expert on foliar bacterial pathogens of beans. he was the only bean pathologist in the USA (either SAES or Federal) that had an active and comprehensive research program on foliar bacterial pathogens of beans. Dr. Saettler's research contributed positively and significantly to several of today's highest national priorities as established by the National Research Council. In that position at E. Lansing, Dr. Saettler contributed to the development of 17 dry bean cultivars in five major market classes and he actively cooperated with other state and private bean research programs. The bean research community needs a pathologist working full time on foliar bacterial pathogens. The work could best be done by ARS because of the national scope of the problem. This position must be funded at the $300,000 level to meet ARS guidelines for CRIS positions.

Recommendation:

The NDBC calls on ARS to create a new position in bean pathology at East Lansing, MI, at the level of funding commensurate with ARS guidelines. A qualified scientist should be recruited to fill the bean bacteriology position as soon as possible.

The NDBC urges Congress to appropriate an additional $300,000 in fiscal year 1999 for the creation of the new position.

LOCATION OF DRY AND SNAP BEAN PROGRAMS, SCIENTIST YEARS (SY) INVOLVED, AND KEY WORDS FOR MAJOR RESEARCH AREAS

Location	Agency	SY	Major research areas
Dry Beans:			
Beltsville, MD	ARS	0.5	Pathology, Rust Variability.
Davis, CA	State	2.5	Breeding, Mapping, Agronomy, Pathology.
E. Lansing, MI	ARS	1.0	Quality Genetics State.
	State	1.5	Breeding, Processing Quality, Agronomy.
Fargo, ND	State	3.0	Breeding, Pathology, Quality, Molecular.
Ft. Collins, CO	State	2.0	Breeding Pathology.
Gainesville, FL	State	0.4	Molecular Mapping.
Ithaca, NY	State	0.4	Processing Quality.
Lincoln, NE	State	2.0	Breeding, Pathology.
Madison, WI	State	0.3	Pathology, Molecular.
Mayaguez, PR	ARS	1.0	Germplasm Enhancement State.
	State	1.5	Breeding, Genetics, Pathology.
Pullman, WA	ARS	0.4	Germplasm Collection State.
	State	0.3	Nutrition.
Prosser, WA	ARS	0.5	Pathology, Breeding.
Scottsbluff, N. Platte, NE	State	0.7	Agronomy, Pathology.
St. Paul, MN	State	0.4	Genetics, N-fixation.
Twin Falls, ID	State	1.5	Breeding, COB Nursery, Pathology.
Snap Beans:			
Beltsville, MD	ARS	0.5	Pathology, Rust Variability.
Charleston, SC	ARS	0.5	Breeding, Adaptation Nursery.
Corvallis, OR	State	2.0	Genetics, Interspecific, Breeding.
Gainesville, FL	State	1.2	Breeding, Pathology.
Geneva, NY	State	1.0	Breeding, Genetics, Pathology, Mapping.
Madison, WI	State	1.0	Breeding, Molecular.
Prosser, WA	ARS	0.5	Breeding, Pathology.
St. Paul, MN	State	0.4	Genetics.
Total	ARS	4.9	
	State	22.1	

PREPARED STATEMENT OF THE NATIONAL EASTER SEAL SOCIETY

EASTER SEAL RECOMMENDATIONS FOR USDA AGRABILITY PROGRAM FISCAL YEAR 1999 APPROPRIATIONS

The National Easter Seal Society appreciates the opportunity to report on the notable accomplishments of the USDA Cooperative State Research, Education, and Extension Service (CSREES) AgrAbility Program and recommend that funding for the AgrAbility Program be increased to $4.6 million in fiscal year 1999.

The AgrAbility Program is an essential, unduplicated, hands-on resource for farmers, ranchers, and farmworkers with disabilities. It is the only USDA program dedicated exclusively to helping disabled agricultural producers. It demonstrates the value of public-private partnership by securing donations of funds, talent, and materials to magnify the impact of a modest federal investment. Small, but damaging, reductions in funding over the past two years resulted in a fiscal year 1998 appropriation of $1.91 million, down from $2.0 million in 1995.

Your colleagues on the Agriculture Committee expressed strong bipartisan support for this important program in the "Agricultural Research, Extension, and Education Reform Act of 1997" that is currently in conference. The Committee included language, that while strongly supportive of the work of AgrAbility, expressed dismay at the increased waiting lists, strain on staff members, and unserved states that still seek funding every year and are unable to offer AgrAbility services due to funding limitations. In the 1990 Farm Bill, a funding floor of $150,000 per state was set to assure that the state programs were successfully implemented. However, because funding has not approached the $6 million authorized level, state projects have been funded at only $85,000 per state. In the reauthorization, the Committee reaffirmed a commitment to that $150,000 per state floor, and Easter Seals strongly supports the need to fully fund state programs to assure that they continue to be effective for farmers with disabilities. Without a concurrent increase in appropriations, fully funding state projects at $150,000 per state would result of a loss of almost half of the existing AgrAbility projects. The fiscal year 1999 request of $4.6 million would bring all current states up to the $150,000 level and would allow seven currently unserved states to implement AgrAbility programs.

DISABILITY & AGRICULTURE

Agricultural production is one of the nation's most hazardous occupations. Each year, approximately 200,000 people working in agriculture experience injuries that limit their ability to perform essential farm tasks. Tens of thousands more become disabled as a result of non-farm injuries, illnesses, other health conditions, and the aging process. Nationwide, approximately 500,000 agricultural workers have physical disabilities that prevent them from performing one or more essential farm tasks.

For many of these individuals, the presence of a disability jeopardizes their rural and agricultural futures. Rural isolation, a tradition of self-reliance, and gaps in rural service delivery systems frequently prevent agricultural workers with disabilities from taking advantage of growing expertise in modifying farm operations, adapting equipment, promoting farmstead accessibility, and using assistive technologies to safely accommodate disability in agricultural and rural settings. Yet, with some assistance, the majority of disabled agricultural workers can continue to earn their livelihoods in agriculture and participate fully in rural community life.

AGRABILITY'S ROLE AND RECORD OF SUCCESS

The AgrAbility Program was established under the 1990 Farm Bill in response to the needs of farmers with disabilities. The Farm Bill authorizes the Secretary of Agriculture to make grants to Extension Services for conducting collaborative education and assistance programs for farmers with disabilities through state demonstration projects and related national training, technical assistance, and information dissemination. Easter Seals is proud to be a partner with Purdue University's Breaking New Ground Program in providing the national training and technical assistance portion of AgrAbility. Thousands of people in states with and without state AgrAbility projects are aided through this initiative. For example, in New Mexico, 38 farmers and agricultural and disability professionals have received direct assistance and information on farming and disability in 1997 from the national project.

AgrAbility combines the know-how of Extension Service and national disability organizations to provide people with disabilities working in agriculture the specialized services that they need to safely accommodate their disabilities in everyday farm operations. AgrAbility received strong bipartisan support during the 1996 Farm Bill reauthorization, and was extended through fiscal year 1997. The $6 million author-

ization level for AgrAbility was continued and is expected to be included in the current reauthorization of the USDA-CSREES.

Under the statute, state and multi-state AgrAbility projects engage Extension Service agents, disability experts, rural professionals, and volunteers in offering an array of services, including: identifying and referring farmers with disabilities; providing on-the-farm technical assistance for agricultural workers on adapting and using farm equipment, buildings, and tools; restructuring farm operations: providing agriculture-based education to prevent further injury and disability; and, upgrading the skills of Extension Service agents and other rural professionals to better promote success in agricultural production for people disabilities.

In 1997, USDA received an allocation of $1.91 million to support eighteen projects in nineteen states: Idaho, Illinois, Indiana, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin. The 1998–1999 grant cycle is nearly complete and USDA will be announcing the list of funded states for this year within the next two weeks. Easter Seals understands that the USDA received applications from twenty states for the fourteen available AgrAbility project slots in the 1998 grant cycle.

AgrAbility provides customized assistance to farmers, ranchers, and farmworkers with disabilities and their families. The nature and degree of assistance depends on the individual's disability needs and agricultural operation. For example:

Kenneth Stennett, a 45-year-old poultry and beef farmer from Waynesboro, Mississippi, has paraplegia due to a spinal cord injury two years ago. He was unable to use many of his farm buildings and equipment. The Mississippi Department of Rehabilitation Services referred Kenneth to the newly formed Mississippi AgrAbility project. Project staff are now providing support to help make his farm accessible. A major problem for Kenneth was his inability to use his workbench or hand tools to perform general maintenance activities. AgrAbility staff organized a community workday with the Cattleman's Association to recruit volunteer carpenters who lowered his workbench and made other changes to make his shop accessible. AgrAbility staff also referred him to the T.K. Martin Assistive Technology Center to get information on modifications for his hand tools. AgrAbility staff are also working with local limestone dealers to fill areas of the farm terrain with crushed limestone to enable Kenneth' to maneuver his wheelchair more easily and safely. Finally, AgrAbility worked with Kenneth to locate a padded seat with armrests and a seat belt for his tractor so that he would be more stable while driving it, and to prevent pressure sores. Kenneth is paying for many of these modifications himself, so AgrAbility staff helped him develop a comprehensive list of needs and prioritize these needs and modifications to make the best use of his resources.

A third generation farmer, Don Wolford of Franklin County, Iowa, farms about 1,100 acres, raises 40 head of beef cows, finishes 560 head of hogs, and maintains a 24-stall farrowing building. In 1992, he had surgery to remove a tumor along his spine, which left him with paraplegia. AgrAbility staff first met with him in the hospital and showed him videos of farmers with disabilities using modifications, and advised him of modifications that he could make to his operation. After he returned home, AgrAbility staff wrote a proposal that helped get funding for Don to purchase an all-terrain vehicle that was adapted for him using a kit from the manufacturer. This vehicle allows him to move equipment and supplies on his farm. A friend designed hand brakes for his tractors and pick-ups. AgrAbility provided him with plans for installing a lift on his tractor. Local welders were then able to use the plans to install the lift. Since his injury, Don has been elected president of the Franklin County Farm Bureau and named 1997 Franklin County Master Pork Producer. He also volunteers his time as an AgrAbility peer counselor to other farmers with disabilities in similar situations.

Dave Kemper, a dairy farmer from Huntington County, Pennsylvania, thought he would not be able to remain in farming after a car accident left him with a severe neck injury and degenerative bone disease. His doctors referred him to an AgrAbility for Pennsylvanians workshop, where Dave saw that it was possible for him to continue farming. AgrAbility staff assessed Dave's farm and educated him about possible modifications to his buildings and equipment that would allow him to tend his dairy herd. AgrAbility then worked with the state Department of Vocational Rehabilitation to obtain an overhead milking system that reduces his need to bend or carry heavy milk containers, and other equipment that minimizes heavy lifting.

Since 1991, twenty-eight states have been served by AgrAbility projects. In the aggregate, AgrAbility is estimated to have:

—Provided direct on-farm assistance to more than 5,000 farmers, ranchers, and farmworkers with disabilities and their families.

—Provided information and advice to 10,000 persons with disabilities employed in agriculture and related occupations.
—Educated more than 100,000 agricultural, rehabilitation, and rural health professionals on safely accommodating disability in agriculture.
—Recruited and trained more than 1,000 volunteers to assist agricultural producers with disabilities and their families.
—Reached approximately 6.1 million people through 3,200 exhibits, displays, and demonstrations to increase awareness of the challenges affecting and resources available to people with disabilities who work in agriculture.

IMPACT OF CURRENT FUNDING LEVELS

For too long, AgrAbility projects have been underfunded relative to need and objective. At $85,000 per state, only a few staff can be hired to provide state-wide education and assistance to disabled farmers, educate rural professionals, recruit volunteers, and work with rural businesses on disability-related issues. Rising demand for services and the great distances that must be traveled to reach farmers and ranchers severely strains even the most dedicated of AgrAbility's outstanding staff.. Easter Seals fears that failure to invest wisely in this worthwhile program will ultimately cause it to falter.

One of the consequences of limited funding is that in every grant cycle, some states that have existing AgrAbility programs, and can demonstrate a legitimate need for services, are not renewed and forced to discontinue services to farmers with disabilities in that state and often have difficulty getting the access to the limited state and private funding sources that the federal seed money granted them. More than a dozen states have sought AgrAbility funding without success. Other states, including Colorado, Louisiana, Michigan, New Hampshire, South Carolina, and Vermont, had USDA-funded AgrAbility projects in the past and seek to re-establish their programs. Each of these states can demonstrate significant unmet needs among farm and ranch families affected by disability that AgrAbility could potentially address. Beginning with the 1998–1999 grant cycle that commences April 1, it is Easter Seals' understanding that projects in Ohio, New York, Idaho/Montana, and New Jersey will cease to receive federal support. This loss will greatly affect farmers with disabilities in these states for whom AgrAbility is the primary resource through which they seek information and assistance on farming with a disability. For example:

David Biehl has spent his life working the family wheat and barley farm near Helena, Montana. When a spinal infection, six years ago, left him with paraplegia, weakness in his hands, and low vision, he started searching for a way to remain in farming. His case management nurse referred him to the Montana/Idaho AgrAbility project. AgrAbility staff member Tom Scott, helped David remodel his home for wheelchair accessibility, modify his farm equipment, and find equipment to make it possible for him to drive the family truck. Together, David and the AgrAbility staff developed creative solutions to obstacles facing him. For instance, instead of purchasing an expensive mechanical lift for his tractor, David learned to use the leg braces he had unsuccessfully tried to walk in during his rehabilitation, to safely board his tractor. David expresses the importance of AgrAbility when he says, "It was very important for me not to give up. Tom understood how I felt and was able to help me find ways to be part of things." Unfortunately, the Montana/Idaho program was not successful in the USDA competition for renewal of funding in fiscal year 1998. Effective April 1, 1998, the project is no longer a resource to David and other farmers with disabilities in Montana and Idaho.

The need for AgrAbility services has never been greater, and its accomplishments to date are remarkable by any standard. The National Easter Seal Society is proud to contribute to the ongoing success of the USDA-CSREES AgrAbility Program. Please support the allocation of at least $4.6 million for AgrAbility in fiscal year 1999 to ensure that this valuable public-private partnership continues to serve rural Americans with disabilities and their families. Thank you for considering Easter Seals' views and recommendations.

PREPARED STATEMENT OF THE NATIONAL PHARMACEUTICAL ALLIANCE AND THE GENERIC PHARMACEUTICAL INDUSTRY ASSOCIATION

Mr. Chairman and Members of the Subcommittee, the National Pharmaceutical Alliance and the Generic Pharmaceutical Industry Association are pleased to have the opportunity to present these comments on the fiscal year 1999 budget requests for the Food and Drug Administration, on behalf of their members. Medicines developed, manufactured, and marketed by the approximately 200 members of both orga-

nizations account for more than 75 percent of all generic prescriptions dispensed annually in the U.S.

COST BENEFITS ARE PROVIDED BY THE GENERIC PHARMACEUTICAL INDUSTRY

Generic drugs represent one of the most cost-effective means of controlling U.S. healthcare costs. For example, consumers, insurance carriers, and the U.S. government spent an estimated $81.17 billion on approximately 2.5 billion drug prescriptions in 1997 alone.[1] About half of those prescriptions were filled with generic versions of the prescribed drug,[2] which typically enter the market at 30 percent below the brand price, and within two years decline to 60–70 percent of the brand price.[3] Moreover, brand drug retail prices rose an average of 4.3 percent in 1997, while generic prices declined by approximately 7.6 percent in the same period.[4] In addition to the price discount obtained when compared to the brand product, competition within the generic pharmaceutical industry results in declining prices that create a substantial savings to taxpayers, insurance providers, and consumers—especially senior citizens, the 40 million Americans without health insurance, and the underinsured.

While cost-effective generic pharmaceuticals have reduced health care costs in this country, these savings could be even greater if FDA took final action on generic applications within the statutorily required six months.[5] Due in large part to the leadership of the Appropriations Committee, OGD has been able to take the first steps in augmenting its resources to meet its statutory requirements. While the fiscal year 1998 Operating Plan has not been completely implemented, it is our understanding that the plan will include between $400,000 and $700,000 in additional funds for OGD.[6] These funds will give OGD the opportunity to begin a modest expansion of its resources.

The additional fiscal year 1998 funding for OGD is a watershed event. Instead of a continual focus on retaining its already inadequate resources, OGD will be able to direct its attention to speeding generic drug approvals. Yet, the foundation for a properly funded OGD must be continued with additional funding in fiscal year 1999, in order to substantially improve OGD's system of generic drug approvals.

NPA AND GPIA RECOMMEND AN INCREASE IN FUNDING FOR OGD

We recommend that the Appropriations Committee build on the fiscal year 1998 initiative and provide additional funds that will allow OGD to continue its progress toward compliance with the six month statutory period for final agency action on generic drug applications. Specifically, NPA requests that the Subcommittee take the following actions:

1. Appropriate $3 million directly for the Office of Generic Drugs, in addition to its fiscal year 1998 funding level;
2. In the alternative, re-allocate $3 million to OGD from FDA Administrative Offices that usually do not direct programs with statutorily required deadlines;
3. At a minimum, ensure that OGD and its programs maintain fiscal year 1998 funding levels in fiscal year 1999, despite the Administration's fiscal year 1999 budget request.
4. In addition, continue to insist that FDA provide detailed information about agency expenditures for, and by OGD.

In addition, we would like to highlight several challenges confronting OGD that could be addressed with the appropriations recommended above. We believe that additional funding in fiscal year 1999 could be used productively to:

—increase the number of reviewers to help OGD meet its statutory requirements;

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[1] *See* The Plymouth Group/IMS America, Ltd. "Year-in-Review 1997" prescription pharmaceutical data, presented at NPA Annual Meeting on February 26, 1998, and cited in Post-1990 Launches Represent 43 percent of Rx Market, IMS Says, F-D-C Reports, Inc. ("The Pink Sheet"), Mar. 9, 1998, at 9, and Bristol-Myers Squibb Swallows No. 1 Spot in U.S. Drug Sales, Medical Industry Today, Mar. 2, 1998.

[2] *See* The Plymouth Group/IMS America, Ltd. "Year-in-Review 1997" prescription pharmaceutical data, presented at NPA Annual Meeting on February 26, 1998.

[3] *See* "Economic Impact of GATT Patent Extension on Currently Marketed Drugs," PRIME Institute, College of Pharmacy, University of Minnesota, March 1995, at Executive Summary.

[4] *See* The Plymouth Group/IMS America, Ltd., "Brand vs. Generic Price Changes, Prescription Pharmaceuticals, 1997."

[5] Under the law, FDA, through the Office of Generic Drugs, must review generic applications within 180 days. 21 U.S.C. § 355(j)(4). In 1997, the median time to approval for ANDA's was 19.6 months—more than three times the length mandated by statute. *See* NDA/PLA Approvals on First Review Increase to 44 percent. The Pink Sheet, Dec. 15, 1997, at 7 (citing Janet Woodcock, M.D., Director of FDA's Center for Drug Evaluation and Research).

[6] *See* FDA Budget Would Keep Generics Staff Level, Generic Line, Jan. 14, 1998, at 1.

—add scientific and legal personnel to address the issues related to the use of the citizen petition process to delay generic drug approvals; and
—provide funding to assist OGD in educating consumers, health care providers, and state legislative and regulatory officials about generic equivalence and the generic drug approval process.

APPROPRIATIONS ARE NEEDED FOR ADDITIONAL REVIEWERS TO MEET OGD'S INCREASED WORKLOAD

Among the most pressing needs at OGD is one for additional staff members to review generic applications. OGD continues to experience a steady increase in ANDA filings, which went up from 404 in 1996 to 462 in 1997.[7] Yet, of these 1996 and 1997 filings, OGD annually approved only 340 and 404, respectively.[8] This increase in workload, and the backlog that it creates, must be addressed by hiring reviewers.[9] Even with the infusion of funds under the fiscal year 1998 FDA Operating Plan, however, it is unclear how many additional reviewers will be added to OGD's staff. Given the current situation, NPA maintains that increased appropriations for additional reviewers is paramount.

ADDITIONAL SCIENTIFIC AND LEGAL STAFF ARE NEEDED TO ADDRESS CITIZEN PETITIONS

In addition, OGD's priorities must be expanded to address a specific challenge to FDA's generic drug approval authority: citizen petitions. Over the past few years, brand drug firms have increased their use of citizen petitions to challenge FDA's bioequivalence determinations and other scientific decisions related to ANDA's.[10] The petitions usually request that FDA refrain from approving a competing generic product until the "scientific" questions have been resolved. Unfortunately, FDA has taken, on average, 17 months to resolve the issues raised in the 40 citizen petitions that have been filed since 1990.[11] The addition of senior scientists and/or lawyers would assist OGD in managing these administrative challenges, most of which are ultimately denied by the agency.[12]

OGD RESOURCES SHOULD BE DIRECTED TO EDUCATING THE PUBLIC AND STATE OFFICIALS ABOUT GENERIC EQUIVALENCE

OGD also must take up a second challenge to FDA's authority; that is, the efforts of brand drug firms to undermine the agency's therapeutic equivalence decisions. They do this by arguing to state legislators, boards of pharmacy, and drug formulary committees that the substitution of generic drugs for pioneer drugs raises a patient health risk.[13] To counter this misinformation, additional funds could be used by OGD to educate consumers and health care providers and to dispatch qualified spokespersons to the affected state entities.[14] These agency spokespersons would be instrumental in presenting accurate information to the states about the scientific integrity of the ANDA review process and the fitness of FDA's therapeutic equivalence evaluations.[15] In addition, OGD has worked effectively with academic

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[7] *See* FDA fiscal year 1999 Justification of Estimates for Appropriations Committees and Performance Plan, at 153.

[8] *See id.*

[9] Other resources that would help to improve ANDA review times are statistical analysts, computer professionals, and computer software and related information technology.

[10] A detailed chart describing the 40 citizen petitions that NPA has catalogued from FDA's Dockets Management Branch is available on request. It is titled, "Citizen Petitions That Have Resulted In A Delay To The Approval Of Generic Drug Applications (ANDA's), 1990–Present."

[11] *Id.* As evidenced by NPA's chart on citizen petitions, 13 of the 40 petitions filed since 1990 were pending at the agency for over two years before receiving a final disposition. Of those 13, three petitions remained unresolved for three years, and two petitions remained unresolved for four years.

[12] *Id.*

[13] A detailed chart describing the state lobbying initiatives that NPA has catalogued from public sources is available on request. It is titled, "Anti-Generic Challenges Before State Formularies (Other Than Coumadin®/NTI Challenges)."

[14] NPA continues to advance the position that legislation is needed to amend the Federal Food, Drug, and Cosmetic Act to provide for the express preemption of state generic substitution laws and regulations that impose standards different from or in addition to FDA's generic bioequivalence and therapeutic equivalence determinations.

[15] The agency has noted a need for increased communication between FDA and state entities. In response to questions posed by state formularies about the bioequivalence of generic drugs, FDA's Roger Williams replied, "We've got to do a better job of communicating [to the health care practitioners and state agencies] about how well and how hard we work together to control the quality of these [generic] products." Narrow Therapeutics Need to be Identified in Phase II, The Pink Sheet, Mar. 23, 1998, at 20–21.

experts and the industry in forums such as the Product Quality Research Initiative to solve difficult scientific issues. Expanding FDA's participation in PQRI would be a constructive use of additional appropriations. Regardless of the use(s) to which additional appropriations are put, it is imperative that this Subcommittee continue its support of the generic drug approval process by allocating necessary funds.

INCREASED EFFICIENCIES ARE NOT SUFFICIENT TO ACCELERATE APPROVAL TIMES

With limited resources, OGD has made Herculean efforts to speed up its review times, through a combination of diligent effort and increased efficiency. Specifically, generic drug median approval times have improved from 28.2 months in 1995 to 19.6 months in 1997.[16] System advances also were made, despite a reduced budget and staff, including the streamlining of OGD's approval process and a reduction in the number of review cycles.[17] Program improvements, some of which were industry recommendations, have included implementing electronic data filing, publishing bioequivalence protocol reviews, and establishing efficient labeling procedures.

Nevertheless, improvements in generic approval times cannot be sustained with tireless staff efforts and streamlining initiatives. OGD continues to fall short of its statutory responsibility to take final action on generic drug applications within six months. Our position has not changed: this delay is unacceptable. While NPA and GPIA will continue to cooperate with OGD to implement additional program improvements, our members maintain that further efficiency measures will not significantly impact approval times. Although the fiscal year 1998 FDA Operating Plan funding for OGD is a good beginning, OGD requires additional funding and staffing to function effectively.

SUMMARY: A RATIONALE FOR APPROPRIATING ADDITIONAL FUNDS FOR OGD

We maintain that Congress must continue to guide FDA's priorities by appropriating and allocating resources directly to OGD. Only Congressional mandates can ensure that FDA will continue to invest the resources necessary to ensure timely generic approvals. Once again, the Administration has incorporated as-yet unauthorized user fees into its fiscal year 1999 budget request to cover OGD's responsibilities. Specifically, the Administration has proposed $12.4 million in generic drug user fees. Yet, according to FDA, this $12.4 million in user fees will enable OGD to review and act upon only 60 percent of generic applications within the six months required by statute.[18] Regardless of the generic drug industry's position on the suitability of user fees, the above request clearly establishes that current appropriations are inadequate to meet FDA's obligations with respect to generic drug approvals. In sum, the ability of safe and effective generics in reducing healthcare costs for this nation cannot be fully realized without direct OGD appropriations.

In closing, Mr. Chairman, the NPA and GPIA would like to thank you and the Subcommittee for its time and attention concerning this critical aspect of FDA's fiscal year 1999 budget requests. We look forward to continuing our work with you and members of the Subcommittee to bring safe, effective and more affordable pharmaceuticals to consumers.

PREPARED STATEMENT OF CHUCK GUNNERSON, VICE PRESIDENT, LEGISLATIVE/GOVERNMENT AFFAIRS, NATIONAL POTATO COUNCIL

My name is Chuck Gunnerson. I am a potato farmer from Minnesota and current Vice President Legislative/Government Affairs for the National Potato Council (the Council). On behalf of the Council, we thank you for your attention to the needs of our potato growers.

The Council is the only trade association representing commercial growers in 50 states. Our growers produce both seed potatoes and potatoes for consumption in a variety of forms. Annual production in 1996 was 498,600,000 cwt with a farm value of $2.4 billion. Total value is substantially increased through processing. The potato crop clearly has a positive impact on the U.S. economy.

The potato is the most popular of all vegetables grown and consumed in the United States and one of the most popular in the world. Annual per capita con-

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[16] *See* FDA fiscal year 1999 Justification of Estimates for Appropriations Committees and Performance Plan, at 154.

[17] FDA reports that, "[a]s a result of OGD's initiative to contact applicants that undergo two or more major deficiency cycles, the Office has seen a drop in the number of review cycles needed to approve abbreviated applications," from 4.0 cycles in fiscal year 1995 to 2.9 cycles in fiscal year 1997. *Id.* at 153.

[18] *See id.* at 56.

sumption was 143 pounds in 1996 up from 107 pounds in 1962 and is increasing due to the advent of new products and heightened public awareness of the potato's excellent nutritional value. Potatoes are considered a stable consumer commodity and an integral, delicious component of the American diet.

THE COUNCIL PRIORITIES FOR FISCAL 1999 APPROPRIATIONS

The National Potato Council strongly urges that the Congress: (1) support Agricultural Research Service (ARS) base funding for potatoes at fiscal year 1998 levels, with the addition of $150,000 for the replacement of Dr. Joe Pavek, retiring plant breeder, at Aberdeen, Idaho, continue to include report language urging that the ARS work with the National Potato Council in determining priorities, and oppose the USDA budget proposal to close ARS facilities at Prosser, Washington, and Orono, Maine. Much of the USDA research at Prosser has focused on reducing pesticide use through the development of pest resistant plants with genetic engineering. Eliminating USDA research at Prosser would appear to conflict with President Clinton's goal of helping minor crop producers find new ways to control pests while reducing pesticide use. The ARS lab in Orono is the only one in the northeast that approximates Maine's unique soil types and climatic conditions which are different from most other potato-producing areas. Maine is a humid area rather than arid with less than 10 percent of its production under irrigation. Closure of this facility would be disruptive to current research and marketing activities of the northeast. Considering current budget constraints, it is critical that the ARS, working with potato growers, be able to adjust current research to meet agreed upon priorities. This would allow for better program streamlining and effectiveness; (2) appropriate additional funds for a special grant under the Cooperative State Research Education and Extension Service (CSREES) to accelerate national efforts in breeding and varietal development to among other things eradicate or manage late blight disease. We urge that the CSREES Special Grant Program be increased from $1.2 to $1.4 million. We also support the Administration's budget request for the continuation of the USDA-IPM initiative and funds to meet the data requirements of the new Food Quality Protection Act; (3) appropriate at least fiscal year 1997 level of $444,000 in funds to the Animal and Plant Health Inspection Service (APHIS) to continue the Golden Nematode quarantine program, without which the industry would be subjected to probable export trade restrictions by importing nations; and (4) not restrict funding for the Market Access Program.

AGRICULTURAL RESEARCH SERVICE (ARS) FUNDING

For fiscal year 1999, in order to maintain the current level of research, the National Potato Council seeks at least the 1998 base level of funding for all programs, the addition of $150,000 to maintain a breeder position in Aberdeen, Idaho, and flexibility by ARS for potato research priority projects which would include more research on late blight. The Council specifically urges that the Appropriations Committee report also include language directing ARS to continue to work with the National Potato Council in determining priorities. We also hope that you will encourage the ARS, as potato base research funds come up for review, to direct more of such base funds into agreed upon higher priority research projects.

As you recall, the National Potato Research Proposal was the result of an intensive effort begun in 1984 between the Council and the ARS to identify national priority research issues of concern to the potato industry. Based on these identifiable research needs, the National Potato Research Proposal received initial funding from the Congress for ring rot diseases; early dying disease; marketing; aphids; potato beetle and varietal development.

The monies provided to the ARS have been greatly appreciated and the potato growers definitely see results from this research program. As a result of ARS research, potato varieties have been developed that are resistant to aphids which carry the potato leafroll virus. This virus limits potato yields and marketability by causing spotting and discoloration inside potatoes. The development of these resistant varieties should translate into reduced use of crop protection chemicals to control aphids on potatoes. We are getting feedback on research results back to the producer by having researchers speak at seminars and by making available to the potato industry a written summary of all research underway.

Potato growers recognize that, in order to remain a viable and competitive industry, we must constantly strive to improve production efficiency and market quality while reducing the use of pesticides. Through carefully planned and coordinated research, we believe we can continue to offer an excellent high-value product and maintain a viable and competitive industry in the United States.

The National Potato Council has agreed to work with USDA, EPA and FDA in the Pesticide Environmental Stewardship Program (PESP). Our growers will work toward pest management practices that further reduce risk to humans and the environment. Through this program the NPC has developed a national IPM protocol so potato growers can better judge their progress in IPM. Flexibility by the ARS in allocating potato research funds will greatly facilitate this effort.

It is important to note that representatives of the Council have held annual meetings with ARS officials, the most recent in December of 1997, to discuss the distribution and use of research funds. In response to this Committee's direction, the Council has worked closely with the ARS to ensure that the research conducted is meaningful and addresses industry problems in the most thorough, expeditious, and cost effective manner. The Council looks forward to continuing its close partnership with ARS to maximize the use of these important funds as this subcommittee has directed.

CSREES SPECIAL GRANT REQUEST

The Council has also been working with CSREES on priorities for potato research and extension.

We request $1.4 million (an increase of $200,000 over last year) for a special grant under the CSREES and urge that the Committee report again include the following report language: ''Potato research—The conferees expect the Department to ensure that funds provided to CSREES for potato research are utilized for varietal development/testing. Further, these funds are to be awarded competitively after review by the Potato Industry Working Group.''

CSREES received 15 excellent proposals totaling almost $2 million for variety development and testing in 1998, but due to funding limitations only about 8 can be funded. Although the proposals are all from different states, the Potato Industry Working Group has encouraged the various established breeding programs to move rapidly toward cooperating on a regional basis. The additional $200,000 will assure this cooperation will go forth and many of the current state proposals will be funded within this regional approach.

The Council will continue to work closely with USDA and will report annually to the Congress on the progress of current research and, once USDA's reviews are completed, the need for new research efforts.

GOLDEN NEMATODE QUARANTINE AND SURVEY

The Animal and Plant Health Inspection Service assures that potatoes are protected from the importation of harmful pests and diseases and works with potato growers in assuring that potatoes meet phytosanitary export requirements.

The Golden Nematode is a significant pest which has been quarantined by USDA-APHIS for over 50 years, and this pest has been confined to a few locations in New York state. Its commercial hosts are potatoes, tomatoes, and eggplants. It is important to our domestic industry and to our export market that this quarantine be continued and be effective. We are informed that federal budget reductions over the past several years have raised concerns over the future of this program. Funding for this program has dropped from almost $900,000 in fiscal year 1992 to $444,000 in fiscal year 1997 and $435,000 in fiscal year 1998. The fiscal year 1999 budget request would further reduce funding to $417,000. We strongly urge that at least the 1997 level of $444,000 be provided and used for regulation enforcement and survey work so that this program can continue in order to avoid jeopardizing domestic production and eliminating export markets.

MARKET ACCESS PROGRAM

The Foreign Agricultural Service (FAS) assists U.S. potato growers in the export market and administers funds provided to the National Potato Promotion Board under the Market Access Program (MAP). MAP and its predecessor program have been particularly successful since 1986 in helping potatoes gain greater access and product recognition in foreign markets and is legal under the new GATT agreement.

Industry research shows that there is a direct correlation between receiving MAP funds and the ability to effectively market overseas. With MAP assistance, the U.S. Potato Board has developed long-term markets for U.S. potato exports and created an outlet for surplus potatoes grown domestically, helping stabilize farm gate prices throughout the U.S. industry. As a direct result of promotional campaigns made possible by the pooling of industry monies and government MAP funds, U.S. potato exports have reached record volumes and values. Since 1986, total U.S. potato exports have increased three-fold in volume terms and almost six-fold in value, reaching an export value of over $618 million in 1997. In fiscal year 1997, U.S. frozen

potato exports alone were valued at over $320 million, a 12 percent increase over 1996. Exports for 1986 were valued at $64 million. Exports account for 10 percent of U.S. production. With MAP, U.S. potato exports have expanded to new markets in Asia and South America and the industry has diversified its marketing activities to include trade advertising, trade seminars, restaurant and food service promotions, industry orientation tours, merchandising, and research and evaluation.

During the recent Farm Bill debate, the U.S. potato industry in cooperation with a coalition of agricultural commodity groups fought to preserve the current MAP program. It was our industry's position then and remains our position today that substantive changes made to the MAP program by the 1993 Omnibus Budget Reconciliation Act and the 1996 Agricultural Appropriations Bill, which our industry supported, fully addressed the concerns raised by some in the Congress and others about program efficiencies and management. Those changes imposed minimum contribution amounts for nonprofit participants, required that all participants certify that funds supplement but do not supplant industry funds, imposed a five-year limit on the use of brand MAP funds in a given country, and gave priority funding to small U.S. entities and cooperatives under the branded program. Additional changes to the program made by the 1996 Farm Bill, which preclude direct MAP funding to large corporations and to foreign entities for foreign-produced products, ensure that the real beneficiaries of the MAP program will be U.S. farmers, cooperatives, and U.S. agricultural products.

One remaining concern about the MAP program relates to annual funding levels, which have been reduced by Congress over the last several years and again last year by the 1996 Farm Bill. U.S. potato growers were discouraged that the 1996 Farm Bill reduced program funding from its previous authorized level of $110 million to $90 million annually, and strongly believe that finding should eventually be restored to its previously high level of $200 million to take full advantage of the WTO-legal program.

Despite funding cuts, we nevertheless are encouraged that Congress recognized the importance of continuing this fully accountable and result-oriented program for U.S. farmers. At a time when U.S. agriculture is struggling to compete with subsidized foreign competition and foreign governments are increasing GATT/WTO-legal promotional assistance to their agricultural sectors, we encourage Congress to keep in tact and extend greater funding to the one USDA program that has truly helped U.S. agricultural products compete in the global marketplace.

This concludes our statement and we would be pleased to respond to questions or provide further information for the record.

PREPARED STATEMENT OF JOHN F. O'NEAL, GENERAL COUNSEL, NATIONAL RURAL TELECOM ASSOCIATION

SUMMARY OF TESTIMONY REQUESTS

Project involved.—Telecommunications lending programs administered by the Rural Utilities Service of the U.S. Department of Agriculture

Actions proposed.—Supporting loan levels for fiscal year 1999 in the same amounts as those contained in the Fiscal Year 1998 Agriculture Appropriations Act (Public Law 105–86) for hardship, cost-of-money, Rural Telephone Bank and guaranteed loan programs and the associated subsidy to support hardship and Rural Telephone Bank loans at existing levels. Also supporting funding for $150 million in loan and $15 million grant authority designated for distance learning and telemedicine purposes as requested in the President's budget. Supporting an extension of the language removing the 7 percent interest rate ceiling on cost-of-money loans for fiscal year 1998. Supporting continuation of the restriction on retirement of Rural Telephone Bank class A stock in fiscal year 1998 at the level contained in Public Law 105–86 and an extension of the prohibition against the transfer of Rural Telephone Bank funds to the general fund. Opposing the proposal contained in the budget to transfer funds from the unobligated balances of the liquidating account of the Rural Telephone Bank for the bank's administrative expenses and loan subsidy costs.

Mr. Chairman, Members of the Committee: My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. NRTA is comprised primarily of commercial telephone companies which borrow their capital needs from the Rural Utilities Service of the U.S. Department of Agriculture (RUS) to furnish and improve telephone service in rural areas. Approximately 1000, or 71 percent of the nation's local telephone systems borrow from RUS. About three-fourths of these are commercial telephone companies. RUS borrowers serve almost 6 million sub-

scribers in 46 states and employ over 30,000 people. In accepting loan funds, borrowers assume an obligation under the act to serve the widest practical number of rural users within their service area.

PROGRAM BACKGROUND

Rural telephone systems have an ongoing need for long-term, fixed rate capital at affordable interest rates. Since 1949, that capital has been provided through telecommunications lending programs administered by the Rural Utilities Service and its predecessor, the Rural Electrification Agency (REA).

RUS loans are made exclusively for capital improvements and loan funds are segregated from borrower operating revenues. Loans are not made to fund operating revenues or profits of the borrower system. There is a proscription in the Act against loans which would duplicate existing facilities providing adequate service and state authority to regulate telephone service is expressly preserved under the Rural Electrification Act.

Rural telephone systems operate at a severe geographical handicap when compared with other telephone companies. While almost 6 million rural telephone subscribers receive telephone service from RUS borrower systems, they account for only four percent of total U.S. subscribers. On the other hand, borrower service territories total 37 percent of the land area—nearly 1½ million square miles. RUS borrowers average about six subscribers per mile of telephone line and have an average of more than 1,000 route miles of lines in their systems.

Because of low-density and the inherent high cost of serving these areas, Congress made long-term, fixed rate loans available at reasonable rates of interest to assure that rural telephone subscribers, the ultimate beneficiaries of these programs, have comparable telephone service with their urban counterparts at affordable subscriber rates. This principle is especially valid today as the United States endeavors to deploy telecommunications "information superhighway" technology and as customers and regulators constantly demand improved and enhanced services.

At the same time, the underlying statutory authority which governs the current program has undergone significant change. In 1993, telecommunications lending was refocused toward facilities modernization. Most of the subsidy cost has been eliminated from the program. The subsidy that remains has been targeted to the highest cost, lowest density systems. Other loans are made at Treasury's cost-of-money or greater.

We are proud to state once again for the record that there has never been a default in the RUS/REA telephone program! All loans have been repaid in accordance with their terms with interest. As of December 31, 1997, well over $4 billion of principal and $5 billion in interest had been paid by telephone borrowers.

NEED FOR RUS TELECOMMUNICATIONS LENDING CONTINUES

The need for rural telecommunications lending is great today, possibly even greater than in the past. Technological advances make it imperative that rural telephone companies upgrade their systems to keep pace with improvements and provide the latest available technology to their subscribers.

These rapid technological changes and federal policies of competition and deregulation in the telephone industry, as evidenced by passage of the "Telecommunications Act of 1996", underscore the continuing need for targeted assistance to rural areas. The inherently higher costs to serve these areas have not abated. Regulatory trends encouraging competition among telephone systems increase pressures to shift more costs onto rural ratepayers. Interstate subscriber line charges have already shifted substantial costs to local exchange customers. Pressures to recover more and more of the higher costs of rural service from rural customers to foster urban competitive responses will further burden rural consumers. And, as rural rates rise, small telephone systems will tend to lose confidence that they can recover the investments for costly network upgrades.

1996 TELECOMMUNICATIONS ACT EFFECT ON RURAL AMERICA

Congress passed the Telecommunications Act of 1996 as the culmination of more than a decade of debating national telecommunications policy and balancing many diverse needs and interests. The 1996 Act responded to a number of rural needs and differences with a series of safeguards to ensure that rates, services and network development in rural America will be reasonably comparable to urban telecommunications opportunities.

The process of implementing the new law continues to raise troubling uncertainties and concerns about whether the FCC and the states will honor the balance Congress achieved in its policy, as regulators (a) radically revise the mechanisms for

preserving and advancing "universal service," (b) adjust the cost recovery responsibilities and allocations of authority between federal and state regulation, (c) effectuate the Act's somewhat different urban and rural ground rules for how new companies and incumbent universal service providers connect their networks and compensate each other and (d) peel back layers of regulation developed over a century. So far, the FCC has been overzealous in expanding the Act's market-opening provisions to give new entrants a regulatory head start and advantage at the expense of the Act's rural development and universal service provisions. The FCC is trying to usurp the role of competition by dictating a whole new—and wholly inadequate—way to measure the costs of modern, nationwide telecommunications access to information. Congress and the courts must carefully supervise the FCC's implementation to achieve the rural access to information and an evolving modern public network intended by Congress, as well as the benefits of deregulation and genuine competition.

EXPANDED CONGRESSIONAL MANDATES FOR RURAL TELECOMMUNICATIONS

Considerable loan demand is being generated because of two additional mandates for enhanced rural telecommunications standards contained in the authorizing legislation enacted in 1993 by Congress in Public Law 103–129.

First, Congress expanded the definition of a "rural area" to include towns up to 5,000 population from the previous standard of 1,500 which had the effect of qualifying substantial additional geographic areas of the country for loans. Second, as a prerequisite to eligibility for insured and Rural Telephone Bank loans, RUS, has approved a telecommunications modernization plan for each state which meet certain minimum statutory objectives for the deployment of modern telecommunications technology. Implementation of these plans will generate additional loan demand as rural telephone systems strive to meet these increased service objectives in the rural areas they serve.

These two Congressional mandates coupled with the need for stable financing sources to meet the infrastructure demands envisioned for rural areas by the new telecommunications act amply demonstrate the continuing need for this important program at the levels established in the fiscal year 1998 appropriations act. They are:

5 percent Hardship Loans	$75,000,000
Cost-of-Money Loans	300,000,000
Guaranteed Loans	120,000,000
Rural Telephone Bank Loans	175,000,000
Total	670,000,000

The President's budget request for fiscal year 1999 for this program closely parallels fiscal year 1998 enacted loan levels with one exception: Despite substantial ongoing demand, the President proposes to reduce hardship loans $25 million next year. The savings which would be achieved are only about $2.5 million dollars. Based on figures supplied by RUS, at the end of the first quarter, the agency had already approved almost all of the entire authorization of $75 million for this fiscal year and expects to carry over an additional $79 million in completed applications into the next fiscal year. We believe that the needs of this program balanced with the minimal cost to the taxpayer argue for its continuation at enacted levels given the fact that it provides funding for the neediest borrower systems serving the highest cost areas.

SPECIFIC ADDITIONAL REQUESTS

Continue the Removal of the 7 percent Cap on Cost-of-Money Loans

Again this year we are supporting removal of the 7 percent ceiling on cost-of-money loans. This Committee included language in the fiscal year 1996 act to permit borrower interest rates on cost-of-money loans to exceed the 7 percent per year interest rate ceiling contained in the authorizing act. The language has been continued in subsequent acts. We support an extension of this provision in the fiscal year 1999 bill. Long-term Treasury interest rates might exceed 7 percent in fiscal year 1999. In that event, the cost-of-money loan program could be disrupted and loan levels not achieved since adequate subsidy would not be available to support the program at the authorized levels. For this reason, we believe it is important to incorporate this language in the bill again this year.

Continue the Restriction on Retirement of Class A Government Stock in the Rural Telephone Bank (RTB) and also Continue the Prohibition Against Transfer of RTB Funds to the General Fund

The Committee should continue the restriction on retirement of the amount of class A stock by the Rural Telephone Bank in fiscal year 1999. The Bank is currently retiring the government's stock as required under current law. We believe that this process which began in fiscal year 1996 should continue to be an orderly one as contemplated by the retirement schedule enacted two years ago and continued in last year's bill to retire no more than 5 percent of the total class A stock in one year. We also urge the Committee to continue the prohibition against the transfer of any unobligated balance in the bank's liquidating account which is in excess of current requirements to the general fund of the Treasury along with the requirement that the bank receive interest on those funds. The private Class B and C stockholders of the Rural Telephone Bank have a vested ownership interest in the assets of the bank including its funds and their rights should not be abrogated.

Reject Budget Proposal to Transfer Funds from RTB Liquidating Account for Administrative and Subsidy Costs

In this same vein, we are also opposed to the proposal contained in the President's budget that the subsidy cost associated with Rural Telephone Bank loans be funded by a transfer from the unobligated balances of the bank's liquidating account rather than by a traditional appropriation from the general fund of the Treasury which has been the funding mechanism utilized for the bank since enactment of the federal credit reform act in 1990. Requiring the bank to fund the subsidy cost of its loans would dilute the interests of the bank's stockholders. By definition, the bank's unobligated balances are not federal funds but are subject to the respective ownership interests of all the stockholders of the bank. Previous appropriations acts, including the fiscal year 1997 and fiscal year 1998 acts, have recognized the ownership rights of the private class B and C stockholders of the bank by prohibiting a similar transfer of the bank's excess unobligated balances which otherwise would have been required under the federal credit reform act. This cost is more properly funded through a regular appropriation from the general fund of the Treasury.

The President's budget also proposes that the bank assume responsibility for its administrative costs also by a transfer of funds from the unobligated balances of the bank's liquidating account rather than through an appropriation from the general fund of the Treasury. This recommendation is contrary to the RTB enabling act. Under Sec. 403(b) of that act, until the ownership, control and operation of the telephone bank is converted (or privatized). . . .

> in order to perform its responsibilities under this title, the telephone bank may partially or jointly utilize the facilities and the services of employees of the Rural Electrification Administration or of any other agency of the Department of Agriculture, *without cost to the telephone bank*". (emphasis supplied)

The budget language acknowledges that neither proposal would result in budgetary savings. No justification for these recommendations is contained in the budget. Both proposals would require consideration by the authorizing committees and enactment of new authorizing legislation as a prerequisite to an appropriation. As of this date, no such legislation has been transmitted by the Administration or is under consideration before the authorizing committees.

Loans and Grants for Telemedicine and Distance Learning

The President's budget requests $150 million in loan authority for fiscal year 1999 and $15 million in grants specifically devoted to telemedicine and distance learning purposes. Loans are made at the government's cost-of-money. The purpose is to accelerate deployment of telemedicine and distance learning technologies in rural areas through the use of telecommunications, computer networks, and related advanced technologies by students, teachers, medical professionals, and rural residents.

We believe this program specifically designated for distance learning and telemedicine purposes is particularly important. Continuing to target funds in this manner spurs deployment of this important new technology which is vital for the survival of rural schools, hospitals and the rural communities they serve. At the same time, we believe the level proposed strikes a cost effective balance for the taxpayer.

CONCLUSION

Thank you for the opportunity to present the association's views concerning this vital program. The telecommunications lending programs of RUS continue to work

effectively and accomplish the objectives established by Congress at a minimal cost to the taxpayer.

PREPARED STATEMENT OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

SUMMARY

Considering the current telecommunications demands being made by the Administration, Congress, and rural Americans, it is clear that the need for the Rural Utilities Service (RUS) telecommunications lending has never been greater. In this context, the National Telephone Cooperative Association (NTCA) strongly supports the continuation of the RUS telecommunications loan program. For nearly 49 years, the RUS and its predecessor, the REA, has carried out its mission, of both providing and improving rural telephone service, with distinction. Appropriately funded, it will continue to do so well into the future. In short, RUS financing is critical to ensuring that rural Americans enjoy the benefits of the information revolution currently sweeping the nation.

INTRODUCTION

It is a pleasure to discuss the current financing needs of the rural local exchange carrier (LEC) industry. In light of all that is occurring on the telecommunications front, this discussion is urgently needed. NTCA is a national trade association representing 500 small, rural cooperative and commercial telephone systems. These locally owned and operated LEC's are situated throughout our nation. More than 80 percent of NTCA's member systems have benefited from the RUS/REA telecommunications loan program.

NTCA's members, like most of the country's independent LEC's, evolved to serve high cost rural areas of the nation. There can be no doubt regarding the high cost of providing telecommunications services to rural America. Just considering that this account for approximately 40 percent of the nation's geographic area is convincing enough. In addition, when we consider that rural subscribers account for only 4.3 percent of the nation's total population, it quickly becomes clear why rural America is so costly to serve.

Congress recognized this unique financing dilemma confronting America's rural LEC's as early as 1949. It was in that year that it amended the Rural Electrification Act (RE Act) to create the REA telephone loan program. Congress planned for the future and fully understood that rural America's telecommunications financing needs would be ongoing. It charged the REA with the responsibility for making low interest loans to both ". . . furnish and improve . . ." rural telephone service.

In keeping with it mission, Congress has periodically amended the RE Act to ensure that the original mission of the program is met. In 1971, the Rural Telephone Bank (RTB) was created as a supplemental source of direct loan financing. In 1973, the REA was provided with the ability to guarantee Federal Financing Bank (FFB) and private lender notes. In 1993, the Congress established a fourth program lending facet, the REA treasury-cost fund. Most recently, the reorganization of the U.S. Department of Agriculture facilitated consolidation of the Department's utility development programs through transferring the telecommunications loan and technical assistance programs of the REA to the Rural Utilities Service (RUS).

The infrastructure being deployed by a majority of rural LEC's today is capable of providing state-of-the-art services such as two-way interactive video links and internet access. These services are changing the destiny of rural America. Through this technology, rural Americans are assured of improved education, health care access, and business and government services. The RUS's telecommunications loan program is financing a significant portion of such infrastructure enhancement.

RESPONSIBILITIES CONFRONTING THE INDUSTRY ARE SUBSTANTIAL

The success of private/public partnership represented by NTCA's members' use of the RUS telecommunications loan program is substantial. This partnership boasts infrastructure of a highly sophisticated quality. With the assistance of RUS capital and technical standards, NTCA's members are leaders in modernizing their telecommunications capabilities for their communities. This financing partnership fosters a true commitment to rural residents. Compared to their urban counterparts, rural communities are faced with higher poverty rates, lower income levels, and higher costs of delivering modern infrastructure.

These rapid changes are underscored by recent actions taken with passage of the "Telecommunications Act of 1996." As we enact federal policies of competition and deregulation, the high costs associated with providing modern telecommunications

services in rural areas will not diminish. Moreover, the mandated provisions for an evolving definition of universal service serves to emphasize the need for targeted assistance to rural areas. Two years into the implementation of the act, the FCC's interpretation of the law has held little regard for congressional intent particularly with respect to rural provisions that are vital to rural incumbent LEC's. This is evidenced by the 25 percent federal/75 percent state split in universal service funding. These important provisions include universal service language mandating a national commitment to geographic toll rate averaging and consumer access to quality services at reasonable and affordable rates; interconnection exemption, suspension and modification language to spare rural LEC's from excessive new regulatory burdens; infrastructure sharing language requiring large carriers to engage in such sharing upon request of a facilities based universal service designee that lacks resources; as well as other provisions important to the rural industry.

It is clear that without appropriate strong national safeguards, the transition to a competitive and deregulatory telecommunications environment would damage the ability of rural Americans to full participate in the information age. Today, RUS borrowers average only 6 miles per subscriber compared to 37 per mile for the larger, urban-oriented, non-RUS financed systems. This results in an average plant investment per subscriber that is 38 percent higher for RUS borrowers. Without the availability of affordable capital financing to compete and provide adequate, up-to-date services in an unfavorable environment, building adequate telecommunications infrastructure in rural communities will be untenable.

RUS: CONNECTING RURAL AMERICA TO THE FUTURE

Clearly, the RUS telecommunications loan program is helping extend benefits of the information superhighway to rural America. RUS telecommunications lending creates public-private partnerships that work to create telecommunications infrastructure. These federal resources have stimulated billions of dollars in private capital.

For example, in fiscal year 1997 a subsidy of just $3.6 million generated $670 million in federal loans and loan guarantees. For every dollar in government money invested, 4.5 private dollars were invested. RUS financing in 1996 involved the construction or rebuilding of an estimated 9,472 route miles of line (including fiber optic facilities) and other plant facilities to provide initial or improved service to 72,874 subscribers.

The RUS is also making a difference in our rural schools, libraries, and hospitals. Since 1993, the RUS Distance Learning and Telemedicine (DLT) Grant and Loan program has funded 192 projects in 41 states totaling over $52 million for interactive technology in rural schools, libraries, hospitals, and health clinics. This program has provided unprecedented educational opportunities for rural students and enhanced health care for rural residents.

As a result of this program, thousands of rural students will gain access to additional classes and advanced curriculum. The RUS reports that previously unavailable courses such as calculus, physics, chemistry, and accounting are now being made to 550 rural schools in 33 states. In addition, telemedicine facilities which provide cost-effective services such as 24 hour access to trauma specialist, continuing medical education, and distance consultations for pediatrics, obstetrics, cardiology, and oncology will be made available to 438 hospitals and clinics in 23 states. Simply stated, this critical program is allowing our rural citizens to overcome the isolated nature of their rural areas through the power of modern telecommunications.

At the end of 1997, about $4 billion in principal and $5 billion in interest had been paid by borrowers. We are proud to claim that there has never been a loss for U.S. taxpayers through borrower default or abuse in 49 years of RUS telecommunications lending!

RECOMMENDATIONS FOR THE SUBCOMMITTEE'S CONSIDERATION

RUS Telecommunications Loan Program.—Increasing demand for expanded telecommunications services and infrastructure upgrades indicates the level of need. The RUS has indicated that as of the end of the second quarter of fiscal year 1998, all of the 5 percent Hardship loan funds have been allocated and are expecting a backlog of $60–100 million in hardship loan requests this year. To allow for this demand to be met, NTCA recommends that the committee consider the following RUS Telecommunications loan levels for fiscal year 1999:

5 percent Hardship Loans	$75,000,000
Treasury-rate Loans	300,000,000
FFB Loan Guarantees	120,000,000

Rural Telephone Bank Loans	175,000,000
Total	670,000,000

These loan levels are the same as the current fiscal year's funding provided by this committee and represent a genuine commitment to rural telecommunications needs.

Removal of Interest Rate Cap on Treasury-rate Loans.—We are also requesting that the committee include language removing the 7 percent interest rate cap on Treasury-rate loans. This provision was included in this year's Fiscal Year 1998 Agriculture Appropriations Act (H.R. 2160), and it prevents the potential disruption of the program in the case where interest rates exceed 7 percent and insufficient subsidy cannot support authorized lending levels. It is a continuation of current policy and supports the viability of this critical loan program.

Prohibition of the Transfer of Unobligated Balances of the Rural Telephone Bank Liquidating Account.—NTCA also recommends that the subcommittee continue the prohibition against the transfer of any unobligated balances of the Rural Telephone Bank liquidating account to the general fund of the Treasury. This language was first introduced in the Fiscal Year 1997 Agriculture Appropriations Act (H.R. 3603) to protect the private Class B and C stockholders ownership rights to the assets of the bank. Restatement of this language will ensure that RTB borrowers are not stripped of the value of this required investment.

Fund the Rural Telephone Bank's Loan Subsidies and Administrative Expenses through Traditional Appropriation from General Funds of the Treasury.—The Administration's fiscal year 1999 budget proposal would fund the Rural Telephone Bank's loan subsidies and administrative expenses out of unobligated balances in the bank's liquidating account rather than out of the general fund of the Treasury as normally appropriated. NTCA urges the subcommittee to reject this proposal for three reasons.

Specifically, the proposal would require new authority in the authorizing act as a prerequisite to an appropriation. Current law under the Rural Electrification Act provides for the use of facilities and services of employees of the Department of Agriculture, without cost to the Rural Telephone Bank until the ownership, control and operation of the telephone bank is converted or privatized. Additionally, the proposal appears to be in conflict with the intent of the Federal Credit Reform Act (Public Law 101–508). The Subcommittee should also recognize that this proposal will not result in budgetary savings. Because of the aforementioned concerns, NTCA requests the subcommittee to fund the RTB's loan subsidies and administrative expenses through the general funds of the Treasury.

Rural Telephone Bank Privatization Proposal.—Under the President's fiscal year 1999 budget proposal, the Rural Telephone Bank is proposed to "become a Performance Based Organization to establish its financial and operational independence prior to its being privatized within ten years." At this time, it is difficult to support, or evaluate any privatization proposal without first obtaining an answer to the critical question of who own the assets of the bank—the federal government or the stockholders of the RTB. Without a definitive and official determination of this central issue, it is not possible to formulate an informed position regarding privatization of the bank.

NTCA believes any privatization plan should be well conceived before implementation. At the very least, privatization should proceed in an orderly fashion with a full accounting of the various financial and legal implications involved. Congress, RTB Stockholders, and the rural telecommunications industry deserve the benefit of having RTB privatization reviewed thoroughly. In addition to having a high concentration of NTCA members as stockholders of RTB stock, NTCA itself maintains a substantial interest in RTB stock. As the RTB possess nearly $2 billion in assets, it continues to play a critical role in the modernization of rural telecommunications infrastructure throughout the United States, and its future will continue to be closely monitored by the rural telecommunications industry.

RUS Distance Learning and Telemedicine Program.—The RUS Distance Learning and Telemedicine Grant program has proven to be an indispensable tool for rural development. In this regard, NTCA urges the Committee to provide adequate funding for this critical program. NTCA supports the exciting initiative included with the enactment of the 1996 Farm Bill. The legislation authorized a $100 million Distance Learning and Telemedicine and Grant cost-of-money loan and grant program that began in fiscal year 1996. NTCA encourages the subcommittee to continue funding for this critical program for the purpose of extending benefits of modern telecommunications to rural America.

CONCLUSION

The RUS telecommunications loan program bears a proud record and should remain in place to continue assisting the rural LEC industry to meet its service commitment to rural Americans. As changes to the nation's telecommunications policy are on the horizon, the continuation of the RUS telecommunication loan program is a critical necessity to ensure the highest standard of modern service in rural America. The rural segment of the nation's telecommunications infrastructure is critical to the national objective of universal telecommunications service. The RUS and the rural LEC industry are natural partners in linking all Americans to the "information superhighway."

As the nation faces substantial economic and technological challenges in the near future, rural areas must be equipped with the appropriate tools needed to manage those challenges. The RUS telecommunications loan program has carried out its mission for more than 49 years with distinction and unrivaled financial reliability. Congress willing, the RUS can do the job necessary to connect rural America to the future!

PREPARED STATEMENT OF DR. ROBERT C. SHEARMAN, EXECUTIVE DIRECTOR, NATIONAL TURFGRASS EVALUATION PROGRAM

On behalf of the National Turfgrass Evaluation Program (NTEP), I appreciate this opportunity to provide the Subcommittee with the turfgrass industry's perspective in support of restoration of the $55,000 appropriation for the National Turfgrass Evaluation Program (NTEP) deleted in the President's fiscal year 1999 budget request for the Agricultural Research Service (ARS).

The National Turfgrass Evaluation Program (NTEP) has been unique in that it provides a working partnership that links the federal government, turfgrass industry and land grant universities together in their common interest of turfgrass cultivar development, improvement, and evaluation. The National Turfgrass Evaluation Program is the primary means by which cultivated varieties of turfgrass are evaluated in this country. It provides unbiased information on turfgrass cultivar adaptations, disease and insect resistance, and environmental stress tolerance. The public and private sectors of the turfgrass industry use this information to develop cultivar recommendations for home owners, sod producers, sports turf managers and golf course superintendents.

At a time when this nation's awareness of environmental considerations is increasing, and because of the multiple benefits provided by turfgrass, as well as the advancements that are being made to further improve them through integrated pest management programs, recycling, and other means, the USDA has before it a unique opportunity to take positive action in support of the turfgrass industry, and similarly enjoy a tremendous return for what must be considered, in relative terms within USDA's budget, a minuscule investment of Department funds.

While the vast majority of the USDA's funds have been and will continue to be directed toward traditional "food and fiber" segments of U.S. agriculture, it is important to note that turfgrasses (e.g., sod production) are defined as agriculture in the Farm Bill and by many other departments and agencies. Further, it is estimated by the Economic Research Service that the turfgrass industry, in all its forms, is a $30–$35 billion industry. It should also be noted that the turfgrass industry is the fastest growing segment of U.S. agriculture, while it receives essentially no federal support. There are no subsidy programs for turfgrass, nor are any desired.

For the past 70 years, the USDA's support for the turfgrass industry has been modest at best. The turfgrass industry's rapid growth, importance to our urban environments, and impact on our daily lives warrant more commitment and support from the USDA. Failing to support the National Turfgrass Evaluation Program would be a tremendous oversight of a major opportunity. USDA's support of the NTEP at the $55,000 level does not cover all cost. In fact, NTEP represents an ideal partnership of the public and private sectors in terms of program cost sharing . The NTEP relies most heavily on turfgrass industry (i.e., public sector, end-users) support. However, it is essential that the USDA maintain its financial support and work closely with NTEP. The turfgrass industry relies heavily on NTEP for unbiased findings. Discounting this support will also eliminate a highly reliable and credible level of objectivity that is associated with the NTEP program.

I respectfully request that the Subcommittee restore this vital $55,000 appropriation for the National Turfgrass Evaluation Program (NTEP) in the fiscal year 1999 budget for the Agricultural Research Service.

Thank you very much.

PREPARED STATEMENT OF LINO DEALMEDIA, JR., PRESIDENT, NATIONAL UTILITY CONTRACTORS ASSOCIATION

Mr. Chairman and members of the subcommittee, my name is Lino DeAlmeida, Jr. I am president and chief executive officer of Consolidated Construction Management Services, Inc., in Colts Neck, New Jersey. I am pleased to submit written testimony on behalf of the National Utility Contractors Association (NUCA).

Every day my colleagues and I see firsthand the consequences of failed or nonexistent water and waste disposal infrastructure. We can also attest to the positive public health, environmental, and economic benefits of infrastructure investment in rural communities. We are proud of the vital public services that we provide to rural communities across the country, whether it's the construction of a new drinking water treatment facility or upgrades to existing plant and pipework. The USDA Rural Utilities Service (RUS) has played a critical role in helping these communities finance basic water infrastructure needs.

FISCAL 1999 RECOMMENDATION

NUCA supports the Administration's fiscal 1999 request for $629 million in budget authority to support RUS Water and Waste Loans and Grants totaling $1.34 billion. The request represents a modest $66 million increase over fiscal 1998. The proposed increase is well justified when you consider that RUS had $3.7 billion worth of unfunded applications on hand as of January 1998.

RURAL INFRASTRUCTURE NEEDS

Many small, rural communities find it difficult to maintain safe and affordable drinking water supplies and provide sanitary waste disposal. Lack of access to conventional financing, inadequate technical resources, and a limited tax base are significant reasons why small communities struggle to meet basic water infrastructure needs. Federal regulatory requirements under the Clean Water and Safe Drinking Water Acts pose additional financial burdens.

Last fall, the U.S. Environmental Protection Agency (EPA) revised its assessment of publicly owned wastewater treatment needs. The survey found more than $139 billion in wastewater collection and treatment needs over the next twenty years, including $13.8 billion for communities with fewer than 10,000 residents. These small communities represent 11 percent of the nation's total documented need, including $3.9 billion for secondary treatment and $6.6 billion for sewer pipe repair, replacement, and new construction.

Drinking water infrastructure needs are equally alarming. A 1996 study by the USDA (Water 2000) estimated that as many as 8 million people have drinking water quality problems and that approximately 1.1 million people lack indoor plumbing.

A 1997 EPA drinking water infrastructure survey found that more than $138 billion is needed over the next twenty years for transmission and distribution lines, water treatment plants, and water storage and supply facilities. Small systems serving 3,300 or fewer people reported more than $37 billion in construction needs. As we noted in our fiscal 1998 testimony before the subcommittee, rural households represent the largest per-household need and are burdened with the highest per-household cost.

RURAL INFRASTRUCTURE INVESTMENT BENEFITS

Numerous benefits accrue when a small community builds a new drinking water treatment plant or makes repairs to leaking water and sewer pipes. Foremost, water infrastructure investment improves public health and safety, by reducing the incidence of disease and mortality and enhancing fire protection. Capital investment also yields economic benefits, such as new jobs and better labor productivity. New businesses are attracted to improved communities, and over time the local tax base grows and provides more financial stability.

CONCLUSION

The RUS Water and Waste Disposal Loans and Grants are an important source of financing for small, rural communities that have been turned down by more conventional lenders. The program has a solid track record in terms of loans repaid and maximum use of appropriated dollars. The need for continued federal investment in rural America is evident and worth every penny. We urge the subcommittee to fully support the Clinton Administration's fiscal 1999 request for the RUS water and waste disposal loans and grants.

Thank you for the opportunity to provide this recommendation.

PREPARED STATEMENT OF BEN F. BOWDEN, CHAIRMAN, NATIONAL WATERSHED COALITION

The National Watershed Coalition (NWC) is pleased to present this testimony in support of some of the most beneficial water resource conservation programs ever developed in the United States. The Coalition recognizes full well the very difficult financial situation our nation faces. That makes the work of this Subcommittee very important. It also makes it imperative that the federal programs that are continued are those that provide real benefit to society, and are not programs that would be nice to have if funds were unlimited. We believe that the Small Watershed Program (Public Law 83–566) and the Flood Prevention Operations Program (Public Law 78–534) are examples of those rare programs that address our nations vital natural resources which are critical to our very survival, do so in a way that provide benefits in excess of costs, and are programs that serve as models for the way all federal programs should work.

The National Watershed Coalition is an alliance of national, regional, state and local organizations that have a common interest in advocating the use of the watershed when dealing with natural resource issues. We also support the use of total resource management principles in planning. We are advocates of both the Small Watershed Program and the Flood Prevention Operations Program administered by USDA's Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS). These resource protection programs deserve much higher priority than they have had in the past. Even in difficult financial times, their revitalization would pay dividends in monetary and other benefits, and jobs! The disastrous 1993 Midwest floods should have taught us something. If one examines the Report of the Interagency Floodplain Management Review Committee that studied that event, we see that flood damages were significantly reduced in areas where Public Law 566 projects were installed. The requests for disaster assistance were also less.

The watershed as the logical unit for dealing with natural resource problems has long been recognized. Public Law 566 offers a complete watershed management approach, and should have a prominent place in our current federal policy emphasizing watersheds and total resource management based planning. Why should the federal government be involved with these watershed programs?

—They are programs whose objectives are the sustaining of our nations precious natural resources for generations to come.

—They are not federal, but federally assisted. They do not represent the continued growth of the federal government.

—They are locally initiated and driven. Decisions are made by people affected, and respect private property rights.

—They share costs between the federal government and local people. Local sponsors pay between 30–40 percent of the total costs of Public Law 566 projects.

—They produce net benefits to society. The most recent program evaluation (1987) demonstrated the actual ratio of benefits to costs was approximately 2.2:1. The actual adjusted economic benefits exceeded the planned benefits by 34 percent. How many other federal programs do so well?

—They consider and enhance environmental values. Projects are subject to the discipline of being planned following the National Environmental Policy Act (NEPA), and the federal "Principles and Guidelines" for land and water projects. That is public scrutiny.

—They are flexible programs that can adapt to changing needs and priorities. Objectives that can be addressed are flood damage reduction, watershed protection (erosion and sediment control), water quality improvement, rural water supply, water conservation, fish and wildlife habitat improvement, recreation, irrigation and water management, etc. That is flexibility.

—They are programs that encourage all citizens to participate.

—They can address the needs of low income and minority communities.

—And best of all—they are programs the people like!

The National Watershed Coalition commends the Congress for the support given these programs over the years, and hopes that the outcome of the fiscal year 1999 appropriations process will enable this vital work to continue and expand as we seek to preserve, protect and better manage our nation's water and land resources. Every State in the United States has benefited from the Small Watershed Program.

In order to continue this high priority work in partnership with states and local governments, the Coalition recommends a fiscal year 1999 funding level of $250 million for Watersheds and Flood Prevention Operations, Public Laws 566 and 534. The allocation between these two programs is best left to the ARCS. Of this amount, we would suggest that $50 million be used for structural rehabilitation and replace-

ment, and $10 million be used for wetland acquisition as authorized by the 1990 Farm Bill. We recognize that in these difficult financial times, the Congress may not find it possible to provide that amount, but we also believe that we are not doing our job of helping you recognize the true need if we continually recommend the federal share of these needed funds be less. We would hope that everyone understand these federal funds are only a part of the total that are committed to this vital purpose. The local project sponsors in these "federally assisted" endeavors have a tremendous investment also. Additionally, the Coalition supports $10.5 million for watershed planning, $13.0 million for River Basin Surveys and Investigations. We also suggest that the Emergency Watershed Program (EWP) be provided with $20 million to allow the NRCS to provide rapid response in time of natural disaster.

The issue of the current condition of those improvements constructed over the last fifty years with these watershed programs is a matter of great concern. A USDA study published in 1991 estimated that in the next ten years, $590 million would be needed to protect the installed works. That figure is likely larger today. Of that amount, $100 million would come from local sponsors as their operation and maintenance contribution. That is the reason we are recommending starting with $50 million for the work necessary to protect these installed structures. If we don't start to pay attention to our rural infrastructure needs, the ultimate cost to society will only increase, and project benefits will be lost. This is a serious concern. We are pleased that NRCS and some Members recognize this issue.

In addition to offering our thoughts on needed conservation program budget levels, we would like to express our great concern with the way in which the Administration's budget proposes to change the watershed program funding in fiscal year 1999. The Administration again proposes taking $71 million from the Public Law 83–566 Small Watershed Program, and putting it in the NRCS Conservation Operations account, leaving only $49 million for actual on the ground implementation. While the Administration's budget suggests this approach simply combines some of the NRCS's technical assistance expenses into one account, and the funds will be used for "water resource assistance," we believe this is a means to put these funds in an account where they will not be used for Public Law 83–566 Small Watershed Projects, but instead will be spread around with virtually no program accountability. In our view this represents the long time desire of some in the Administration to circumvent the will of the Congress and eliminate Small Watershed Projects. The Administration's budget also eliminates any funding for the eleven watersheds authorized by the Flood Control Act of 1944 (Public Law 78–534), which was about $18 million in 1997, but suggests that "worthwhile Public Law 534 projects" can be continued under the Small Watershed Program, Public Law 83–566 (with no funding?). We see this as a way to again administratively eliminate a congressionally mandated program which some in the Administration don't care for, but one which has provided millions of dollars of benefits to society. Watershed project sponsors, who were encouraged to assume such responsibility by the federal government, now feel abandoned by that same federal "partner." It seems to us that the money taken from the Small Watershed Program ($71 million put in the Conservation Operations account) would be far better used, and provide many more real benefits, if left in the Small Watershed Program where Congress intended it.

The availability of only $49 million in the administration's budget for actual project installation presents a special problem for watershed sponsors. In addition to virtually eliminating most project construction, this lack of funding allows the NRCS to say they are "reevaluating project priorities in order to make the limited finds stretch, and be used for environmentally friendly projects." Thus reevaluation is done without the input of project sponsors, whose planned work meets every environmental regulation, and meets the criteria in the law. What in truth happens with this reevaluation, is that projects which have a flood damage reduction objective, and which might propose building a small upstream dam to reduce flooding, are eliminated from the NRCS priority listing. Those local project sponsors have made legal commitments based on the federal agreements, and they are being left out in the cold.

The Administration has also suggested that the $49 million for project construction be transferred to the Rural Development for "loans." They are also proposing the collection of "user fees" for services that taxpayers have already paid for once, and for which no statutory authority exists. Not only is this not the intent of Congress or in the legislation, if the wealthy communities elect to use the loan option to implement their projects, it would virtually eliminate any of the poorer, limited resource communities from competition for very limited funds. This sounds like another crazy idea originating with the Office of Management and Budget (OMB). It flies in the face of those interested in the notion of "environmental justice."

A number of proposed amendments to this legislation were considered during the discussions of the 1996 Farm Bill. The NWC would urge you, whenever the time is appropriate, to take another look at those proposals, particularly the idea of expanding the objectives that the legislation can serve to include more non-structural practices, allow the provision in the law to provide assistance in developing rural water supplies (without water there is no rural development) actually be used (we understand OMB has never allowed its use), eliminate the current requirement that mandates twenty percent (20 percent) of the total project benefits be "directly related to agriculture" which has the unintended effect of penalizing projects in poor, small, rural communities, and continue to explore the idea of allowing the USDA Secretary to accept transfers from other Federal departments and agencies to carry out projects under Public Law 83–566, when it is to the advantage of all. We would also urge that as the issue of cost sharing rates is examined in the future, cost sharing rates be set for the natural resource purpose to be achieved, rather on the practices used to achieve those purposes.

The Coalition appreciates the opportunity to offer these comments regarding fiscal year 1999 funding for the water resource programs administered by the Natural Resources Conservation Service. With the "downsizing" the NRCS has experienced, we would be remiss if we did not again express some concern as to their ability to provide adequate technical support in these watershed program areas. NRCS technical staff has been significantly reduced and budget constraints have not allowed that expertise to be replaced. Traditional fields of engineering and economics are but two examples. We see many states where the capability to support their responsibilities in these program areas is seriously diminished. This is a disturbing trend that needs to be halted. This downsizing has a very serious effect on state and local conservation programs. Local Watershed and Conservation Districts and the NRCS combine to make a very effective delivery system for providing the technical assistance to local people—farmers, ranchers and rural communities—in applying needed conservation practices. Many states and local units of government also have programs that provide financial assistance to land owners and operators for installing measures that reduce erosion, improve water quality, and maintain environmental quality. The NRCS provides, through agreement with the USDA Secretary of Agriculture, "on the land" technical assistance for applying these measures. The delivery system currently is in place, and by downsizing NRCS we are eroding the most effective and efficient coordinated means of working with local people to solve environmental problems ever developed. Our system and its ability to produce food and fiber is the envy of the entire world. In our view, these programs are the most important in terms of national priorities.

The administration is also proposing millions of dollars for a new so-called "Clean Water Initiative." Why have they chosen to abandon the tried and proven conservation watershed programs which have served us so remarkably for 50 years in order to fund diner initiatives?

The Coalition pledges its full support to you as you continue your most important work. Our Executive Director/Watershed Programs Specialist Mr. John W. Peterson, who has over forty years experience in this business, is located in the Washington, DC area, and would be pleased to serve as a resource as needed. John's address is 9304 Lundy Court, Burke, VA 22015–3431, phone 703–455–6886, Fax; 703–455–6888, email; jwpeterson@theonramp.net.

Thank you for allowing the National Watershed Coalition (NWC) this opportunity.

PREPARED STATEMENT OF DR. SAM CURL, DEAN AND DIRECTOR, DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES, OKLAHOMA STATE UNIVERSITY, THE OKLAHOMA AGRICULTURAL EXPERIMENT STATION, AND THE OKLAHOMA COOPERATIVE EXTENSION SERVICE

Mr. Chairman and Members of the Subcommittee: Thank you for providing me the opportunity to submit testimony to your subcommittee today concerning agriculture research, extension, and education funding for fiscal 1999.

On behalf of Oklahoma State University, the Oklahoma Agricultural Experiment Station and the Oklahoma Cooperative Extension Service, I seek your support of funding for the following continuing special research grants, which are the priority initiatives for the Division of Agricultural Sciences and Natural Resources:

Animal Waste Management in Semiarid Agroecosystems	$400,000
Expanded Wheat Pasture	330,000
Integrated Production Practices for Horticultural Crops	258,000
Preservation and Processing of Selected Fruits and Vegetables	258,000
Pilot Tech Transfer (Mississippi and Oklahoma)	400,000

Your support is also solicited for national agriculture research, extension, and education funding consistent with the recommendations of the National Association of State Universities and Land-Grant Colleges. Included within those recommendations is the proposal for a 5.7 percent increase in base (formula) funding for agriculture research, extension, and education that we solidly support.

ANIMAL WASTE MANAGEMENT IN SEMIARID AGROECOSYSTEMS—$400,000

The proposed Oklahoma Panhandle Research and Education Center's research project in Animal Waste Management in Semiarid Agroecosystems is designed to develop sustainable, environmentally safe, and ecologically sound best management principles and practices for beneficial animal waste applications for "High Plains Agriculture." The project will be conducted in support of rural economic development through a federal-state-local partnership.

Emphasis is placed on the rapidly expanding hog industry in the semiarid region, but information gained will also be applicable to the beef and dairy industries. The objectives of this study are to develop informational databases for:

(1) sustainable, environmentally safe, and ecologically sound principles and practices for beneficial animal waste management in semiarid agroecosystems;

(2) best management practices to maximize nutrient utilization and minimize odor for land application of animal wastes in crop and grazingland production systems;

(3) the design and operation of waste lagoons in semiarid agroecosystems to minimize odor and risk of harmful effects to ground water, air quality, and the environment;

(4) ensuring public health; and

(5) technology transfer systems that will benefit "High Plains Agriculture."

Research and education programs must provide a flow of timely information addressing problems faced by agricultural clientele and allied industries in the region. Climatic conditions and soils are unique to this semiarid region, and information that has been derived from other more humid regions is not applicable. This research will develop regional information regarding the prudent management of animal waste systems that is applicable to a five state, semiarid area. The multidisciplinary research activities will be conducted by the Oklahoma Agricultural Experiment Station and Oklahoma Cooperative Extension Service in cooperation with Oklahoma Panhandle State University and consultation with other land-grant universities from the four surrounding states.

Information gained will be adaptable to producers in the Texas panhandle, northeastern New Mexico, eastern Colorado, and western Kansas. Research and extension programs dealing with beneficial land applications of biosolids from well-established beef-cattle feedlots, new emerging swine lagoons, and the expanding dairy industry are underway. Nutrient loading rates for crop production and grazingland systems, design and operation of waste lagoon systems with major emphasis on odor control, and minimizing risks to surface and ground water all will receive major attention. It is essential that economical, sustainable, environmentally prudent, and ecologically sound waste management principles and practices be developed for the rapidly expanding animal industry in this semiarid region.

EXPANDED WHEAT PASTURE—$330,000

The Expanded Wheat Pasture Project is a continuing multidisciplinary research and extension initiative at Oklahoma State University. The project is also known as, "Increasing Profitability of the Wheat/Stocker Cattle Enterprise," and its objectives are to:

(1) increase profitability of the wheat grain/stocker-feeder cattle enterprise;

(2) decrease production risks and income variability from the enterprise, thereby increasing growth of the industry in the southern Great Plains; and,

(3) improve the economics of many rural communities in Oklahoma and the southern Great Plains.

This initiative permits Oklahoma State University (OSU) to help improve the profitability, global competitiveness, and sustainability of agriculture, and revitalize rural Oklahoma.

This initiative is at a pivotal stage with regard to evaluation of grazing management strategies to overcome the negative effects of increasing stocking density on grain yield, and further development of decision-support microcomputer models. The project presently focuses on evaluating different wheat varieties by cattle grazing trials, and further development of supplementation programs that will minimize variation in daily intake while achieving desired mean intakes of new technologies for growing cattle. This will maximize both biologic and economic efficiency.

This initiative compliments the new Beef Cattle Environmental Stress Research Facility at OSU. This will allow measurement of the effects of receiving health and nutrition treatments for stressed calves on subsequent performance on wheat pasture. Similarly, effects of treatments on wheat pasture on subsequent feedlot performance of the cattle can be evaluated. These studies are a prerequisite to improving the overall efficiency and decreasing costs of beef cattle production in the United States.

Differences in net return (dollars per acre) from cattle and total net return from cattle and grain have been as large as $35 and $63 per acre, respectively, depending on variety and stocking density. Oklahoma plants about 7.4 million acres of wheat each year.

The potential of this project for improving the economies of many rural communities in Oklahoma and the southern Great Plains is enormous. Annual income in Oklahoma could be increased by $131,000,000 by improving the technical efficiency of production of the 1.5 million head of stocker cattle that are grown to heavier weights on wheat pasture in Oklahoma prior to being finished in feedlots. By improving the technical efficiency and increasing the number of cattle that are grazed on wheat pasture in Oklahoma, annual income in the state could potentially be increased by almost $308,000,000. This research has similar potential impacts on the 5.5 million head of wheat pasture stocker cattle in Texas, Kansas, New Mexico, and Colorado. The opportunity for expansion (growth) of the industry has never been greater than it is today because of the changing structure of the U. S. beef cattle industry.

INTEGRATED PRODUCTION PRACTICES FOR HORTICULTURAL CROPS—$258,000

The goals of the Integrated Production Practices for Horticulture Crops research project include evaluating and developing cropping systems that will diversify agricultural production, thus increasing profits and improving the stability of farms in the southeast region of Oklahoma. The focus of the project has been to develop alternative agricultural enterprises for the region, especially horticulture crops.

The research is conducted by a multidisciplinary team of scientists from OSU and the U.S. Department of Agriculture's Agriculture Research Service (ARS), who are co-located at the Wes Watkins Agricultural Research and Extension Center in southeast Oklahoma, as well as scientists at other universities. The mission of the facility is to aid in the agricultural development in the region.

Applied and theoretical research projects are necessary and are being conducted in support of the overall project. The project leaders have received additional peer reviewed competitive grants for supporting work. Funds from these grants have directly supported the research of scientists located at the Center, support local students as technicians working on projects, supplies, scientific equipment, and infrastructure that will support long term research efforts at the center.

Research has resulted in development of cropping systems for six different vegetable crops not currently grown extensively in the region plus a comprehensive cropping system for watermelons. The cropping systems that have been developed will allow producers to reduce risks, diversify farms, and increase profits. In addition, results will be useful for producers of traditional crops grown in the region. Future support will allow the team to develop new systems, extend the results of prior research to producers, and to optimize production in the region. Databases developed will enable producers to better understand the relationships among farm geography, climate, management practices, yield, and profit.

PRESERVATION AND PROCESSING OF SELECTED FRUITS AND VEGETABLES—$258,000

Preservation of quality after harvest is of special importance for fresh fruits, nuts, and vegetables. The overall objectives of the Preservation and Processing of Selected Fruits and Vegetables research initiative at OSU are: to define the major limitations for maintaining quality of harvested fruits, nuts, and vegetables, and, then, to prescribe appropriate harvesting, handling, and processing protocols to extend shelf life and/or to improve value. Research activities have concentrated on factors currently limiting quality and shelf life of Oklahoma-grown produce and focuses on supporting the growth of the fruit, nut, and vegetable industry by providing technological improvements essential to meet consumer demands. This research program also addresses high priority national research topics in development of new technologies for handling and processing agricultural products.

A systems approach to harvesting, handling, and processing operations is being used to integrate specialized crop culture, harvesting, handling, and processing operations to optimize new cropping systems, and to provide technological information required for integration of new value-added processing industries for Oklahoma hor-

ticultural products. Commercial application of ongoing food products processing projects will be facilitated by activities in the newly opened Oklahoma Food and Agricultural Products Research and Technology Center. Technological improvements in fruit, nut, and vegetable harvesting, handling and processing are critically needed to supply domestic markets and to support continued U.S. participation in international commerce. This research will help Oklahoma industries compete in a global economy.

PILOT TECH TRANSFER (MISSISSIPPI AND OKLAHOMA)—$400,000

Within the Mississippi and Oklahoma Pilot Technology transfer project, the Oklahoma funding supports an integrated extension program that provides technology transfer and associated business support for small manufacturers in southeastern Oklahoma. The team includes engineers and technology transfer specialists from the Oklahoma Cooperative Extension Service working cooperatively with specialists from Rural Enterprises, Inc., of Durant, Oklahoma. Team members cooperate with specialists in other districts of the state in programs supported by the National Institutes of Standards and Technology (NIST) through the Oklahoma Alliance for Manufacturing Excellence. The Alliance programs are focused on other areas in Oklahoma.

The focus of the program is one-on-one assistance to small manufacturers to help make their operations sustainable and more profitable. In the process, jobs are saved and created. In addition, the small manufacturers increase their technical competence and learn to access these kinds of services on their own through private service providers. They are also encouraged to become members of local and state manufacturing organizations that can help make them sustainable.

Rural Oklahoma traditionally has relied on agriculture and energy, with a scattering of small industry, for its economic base. Of the more than 5,800 manufacturing firms in Oklahoma, more than 5,200 employ fewer than 250 employees. Approximately half of these small firms are located in rural areas. Rural manufacturers are extremely important to their local economies. The loss or downsizing of these small plants can have devastating consequences for the host and surrounding communities, while the establishment or growth of a manufacturing facility can provide far-reaching and sustainable economic benefits.

The technology transfer activity supported by this program provides the only on-site, one-on-one, focused transfer of engineering and technical assistance to manufacturers in southeast Oklahoma. It is the only fully integrated program of financial, technical, and business assistance to small manufacturers in Oklahoma.

NATIONAL AGRICULTURE APPROPRIATIONS FOR RESEARCH, EXTENSION, AND EDUCATION

Agricultural science is important for improving the components of life that matter the most to the public. Agricultural science continually produces healthier, more nutritious, safer food than found anywhere else in the world. It produces fibers for American clothing and textiles. Agricultural science produces discoveries that make dramatic improvements in human health. Agricultural scientists work closely with Cooperative Extension personnel who ensure that agricultural discoveries get into the hands of those who need them, resolving problems for whole industries and single individuals.

Despite the documented successes of agricultural research, and education, federal funding for these programs has stagnated since the 1970's. Buying power has eroded 15 percent in real terms since 1985. The Clinton Administration has proposed significant budget cuts for fiscal 1999 in the base funds, which are compounded when the last five years of flat funding for the programs is taken into account. The Clinton budget base funding cuts of particular concern are:

—Hatch Act, Experiment Station—9 percent cut;

—Smith-Lever, Cooperative Extension—4 percent cut;

—McIntire-Stennis, Forestry—3 percent cut; and

—Animal Health—elimination.

Support is requested for agriculture appropriations for fiscal 1999 to: (1) increase base formula funding for agriculture research, extension, and education by 5.7 percent; and (2) fund other agricultural research, extension, and education appropriations as outlined in the recommendations of the National Association of State Universities and Land-Grant Colleges.

PREPARED STATEMENT OF THE ORGANIZATION FOR THE PROMOTION AND ADVANCEMENT OF SMALL TELECOMMUNICATIONS COMPANIES

SUMMARY OF REQUEST

The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) seeks the Subcommittee's support for fiscal year 1999 loan levels for the telecommunications program administered by the Rural Utilities Service (RUS) in the same amounts as those contained in the fiscal year 1998 Agriculture Appropriations Act. The requested program levels are:

Telecommunications Loans Program

5 percent hardship loans	$75,000,000
Treasury rate loans	300,000,000
Guaranteed loans	120,000,000
Rural Telephone Bank (RTB) loans	175,000,000

In addition, OPASTCO requests the Subcommittee's support for the following: (1) removal of the statutory 7 percent cap on Treasury rate loans for fiscal year 1999; (2) a prohibition against the transfer of unobligated RTB funds to the general fund of the Treasury or Federal Financing Bank; (3) continuation of funding the RTB's administrative expenses and subsidy budget authority through the general fund of the Treasury; and, (4) funding of the distance learning and telemedicine grant and loan program at sufficient levels.

OPASTCO is a national trade association of more than 500 independently owned and operated telephone companies serving rural areas of the United States. Its members, which include both commercial companies and cooperatives, together serve over 2 million customers in 40 states. Well over half of OPASTCO's members are RUS or RTB borrowers.

Perhaps at no time since the inception of the RUS (formerly the REA) has the telecommunications program been so vital to the future of rural America. The telecommunications industry is at a crossroads, both in terms of technology and public policy. Great leaps in telecommunications technology in recent years will deliver on the promise of a new "information age." The Federal Communication Commission's (FCC) implementation of the landmark Telecommunications Act of 1996, as well as fundamental statutory changes to RUS's lending program, will expedite this transformation. However, without continued RUS support, rural telephone companies will be hard pressed to build the infrastructure necessary to bring their communities into this new age, creating a bifurcated society of information "haves" and "have-nots."

Contrary to the belief of some critics, RUS's job is not finished. In fact, in a sense, it has just begun. We have entered a time when advanced services and technology—such as broadband fiber optics, digital switching equipment, custom calling features, and the Internet—are an expected and needed part of a customer's telecommunications service. In addition, the fast approaching year 2000 will require all telephone companies to upgrade their digital switches in order to avoid network disruptions and provide a seamless transition to the new millennium. Unfortunately, the inherently higher costs of upgrading rural networks has not abated. Rural telecommunications continues to be more capital intensive and involves fewer paying customers than its urban counterpart. RUS borrowers average only 6.1 subscribers per route mile versus 130 subscribers per route mile for large local exchange carriers. In order for rural telephone companies to modernize their networks and provide their customers with advanced services at reasonable rates, they must have access to reliable low-cost financing.

Furthermore, the relative isolation of rural areas increases the value of telecommunications services for these citizens. Telecommunications enables applications such as distance learning and telemedicine that can alleviate or eliminate some rural disadvantages. Telecommunications can also make rural areas attractive for some businesses and result in revitalization of the rural economy. For example, businesses such as telemarketing and tourism can thrive in rural areas, and telecommuting can become a realistic employment option.

While it has been said many times before, it bears repeating that RUS's telecommunications loans program is not a grant program. The funds loaned by RUS are used to leverage substantial private capital, creating public/private partnerships. The RUS estimates that every dollar of government money invested in telecommunications plant leverages $4.80 in private capital. For a very small cost, the government is encouraging tremendous amounts of private investment in rural telecommunications infrastructure. Moreover, there has never been a default in the history of the lending program.

The FCC's implementation of the Telecommunications Act of 1996 will only increase rural telephone companies' need for RUS assistance in the future. The forward-looking Act defines universal service as an evolving level of telecommunications services that the FCC must establish periodically, taking into account advances in telecommunications and information technologies and services. While the competitive environment engendered by the 1996 Act may offer the means of meeting this definition in urban areas, rural and high cost areas have less potential for competitive investment.

One of the principles of universal service established in the 1996 Act is that consumers in rural areas have access to advanced telecommunications and information services that are reasonably comparable to those services provided in urban areas at reasonably comparable rates. At present, it is uncertain whether the FCC will provide a "sufficient" mechanism, as required by the Act, to achieve this urban/rural comparability goal. Long before the enactment of the 1996 Act, RUS has been the great facilitator of a dynamic universal service concept in rural areas, providing rural telephone companies with the financing to fund technological improvements. RUS now has an essential role to play in the implementation of the new law, as it will compliment new funding mechanisms established by the FCC and enable rural America to move closer to achieving the federally mandated goals.

Working in tandem with the 1996 Act, the Rural Electrification Loan Restructuring Act of 1993 (RELRA) will further help to ensure the comparability of telecommunications service between urban and rural America. As a prerequisite to eligibility for insured and RTB loans, RELRA requires that every state have an RUS approved modernization plan which provides a timeline for the improvement of the state's telecommunications network and assures that the purpose of every loan is consistent with achieving the requirements of the borrower's state plan. These plans set forth the requirements for the transmission of video images and high speed data that will promote educational and health care opportunities as well as provide the necessary infrastructure for economic development. Implementation of these plans has already begun to generate additional loan demand as rural telephone systems strive to meet the increased service objectives in the rural areas they serve.

One of the most vital components of RUS's telecommunications loans program is the 5 percent hardship loan program. These loans are referred to as hardship loans for good reason: They provide below-Treasury rate financing to telephone companies serving some of the most sparsely populated, highest cost areas in the country. The commitment these companies have to providing modern telecommunications service to everyone in their communities has made our nation's policy of universal service a reality and, in many cases, would not have been possible without RUS's hardship loan program. Companies applying for hardship loans must meet a set of eligibility requirements and the projects to be financed are rated on a point system to ensure that the loans are targeted to the most needy and deserving. The RUS reports that through the second quarter of fiscal year 1998, they had already approved over $65 million in hardship loans—or more than 86 percent of their authorization—and had an additional $62 million in applications on hand. By year end, RUS estimates that it will have $79 million in hardship loan applications that cannot be funded. For fiscal year 1998, the government subsidy needed to support a $75 million loan level was under $3 million. Given the need and demand for this essential program, it is critical that the loan level be maintained at $75 million for fiscal year 1999.

With regard to RUS's Treasury rate loan program, OPASTCO supports the removal of the 7 percent ceiling on these loans for fiscal year 1999. This Subcommittee appropriately supported language in the fiscal year 1996 Agriculture Appropriations Act to permit Treasury rate loans to exceed the 7 percent per year ceiling contained in the authorizing act. This language was continued in fiscal year 1997 and fiscal year 1998. Were long-term interest rates to exceed 7 percent, adequate subsidy would not be available to support the Treasury rate loan program at the authorized levels. Accordingly, OPASTCO supports the continuation of this language in the fiscal year 1999 appropriations bill in order to prevent potential disruption to this important program.

OPASTCO also urges the Subcommittee to reinstate the language introduced in the fiscal year 1997 Agriculture Appropriations Act, and continued in fiscal year 1998, prohibiting the transfer of any unobligated balance of the RTB liquidating account to the Treasury or the Federal Financing Bank which is in excess of current requirements and requiring the payment of interest on these funds. As a condition of borrowing, the statutory language establishing the RTB requires telephone companies to purchase Class B stock in the bank. Once all loans are completely repaid, a borrower may then convert its Class B stock into Class C stock. Thus, all current and former borrowers maintain an ownership interest in the RTB. As with stockholders of any concern, these owners have rights which may not be abrogated. The

Subcommittee's inclusion of the aforementioned language into the fiscal year 1999 appropriations bill will ensure that RTB borrowers are not stripped of the value of this required investment.

On the other hand, the Subcommittee should reject the Administration's proposal to fund the RTB's administrative expenses and subsidy budget authority through the bank's liquidating account balances. This proposal is inappropriate on both legal and policy grounds. Statutorily, the Rural Electrification Act provides for the RTB's use of facilities and services of employees of the Department of Agriculture, without cost to the RTB, until such time as the bank is privatized. The proposal also appears inconsistent with the bifurcated structure of the RTB under the Federal Credit Reform Act of 1990 which does not permit funds in the liquidating account to finance new loans. From a public policy standpoint, unobligated balances of the liquidating account have been targeted to support the privatization of the RTB and use of these funds for other purposes would only serve to dilute the value of the bank for all stockholders. Finally, paying for the RTB's administrative expenses and subsidy through the liquidating account offers no budgetary savings. For these reasons, OPASTCO is opposed to the Administration's proposal and urges the Subcommittee to continue to fund the RTB through the general fund of the Treasury.

In addition to RUS's telecommunications loans program, OPASTCO supports adequate funding of the distance learning and telemedicine grant and loan program authorized in the Federal Agriculture Improvement and Reform Act of 1996. This sensible investment allows rural students to gain access to advanced classes which will help them prepare for college and jobs of the future. Also, rural residents will gain access to quality health care services without traveling great distances to urban hospitals. The Agriculture Act authorizes $100 million for each of the fiscal years 1996 through 2002. Loans are made at the government's cost-of-money, which should help to meet demand for the program in the most cost effective way. In light of the Telecommunications Act's requirement that schools, health care providers, and libraries have access to advanced telecommunications services, sufficient targeted funding for this purpose is essential in fiscal year 1999.

CONCLUSION

The development of the nationwide telecommunications network into an information superhighway, as envisioned by policymakers, will help rural America survive and prosper in any market—whether local, regional, national, or global. However, without the availability of low-cost RUS funds, building the information superhighway in communities that are isolated and thinly populated will be untenable. By supporting the RUS telecommunications programs at the requested levels, the Subcommittee will be making a significant contribution to the future of rural America at a negligible cost to the taxpayer.

PREPARED STATEMENT OF ALAN F. HOLMER, PRESIDENT, PHARMACEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA

Mr. Chairman and Members of the Subcommittee: On behalf of the Pharmaceutical Research and Manufacturers of America (PhRMA), I present recommendations on the fiscal year 1999 budget request submitted by the Administration for the Food and Drug Administration (FDA). PhRMA represents the country's major research-based pharmaceutical and biotechnology companies, which are leading the way in the search for new cures and treatments that will enable patients to lead longer, happier, healthier, and more productive lives.

Let me acknowledge at the outset that we appreciate the very difficult decisions the Subcommittee must make as it considers funding for the many vital agriculture, infant feeding, rural development, tobacco, and other programs with which it is concerned. Our interest is in the FDA and the critical role it plays in promoting and protecting the health and safety of our country's citizens.

Let me also acknowledge and thank the Subcommittee for its key leadership in ensuring that FDA receives the necessary funding to carry out its important functions. This was particularly true last year when the Subcommittee approved funding for fiscal year 1998 that enabled Congress to pass the FDA Modernization Act of 1997 (FDAMA), which extended the Prescription Drug User Fee Act of 1992 (PDUFA) for another five years. Under the first five years of the user-fee law, FDA cut drug-approval times in half and is making new life-saving, cost-effective medicines available to patients much more quickly.

We also thank you, Mr. Chairman, for your leadership on the pending fiscal year 1998 supplemental appropriations legislation. PhRMA supports FDA's request, as a result of FDAMA, for an increase to the current authorized appropriation level, plus

an additional amount for the FDA's increased workload of drug applications, for a total of $25.9 million. We appreciate that your Subcommittee has pressed to provide this additional funding for the agency to allow it to utilize all of the drug user-fee revenues that will be paid this year.

PhRMA also supports the Administration's fiscal year 1999 request for budget authority for direct federal appropriations of $878.9 million for FDA salaries and expenses—the major and essential component of FDA's resources. This represents a $21.4 million increase over the appropriations enacted by Congress for the current fiscal year.

However, the Administration is further proposing to raise an additional $127.7 million through the imposition of new user fees for such activities as medical device reviews, animal drug approvals, import inspections, food additive petition reviews, generic drug application reviews, and post-market surveillance of products. Unlike the prescription-drug user fee program, these user fees would substitute for regular appropriations, would not be dedicated to a specific purpose, and would not require that FDA meet performance goals.

For more than a decade, this and previous Administrations have made such proposals and Congress has repeatedly rejected them. We anticipate that this will happen again this year.

For this reason, we believe it is critical that Congress provide direct federal appropriations of $1.007 billion for FDA salaries and expenses for fiscal year 1999—which includes the $878.9 million requested by the Administration and the additional $127.7 million the Administration believes is necessary but should be derived from general user-fees that Congress has consistently declined to authorize.

Without the additional $127.7 million in appropriations, FDA will not be able to carry out all of its important public health and safety responsibilities in regulating more than $1 trillion worth of products—one-quarter of all the money spent annually by U.S. consumers—in the areas of drugs, biologics, medical devices, food, cosmetics, radiation-emitting devices, and pet food and drugs.

In his prepared testimony for the Subcommittee's hearing on March 31, 1998, FDA Lead Deputy Commissioner Michael A. Friedman, M.D., stated that, while "focused" food safety and tobacco programs that have received "specially designated appropriations [will] continue to grow, core FDA functions have seen a steady decline in non-PDUFA FTE's from the fiscal year 1992 level of 8,868 to a low of 8,444 in the current fiscal year, a 4.8 percent drop."

Of primary concern to PhRMA, the prescription drug user-fee program—entirely different than the Administration's proposals for general new user fees—is good for FDA, industry and, above all, patients. The pharmaceutical industry and FDA are working to serve a common client—the patient. The research-based pharmaceutical industry is working to develop new and better drugs, FDA to improve the drug development and approval process. According to the agency, more than 11 million patients received an approved medicine in 1997 that would not have been available except for the prescription drug user-fee law.

PhRMA companies will spend over $20 billion this year—almost 20 percent of sales, more than virtually any other U.S. industry—to discover and develop new medicines and vaccines to combat such diseases as AIDS, cancer, Alzheimer's, heart disease, stroke, diabetes, arthritis, asthma, and numerous other diseases. In his testimony, Dr. Friedman recognized the symbiotic relationship between industry and FDA:

> The industry's research and development investment of some $21 billion in drugs and nearly $4 billion in medical devices last year continues to grow as companies try to transform the advancing medical science into new products. The payoff is a new product pipeline filled with promising new therapeutics, some of which are strikingly novel. For society, the benefit from this investment in basic research is great. For FDA, as society's technological midwife for medical products, the burden also is great as it struggles to manage the burgeoning flow of new products to the market.

We are concerned that FDA's baseline appropriations be maintained and that user fees not be substituted for direct federal appropriations. This is a fundamental principle underlying the agreement reached between Congress, FDA, and industry and embodied in PDUFA and FDAMA.

Under the 1992 law, industry agreed to pay $327 million in user fees during 1993–1997, which enabled FDA to hire 600 additional reviewers and cut drug-approval times from 29.2 months in 1992 to 16.2 months in 1997. During fiscal years 1998–2002, pharmaceutical companies will pay more than $550 million in user fees under FDAMA so FDA can continue to reduce approval times and can begin to cut development times as well. While approval times have been cut in half, total devel-

opment times have continued to rise through the 1990's to more than 15 years according to the most recent figures.

As Dr. Friedman stated in his prepared testimony, FDA will increase its number of reviewers and support staff under FDAMA by 120 FTE's over the current fiscal year to 820 in fiscal year 1999, ensuring that the agency will be able to continue to perform at its current high level.

As revised under FDAMA, general fund appropriations for FDA salaries and expenses each year must equal or exceed the fiscal year 1997 appropriation level (excluding user fees) of $820 million, as adjusted for inflation or changes in overall domestic discretionary budget authority, beginning after fiscal year 1998, whichever is lower. We understand that the requested basic direct federal appropriations level of $878.9 million for overall federal salaries and expenses may be adequate to meet the "waterline" requirement for "triggering" FDA authority to assess and collect user fees for prescription drugs in fiscal year 1999.

However, if FDA must absorb a shortfall of $127.7 million that will not be derived from proposed new user fees and is required to direct existing staff resources to support new Administration domestic policy initiatives in such areas as tobacco and food safety, the agency will not be able to carry out all of its other important public-health responsibilities, as Dr. Friedman made clear.

Thus, PhRMA strongly urges that Congress appropriate $1.007 billion in fiscal year 1999 for FDA salaries and expenses to ensure that the agency can fulfill all its vital responsibilities to promote and protect public health and safety.

PREPARED STATEMENT OF DAVID GAILLARD, FOREST PREDATOR PROTECTION CAMPAIGN COORDINATOR, PREDATOR PROJECT

I am writing you on the 67th anniversary of the creation of the Wildlife Services program (formerly called, "Animal Damage Control"), in regards to the appropriations of federal funds to this program. I am writing on behalf of Predator Project, a non-profit conservation organization based in Bozeman, Montana. We urge you and the other members of the Appropriations Subcommittee on Agriculture to cut $10 million from Wildlife Service's "livestock protection" program, which is almost entirely comprised of lethal predator control in the western United States.

The federal Wildlife Services program has received much public scrutiny and criticism for its livestock protection program, which primarily involves killing coyotes, mountain lions and other predators. As we explain in our attached report, the problem with the USDA's Wildlife Services program is that public money is being spent to kill publicly owned wildlife, often on public lands, for the benefit of a small percentage of private livestock producers, who are neither required to change their management practices to reduce livestock/predator conflicts nor directly pay for this government "service." Of the federal funds Congress allocates to Wildlife Services, we find that the majority goes to the western states, and the majority of that is spent on killing predators.

Our report "Wildlife Services?" identified the following problems:

—Despite a Clinton Administration policy that federal dollars should fund no more than half of Wildlife Services' state office expenditures, this is violated in 13 of the 17 western states;

—Western livestock producers, including individuals and organizations, contributed less than 14 percent in direct payments for livestock protection, and less than 26 percent when indirect payments to county governments (typically due to a "head" tax on livestock) are included;

—Livestock protection—which is almost exclusively lethal predator control—accounts for two-thirds (67 percent) of Wildlife Services' western state office expenditures, and more than two-thirds (69 percent) of its western state office expenditures of federally appropriated funds; and

—Wildlife Services' western state office expenditures to kill predators exceeds reported livestock losses to predators in those states by more than three times!

Predator Project considers the Clinton Administration's recent proposal to reduce Wildlife Services' operational budget for fiscal year 1999 by $2.5 million a step in the right direction. However, we urge Congress to further reduce Wildlife Services' budget by $10 million, by eliminating federal appropriations for the lethal predator control work conducted through the Wildlife Services' "livestock protection" program. For fiscal year 1996 (the most recent years for which figures are available) Wildlife Services state offices spent $9.95 million of federally appropriated funds on livestock protection. We propose a $10 million cut in Wildlife Services' annual federal appropriations to eliminate this aspect of the Wildlife Services program. It is important to note that this total comprises the amount spent by state offices only.

Additional federally appropriated funds are spent by the western and national Wildlife Services offices to manage lethal predator control work; these funds will be unaffected by this cut, and will therefore be available to provide technical assistance to livestock producers, targeted lethal predator control, and other Wildlife Services activities in the western 17 states. Eastern Wildlife Services activities, which largely assist landowners in managing their own wildlife problems, would be unaffected by this reduction.

Predator Project is not alone in suggesting that Congress end the wildlife control program. In January, an unusual coalition of taxpayer and environmental groups released "Green Scissors 1998—Cutting Wasteful and Environmentally Harmful Spending". Wildlife Services was one of 71 programs which the report recommended be cut, because the program is "preying on taxpayers." According to the report, not only is the program harmful and costly, it does not even work: "Livestock losses to predators have not declined despite a 71 percent inflation-adjusted increase in WS's appropriations between 1983 and 1993 and a 30 percent increase in coyotes killed in the last decade." In addition, Wildlife Services' livestock protection activities benefit western ranchers to the exclusion of most eastern ranchers. I would add to this that only a small percentage of western ranchers use Wildlife Services.

In sum, there are three good reasons for cutting Wildlife Services' budget. First, ranchers who get Wildlife Services' help are neither required to pay directly for that help, nor do they have to change their livestock management practices to try and reduce the need for Wildlife Services' predator control work. In other words, those ranchers who are asking for Wildlife Services' assistance are getting something from the federal government without having to try and meet their own needs first. Second, all wildlife is considered the property of the individual states. So, the states should retain the responsibility for managing its wildlife. This would give power back to the states. Increasingly, we are hearing that states in the West are frustrated with Wildlife Services' work. Eliminating the Wildlife Services' lethal predator control program would allow the states to manage their own wildlife, instead of having to accept the constraints of the federal government's program. Finally, the federal predator control program is outdated because it is no longer in step with the wishes of the majority of Americans. Our nation spends millions of dollars each year to aid wildlife, so the killing of wildlife by Wildlife Services is not cost-effective.

We look forward to working with you to reduce the federal government's operations and budget.

PREPARED STATEMENT OF A. LYNN LOWE, PRESIDENT, RED RIVER VALLEY ASSOCIATION

The Red River Valley Association is a voluntary group of citizens banded together to advance the economic development and future well-being of the citizens of the four state Red River Basin area in Arkansas, Louisiana, Oklahoma and Texas.

For the past 73 years, the Association has done notable work in the support and advancement of programs to develop the land and water resources of the Valley to the beneficial use of all the people. To this end, the Red River Valley Association offers its full support and assistance to the various Port Authorities, Chambers of Commerce, Economic Development Districts and other local governmental entities in developing the area along the Red River.

The Resolutions contained herein were adopted by the Association during its 73rd Annual Meeting in Shreveport, Louisiana on February 19, 1998, and represent the combined concerns of the citizens of the Red River Basin area as they pertain to the goals of the Association, specifically:

—Economic and Community Development;
—Flood Control;
—Bank Stabilization;
—Watershed Improvement;
—A Clean Water Supply for Residential, Commercial, Industrial and Agriculture Uses;
—Hydroelectric Power Generation;
—Recreation;
—Navigation; and
—Environment.

The Red River Valley Association is aware of the constraints on the federal budget, and has kept those restraints in mind as these Resolutions were adopted. Therefore, and because of the far-reaching regional and national benefits addressed by the various programs covered in these Resolutions, we urge the members of Congress

to review the materials contained herein and give serious consideration to funding at the levels requested.

Mr. Chairman and members of the Committee. I am Lynn Lowe, and I am pleased to represent the Red River Valley Association as its President. Our organization was founded in 1925 with the express purpose of uniting the citizens of Arkansas, Louisiana, Oklahoma and Texas to develop the land and water resources of the Red River Basin.

As an organization that knows the value of our precious water resources we support the most beneficial water and land conservation programs administered through the Natural Resources Conservation Service (NRCS). We understand how important a balanced budget is to our nation; however, we cannot sacrifice what has been accomplished. The NRCS programs are a model of how conservation programs should be accomplished and our testimony will address the needs of the nation as well as our region. We believe strongly that the whole, national program must be preserved.

Even though the fiscal year 1999 President's budget appears to increase NRCS funding the actual use of the funds has changed, to the detriment of the agency and our citizens. The effect is a decrease of usable funds for direct technical and financial assistance. The diversion of funds to new proposed initiatives would reduce assistance to those who need it.

We would like to address several of the programs affected by the President's fiscal year 1999 budget proposal.

1. Watershed and Flood Prevention Operations (Public Laws 566 and 534).—More than 10,400 individual structures have been installed nationally. They have contributed greatly to environmental enhancement, economic development and the social well being of our communities. More than half of these structures are over 30 years old and approaching their 50 year planned life.

These programs offer a complete watershed management approach and should continue for the following reasons:

—Their objectives sustain our nation's natural resources for future generations.
—They are federally assisted and do not grow the federal government.
—Initiatives and decisions are driven by the communities.
—They are cost shared.
—They follow NEPA guidelines and enhance the environment.
—They can address the needs of low income and minority communities.
—The benefit to cost ratio of this program has been evaluated to be 2.2:1. What other federal programs can claim such success?

There is no doubt of the value of this program. The cost of losing this infrastructure exceeds the cost to reinvest in our existing watersheds. Without upgrading existing structures we will miss the opportunity to keep our communities alive and prosperous. It would be irresponsible to dismantle a program that has demonstrated such great return and is wanted by our citizens.

The present level, outlined in the budget, of $49 million is not adequate. We strongly recommend that a funding level of $250 million be dedicated to this program. This is more realistic and compares to the programs appropriated in the years prior to 1997. At the proposed funding level it would take over 30 years to complete just the identified projects, with no attention given to rehabilitation needs.

2. Technical and Financial Assistance.—The Administration wants to change the watershed program from its existing "financial assistance" policy to "loans". This is not acceptable and NOT the intent of Congress. Under a loan system there would be no financial incentive to develop these projects.

A serious issue is that the Administration has diverted the necessary "Technical Assistance" funds from the watershed program to "Conservation Operations". These funds must be put back in "Watershed Operations" to provide accountability and assure the program will continue. Once in the Conservation Operation's account these funds could be diverted to any other program.

The watershed program was mandated by Congress and this is an attempt by the Administration to eliminate the program through funding cuts. We know this is not the will of Congress.

3. User Fees.—It is proposed that $10 million of the NRCS budget come from newly established user fees, which requires legislation to implement. This would be for technical assistance, sales of seeds and plants, soil and snow survey data and technical services.

This cannot be cost effective and will be a burden on the producers that are least able to afford good conservation practices. There has not been a federal fee program that has been effective. We strongly recommend that Congress NOT implement this proposal and instead fund the NRCS budget at the levels required to provide the services our nation needs.

4. Forestry Incentives Program.—The President's budget has no funding for this program, citing that it "promotes timber production on private lands and is incompatible with the agency (NRCS) strategic plan". In fact, Congress transferred this program to NRCS from the Farm Service Agency as a restructuring in the Federal Agricultural Improvement and Reform Act of 1996. Forestry is recognized as a farming activity. NRCS is the best agency to administer this program which assists farmers in production agriculture.

We request Congress to fund the Forestry Incentives Program at a level of $10 million for fiscal year 1999.

5. Environmental Quality Incentives Program (EQIP).—Requests for assistance through the EQIP program have been overwhelming. The resulting requests far exceed the available funds and is an additional workload on NRCS's delivery system. Additionally, the Administration has failed to provide adequate funding for technical assistance to implement the program. The fiscal year 1999 budget increases the program by $100 million but reduces the technical assistance by $8 million from fiscal year 1998. In essence, the program, or workload, was increased by 50 percent and the technical assistance was reduced from 19 percent in 1998 to 10 percent in 1999. There is no logic in this proposal.

The $300 million proposed for the EQIP program is an adequate budget for fiscal year 1999; however, we request that the technical assistance for this program by increased to $57 million.

6. NRCS Staffing.—We are greatly concerned with the Administration's effort to "downsize" this agency. Over the past 3 years staffing has been reduced by about 2,000 staff years. Most of this has been absorbed by national Headquarters (50 percent) and the state offices (20 percent) with minimal impact to field offices. The further cuts proposed will come from the field offices, closing many. This will adversely impact technical support required for field delivery of conservation programs. The end result will be the dismantling of our nation's conservation infrastructure. The proposed budget would eliminate another 532 staff years. Can we afford this? Congress must not allow this to happen.

Additionally, we request that $10.5 million be appropriated for "Watershed Planning", $13 million for River Basins Surveys and Investigations and that $20 million be allocated for the Emergency Watershed Program to provide rapid response in time of natural disaster.

A further reduction to technical assistance will jeopardize the local, state and federal partnership in conservation making it impossible to meet this nation's commitment to land stewardship in a voluntary manner. Acceptance of the proposed budget would contradict the policies set forth by Congress over the years, abandoning their commitment to the sound, conservation goals of our agricultural policy.

Over 70 percent of our land is in private ownership. This is important to understanding the need for NRCS programs and technical assistance. Their presence is vital to ensuring sound technical standards are met in our conservation programs. These programs not only address agricultural production, but sound natural resource management. Without these programs and NRCS properly staffed to implement them much of our private lands will not apply conservation measures.

The administration has proposed "new" Clean Water Initiatives, but why do they ignore the agency that has a proven record for implementing conservation watershed programs? Congress must make a decision. Will NRCS continue to provide the leadership within the communities to build upon the partnerships already established? The President does not provide for that leadership and so it is up to Congress to insure NRCS is properly funded and staffed to provide the needed help to our taxpayers for conservation programs.

All these programs apply to the citizens in the Red River Valley and we are concerned for the future. The RRVA is dedicated to work toward the programs which will benefit our citizens and provide for high quality of life standards. We therefore request that you correct the President's budget and appropriate the required funding levels within the dedicated programs to insure our nation's conservation needs are met.

I thank you for the opportunity to present this testimony on behalf of the members of the Red River Valley Association and we pledge our support to assist you in the appropriation process.

Grant Disclosure.—The Red River Valley Association has not received any federal grant, subgrant or contract during the current fiscal year or either of the two previous fiscal years.

PREPARED STATEMENT OF LESTER W. MYERS, PRESIDENT AND GENERAL MANAGER, DELTA WESTERN, INC.

Mr. Chairman and Members of the Subcommittee, I thank you for the opportunity to provide testimony in support of the Regional Aquaculture Centers. My name is Lester Myers. I own and operate a catfish farm near Inverness, Mississippi, and am President and General Manager of Delta Western, Inc., Indianola, Mississippi, the largest catfish feed mill in the United States.

With relatively little fanfare, the aquaculture industry in the United States has developed into a significant part of domestic agriculture in the last 20 years. Production of channel catfish, the largest sector of domestic aquaculture, has increased more than 30 percent this decade—a rate of expansion matched by very few industries. Channel catfish now make up a remarkably large proportion of domestic seafood consumption and, on a value basis, catfish ranks fourth in the United States, behind only shrimp, salmon, and crabs. Further, a significant portion of the salmon consumed by Americans also derives from aquaculture. So, as we enter the next century, domestic aquaculture is well positioned to make up for the expected shortfalls in wild fisheries harvest and supply an increasing proportion of the domestic demand for seafood products.

Continued expansion and profitability of the aquaculture industry will, however, depend on development of new technology to reduce production costs and make production more competitive in the global market. For the past several years, I have been actively involved with the Southern Regional Aquaculture Center as Chairman of the Industry Advisory Council, and I feel that the Regional Aquaculture Center program is well suited to help meet the need for technology development. Already, results from the Regional Center projects are having a significant impact on domestic aquaculture. I believe this success is attributable to three characteristics that set the Regional Aquaculture Centers apart from other publicly funded programs.

First, the activities of the Regional Centers are industry-driven. The Center's activities are initiated by the Industry Advisory Council, which consists of producers, marketing personnel, bankers, and other individuals with fiscal interests in aquaculture. The Industry Advisory Council provides a forum for input from private and public sectors which is then incorporated into annual and ongoing plans for the Center. As such, the genuine needs of the industry are addressed rather than the needs as perceived by scientists or government officials.

Second, allocation of funds through the Center is a deliberate process involving input from experts and concerned industry representatives from throughout the region and the nation. This approach assures that only priority issues are addressed and that the approach used to solve the problem is efficient, thorough, and carefully developed.

Third, the Center's programs are regional in nature, rather than of local interest only. It is the policy of the Center that the issues addressed must be of regional significance and that the resulting project involves participation from institutions from at least two states within the region. In reality, most Center projects involve institutions from at least seven states within the region. This approach makes it possible for Centers to efficiently address problems that require more personnel, equipment, and facilities than are generally available at one location. It also makes better use of limited resources and a saving of funds relative to funding of independent, uncoordinated projects at many different locations. Accordingly, it is possible to bring the best scientific talent in the region to bear on priority problems in an extremely cost-effective manner.

In summary, representatives of the U.S. aquaculture industry are convinced that the Regional Center programs are highly valuable and productive. Additional new research findings will help insure future success for aquaculture production in the United States. The authorized level of funding for the five Regional Aquaculture Centers is $7.5 million annually. The total annual appropriation for the Centers for fiscal year 1998 was $4.0 million, or $800,000 for each of the five Regions. Despite an enviable performance record while operating for more than 10 years at half the authorized level of funding, the President's Budget Proposal for fiscal year 1999 calls for a 3 percent reduction in funding for the Center Program. We strongly request that you rescind the proposed fiscal year 1999 reduction in funding and provide the full authorized level of $7.5 million for the existing five Centers to support these extremely important and effective programs.

On behalf of the U.S. aquaculture industry, I thank you for the opportunity to present testimony in support of the Regional Aquaculture Centers, and express my sincere appreciation for the support you have provided in previous years. Again, I would like to emphasize that significant benefits have already been provided from

work conducted by these Centers and additional funding is urgently needed by our industry.

PREPARED STATEMENT OF DR. RICHARD SPENCER, LIMITED PARTNER, HAWAIIAN MARINE ENTERPRISES

Mr. Chairman and Members of the Subcommittee, thank you for allowing me to submit testimony on behalf of the Regional Aquaculture Centers and the Center for Tropical and Subtropical Aquaculture or CTSA. My name is Richard Spencer, and I am a limited partner in Hawaiian Marine Enterprises, a commercial aquaculture farm that raises edible seaweeds, clams and abalone. I have been a member of the CTSA Industry Advisory Council for ten years and am privileged to serve as its chairman.

I am a businessman, and I have a doctorate in oceanography. Wearing both those hats gives me a true appreciation of the Center's singular role linking the needs of industry and the expertise of science to further the development of aquaculture. The Center recognizes the necessity of integrating industry priorities and scientific research to ensure that its program directly meets the needs of commercial aquaculture producers.

Each year, the United States imports far more seafood than it exports. A high proportion of those imports come from countries that have little or no regulations regarding the safety of cultured aquatic animals or the manner in which wild stocks are harvested. The growth of the U.S. aquaculture industry ensures a reliable, safe source of high quality protein for the American diet and an alternative to the overharvesting of wild stocks, which are being rapidly depleted. In addition, the growth of aquaculture will create new jobs and generate tax revenues, thereby strengthening the economy. However, commercial aquaculture is a mere toddler in terms of its development, and, like all toddlers, requires support and nurture to develop to its full potential.

The Center for Tropical and Subtropical Aquaculture provides that support. Each year, the Center holds a meeting for commercial producers from throughout the region and asks them to define industry problems. Then the appropriate scientific experts are called upon to conduct research to solve those problems.

The routes to those solutions have varied, including education, training, technology transfer, addressing disease issues and government regulations, marketing and economics, and revitalizing or initiating aquaculture activity throughout the Pacific. Most importantly, each route was mapped out in direct response to an industry need.

Although the Center's research projects have been underway for one to ten years, commercial producers in the region and throughout the nation have already reaped enormous benefits.

As a producer of edible seaweed, I benefited directly from Center-funded projects investigating Graccilaria gall syndrome. The syndrome, a relatively new disease problem, attacks cultured seaweed and makes it unsuitable for sale. It nearly devastated seaweed production in Hawaii. The project titled "Disease Management for Hawaiian Aquaculture" found that continuous aeration controls the syndrome. Since that time, I have lost no crops to the syndrome.

The Center-funded "Pacific Regional Aquaculture Information Service for Education" provides easy access to the latest scientific information on aquaculture. It also ensures that individuals in the developing Pacific Island nations—where libraries may well be non-existent—also can easily access that vital information. The project provides a cost benefit of $20 for each $1 of Center funding.

Another project, "Ornamental Aquaculture Technology Transfer," allowed me to diversify into producing ornamental fish for the aquarium trade. In 1995, the U.S. imported $54 million worth of ornamental fish, so this is clearly a lucrative market that U.S. farmers should tap.

Such progress in so short a time clearly illustrates that the Regional Aquaculture Centers' approach of spotlighting industry concerns is the right one, offering rapid, effective results. The investment in the Regional Aquaculture Centers has yielded high returns thus far and will continue to do so. However, I was recently informed that the future yields may well be diminished because of a planned 3 percent funding cut for fiscal 1999. I find that most unfortunate. I have continually urged that expanding the funding capabilities of the Centers would afford even greater results. Please reconsider this decision. Although that may not sound like a huge cut, it will seriously deter the Centers ability to fulfill its mission of developing a viable U.S. aquaculture industry to benefit producers, consumers and the U.S. economy.

With level funding, the Regional Aquaculture Centers funding allocation had lost much of its purchasing power. Over the years, we have found it increasingly difficult to fund the desired research at levels equivalent to the scope of the work. The cost of conducting science has increased dramatically, and the number of worthy proposals has increased as the aquaculture industry in the Pacific region has grown.

With reduced funding, the rising costs of research are eroding available funds and further reducing the amount of real dollars available for projects. This means that a project must be funded over several years to solve a problem that could possibly be solved in a shorter time span, given sufficient funds. Because the economy is doing well, now would be the perfect time to move forward decisively. I strongly urge you to take this into account and approve the authorized full funding of $7.5 million for the Regional Aquaculture Centers program.

Thank you again for the opportunity to submit this testimony.

PREPARED STATEMENT OF DR. DAVID A. SMITH, PRESIDENT, FRESHWATER FARMS OF OHIO, INC.

This past year in Ohio, several landmark events have occurred in aquaculture. The first is that all farm-raised fish products have been brought under the new federal seafood inspection program of HMCP. The second is that fish processors along Lake Erie have turned their sights inland to the few pioneering fish farmers that have started modest production of yellow perch. Fishery harvests of wild perch stocks are at an all time low, and record prices have been maintained virtually all year. The bad news is that there is no perch aquaculture industry large enough in the whole country to satisfy the demand of just one of these major fish wholesalers in northern Ohio.

Why is this the case? If there is such demand, why don't fish farmers just produce more? There is a reason. A technological/extension bottleneck exists at the level of fingerling production. Farmers cannot produce, with today's level of understanding, a reliable and adequate number of young fish to stock out their ponds.

This is one example of problems that are directly addressed by research at the U.S.D.A. Regional Aquaculture Centers. In our own North Central Region, yellow perch research has been given the highest priority and attention. The Center's research priorities are identified by those of us in commercial aquaculture, and are geared to providing hands-on answers to these very real problems that hold back the economic potential of aquaculture in the United States. They are designed to do this through a network of university research and extension outreach that has the highest potential of economic return than any other program out there.

Please give serious consideration to supporting a higher level of funding for adequate aquaculture research through the Regional Aquaculture Centers. I would like to request on behalf of the aquaculture industry that funding be extended to the fully authorized level of $7.5 million. If the fully authorized amount is not appropriated, then they should at least be funded at the level they have received over the last few years which is $4.0 million.

PREPARED STATEMENT OF JOSEPH MCGONIGLE, EXECUTIVE DIRECTOR, MAINE AQUACULTURE ASSOCIATION

Mr. Chairman and members of the Subcommittee: I appreciate this opportunity to express my support for USDA's Regional Aquaculture Centers in the Northeast and in the four other regions of the country where vital research partnerships among entrepreneurs, academia and the extension service are fostering an emerging fish farming industry that is bringing economic opportunity to rural communities and the hope of food sufficiency to an increasingly crowded world.

Maine has been a leading supplier of high quality seafood for fully 400 years—since before the settlement at Jamestown and the landing at Plymouth Rock. But capture fishery harvests are stagnant or declining, no less in Maine than around the world. So today, Maine is a leader in marine aquaculture, as well, with fanned fish and sea vegetable harvests that are closing in on the state's lobster catch as our most valuable fishery.

I represent a trade association whose members grow salmon, trout, oysters, mussels, clams and nori, with commercial quantities of haddock, halibut, urchins and scallops on the immediate horizon. Twenty years ago, my association did not exist. Ten years ago, its members produced just a few hundred tons of fish. Today, Atlantic salmon is Maine's third most important farm crop, after potatoes and dairy.

Worldwide, one pound of fish in five is Ann raised, and virtually all of the growth in the world seafood harvest stems from aquaculture. In the U.S., fish fauns also

contribute to the growth to our seafood supply, but only 7 percent to the overall harvest. The difference between U.S. and world aquaculture performance is largely attributable to differences in public investments in research, demonstration and technology transfer—investments like the RAC's before you today. The farms I represent in Maine are living proof of the returns such investments can provide to the consumers and communities we all serve.

Of the ten marine species grown in Maine today, NRAC supported either the basic research or the technology transfer that launched three new crops from a standing start and provided critical management breakthroughs for four others:

—NRAC tech transfer support in 1993 helped a tiny 2-man seaweed company create America's first nori farm, which today supports 25 jobs, cross-licensing with an emerging web of biotechnology fines and a budding seaweed cooperative that could provide jobs and incomes for up to 100 displaced fishermen.

—A 1995 project allowed a small salmon farmer to diversify into halibut by supporting broodstock collection from which future generations can be spawned. A follow-up grant is supporting University research into the light- and depth-sensitive breeding behavior and the nutritional needs of these mysterious, and disappearing, beasts.

—Several dozen displaced fishermen are looking ahead this year to new careers on the water as mussel farmers, following an NRAC-supported education program that brought Canadian and European raft culture technology to the hard-fished waters of the Gulf of Maine.

—A University of Maine professor's 1997 breakthrough in groundfish nutrition will pay off this year with America's first commercially-significant haddock crop, thanks to research funded in part by NRAC.

—A 1996 graduate student in Food Science has become an entrepreneur in 1998 with a new line of sausages made from salmon scraps, based on techniques he identified with NRAC assistance.

—NRAC also supports long term fish health research with particular value to Maine's established salmon and oyster industries, including projects to identify genetic susceptibility to, and genetic probes for, Juvenile Oyster Disease, partial support for an investigatory new animal drug coordinator (INAD) at FDA, and the northeast's premier fish health workshop, now entering its 6th year.

While these examples focus on projects that have impacted Maine, in particular, a key element of the RAC approach is an emphasis on multi-state proposals or on research that has impacts beyond a single species or state. So, for example, the salmon sausage project actually has potential applications for any value-added fish product subject to oxidation and off flavors. The Maine projects, in fact, have been only a small part of NRAC's impact on the development of a fresh and marine water aquaculture industry between the Gulf of Maine and the Chesapeake Bay. And what NRAC provides in the northeast, four other RAC's offer in the south, the west and the heartland of the nation.

RAC projects have addressed waste management and effluent reduction; improved low phosphorous feeds and acoustic "seal scarers" that replace lethal taking of predators. They have led the way in demonstrating how aquaculture can be environmentally benign as well as economically beneficial—how rural and water-dependent communities can have payrolls and pickerel well into the future.

RAC-sponsored forums where industry and academic researchers sit down together to hammer out a common research agenda have evolved into efficient collaborative networks that can quickly marshal public and private resources to find solutions in a rapidly changing world. The RAC's have become a research infrastructure, a problem solving tool that, with your continued support and the full authorized allocation of $7.5 million, can make this the generation of Americans that farms the sea, the next generation of Americans that feeds the world.

PREPARED STATEMENT OF KENNETH E. CLINE, CLINE TROUT FARMS

Mr. Chairman and Members of the Subcommittee: My name is Kenneth Cline. I am an owner of Cline Trout Farms, a family owned business established in 1946. We produce trout for recreation markets in Colorado, New Mexico, Wyoming, and surrounding states. I have served as president of the National Aquaculture Association, The United States Trout Farmers Association, and the Colorado Aquaculture Association. Currently, I chair the Colorado Fish Health Board and am a member of the Colorado Aquaculture Board. I have been a member of the Western Regional Aquaculture Center Industry Advisory Council for the past eight years.

In addition to the potential for aquaculture to provide food fish, aquaculture also provides fish and services to recreation fisheries. State and federal natural resource

management agencies are adjusting their priorities away from sport and recreation fisheries and toward endangered species, biodiversity, and native species. Private aquaculture provides fish and services for over one-third of Colorado's billion dollar recreation fishing industry.

Research is needed for the aquaculture industry to keep pace with increasing demand for its products and for the industry to respond to environmental concerns. The Regional Aquaculture Centers have been very successful in identifying research needs, coordinating research efforts, and disseminating research results to industry. In September of 1995 industry representatives from all of aquaculture met to discuss the National Aquaculture Development Plan. The Regional Aquaculture Center program was identified as the most positive government program for aquaculture in the last ten years.

The success of the Regional Aquaculture Center system lies in several strengths. First, the Regional Aquaculture Centers are industry driven. Research needs are identified and prioritized by industry, and research is monitored by industry so that industry research objectives are accomplished. Second, the Regional Aquaculture Centers are very successful in facilitating collaboration among institutions. Leveraging of resources among institutions has resulted in a very high rate of return on research dollars. Another strength is the regional structure; which, along with the strong input from fish farmers, facilitates responsiveness to the many diverse, and often local, research needs.

The Regional Aquaculture Centers have strongly demonstrated their worth to our industry and to the national economy. This program is an investment, not an expense, for the American public. It is unfortunate that the Administration has proposed a 3 percent cut in funding. I urge you to not only reinstate that 3 percent, but also to bring the appropriation for the Regional Aquaculture Centers to the fully authorized funding of $7.5 million per year.

Thank you for this opportunity for input.

PREPARED STATEMENT OF WILLIAM H. BANZHAF, CAE, EXECUTIVE VICE PRESIDENT, SOCIETY OF AMERICAN FORESTERS

Mr. Chairman, my name is William H. Banzhaf. I am the Executive Vice-President of the Society of American Foresters (SAF). The more than 18,000 members of the Society constitute the scientific and educational association representing the profession of forestry in the United States. SAF's primary objective is to advance the science, technology, education, and practice of professional forestry for the benefit of society. We are ethically bound to advocate and practice land management consistent with ecologically sound principles. I am especially pleased to submit comments on the President's proposed fiscal year 1999 budget for the Department of Agriculture and Related Agencies. I wish to thank the subcommittee for its continued support of professional forestry and its continued support of SAF's priorities. We will especially need your help this year to correct a mistake on the part of the Administration in requesting the elimination of the Forestry Incentives Program. I thank the Chair for the opportunity to submit testimony on the Forestry Incentives Program, the Renewable Resources Extension Act, and Department of Agriculture research programs.

The public policy activities of SAF are grounded in scientific knowledge and professional judgment. From this perspective we review proposed budgets for forestry and related natural resource programs to determine their adequacy to meet stated objectives and public needs.

FORESTRY INCENTIVES PROGRAM (FIP)

As you know, the forest-related programs funded under the Department of Agriculture largely affect the nation's 9.7 million nonindustrial private forest landowners, who own 57 percent of the nation's forestlands, which supply 48 percent of the nation's timber harvest. A recent report by the National Research Council points out that these owners are woefully underserved by both the private and the public sector. This is critically important today because, as you are aware, the level of timber harvest from federal lands has dropped significantly in recent years, an important factor resulting in increased harvests on other ownerships. Several programs within this appropriations bill are important to ensuring that the shift of timber demand to nonindustrial private lands doesn't impair their owners' willingness or ability to produce a broad array of forest resources sustainably over the long term.

Programs such as the Forestry Incentives Program (FIP) are needed now more than ever. FIP's focus on reforestation helps keep large tracts of land in continuous forest cover, helping to ensure long-term forest benefits while providing habitat for

wildlife, protecting soil productivity, and enhancing water quality. We strongly oppose the Administration's request to eliminate the Forestry Incentives Program and reject their rationale that the program is not compatible with the Natural Resources Conservation Service's (NRCS) strategic plan. Keeping lands forested most certainly helps the NRCS meet its objectives of protecting watersheds and soils. In fiscal year 1997, FIP provided funding to help plant trees on more than 141,000 acres and helped owners perform timber stand improvement on more than 22,000 acres. Congress specifically reauthorized FIP through the 1996 Farm Bill, and the NRCS has a statutory responsibility to carry out the program.

There is concern about the NRCS's administration of the FIP program. It appears to many that the NRCS is not committed to the FIP program. We encourage the USDA to reevaluate the transfer of this program from the Farm Services Agency (FSA) to NRCS and request that USDA consider either returning the program to the FSA or transferring it to the Forest Service.

FORESTRY RESEARCH

The Society of American Foresters promotes public policies that advance knowledge about the behavior and functioning of forest ecosystems and their responses to specific actions and policies. SAP believes forestry research is critical to understanding the relationship between societal expectations for diverse needs and values from the forest, and the capability of the forest to meet and sustain those expectations. We advocate continued public and private funding of research activities that address a broad variety of natural resource concerns. Such knowledge, based on sound science, is vital for resolving conflicts about forest policy and management. Two key programs funded by this appropriations bill provide important research dollars that can be used to benefit forest management across all ownerships in this country.

The first is the Cooperative Forestry (McIntire-Stennis) Research Program. This program supports research on forestry and wood fiber conducted by the nation's public universities. University-based research is an important part of the collaborative forestry research effort involving federal, state, and industry scientists. McIntire-Stennis research is critical to the development of new information and technologies that increase not only the efficiency and productivity of forest management on all forest ownerships for a wide range of forest benefits, but also provide information for developing natural resource management policy. As you know, McIntire-Stennis research funds are granted directly to public colleges and universities on a matching basis. This program has provided funding for research demands that have not been met through other programs or in the private sector.

The second research program is the National Research Initiative (NRI). This competitive grant program provides funding for research on problems of national and regional importance in biological and environmental sciences. The NRI awards grants on a matching basis to university researchers in biological, environmental, and engineering sciences to address critical problems in agriculture and forestry. The SAF strongly supports this program and believes some of the funding should be specifically directed at renewable natural resources research.

RENEWABLE RESOURCES EXTENSION ACT PROGRAM (RREA)

Finally, we are pleased that the Administration has requested funding for the Renewable Resources Extension Act program (RREA) for fiscal year 1999, and we applaud the action of this subcommittee in restoring funding for RREA in spite of the Administration's request to eliminate it in fiscal year 1998. The SAF supports this program, which we believe helps in communicating ecologically sound technical advice to landowners, foresters, and loggers. This advice improves the productivity and management of nonindustrial private forests.

ABOUT THE SOCIETY

The Society of American Foresters, with about 18,000 members, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Society was established in 1900 by Gifford Pinchot and six other pioneer foresters.

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

The Society is the accreditation authority for professional forestry education in the United States. The Society publishes the Journal of Forestry; the quarterlies, Forest Science, Southern Journal of Applied Forestry, Northern Journal of Applied Forestry, and Western Journal of Applied Forestry; The Forestry Source; and the annual Proceedings of the Society of American Foresters national convention.

PREPARED STATEMENT OF THE SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

We respectfully request the following appropriations and oversight to permit these programs within the U.S. Department of Agriculture to be carried out effectively.

$12 MILLION FOR APHIS' ANIMAL CARE PROGRAM

At least $12 million is desperately needed for enforcement of the federal Animal Welfare Act. The Act, passed in 1966 and amended in 1970, 1976, 1985 and 1990, is intended to ensure the protection of millions of animals nationwide used in exhibition, the commercial pet trade, experimentation, and during transportation.

Animal Care is responsible for enforcement of the Animal Welfare Act, but their excellent efforts are on the verge of collapse due to the failure of Congress to provide sufficient resources. The Animal Care program has always been forced to function with less than needed funds, as a result they are squeezing everything they possibly can out of what Congress provides. Given the vital protection provided to animals, it is time for Congress to provide a little support back to Animal Care through a modest increase in appropriations. Shamefully, current appropriations are below the fiscal year 1993 level:

Fiscal year	*Million*
1993	$9.188
1994	9.262
1995	9.262
1996	9.185
1997	9.175

This decreased funding is impairing the ability of Animal Care to fulfill its duties, leaving the animals and the Department vulnerable.

This year circus elephants were diagnosed with tuberculosis. This serious potential health hazard to humans arid elephants must be addressed by Animal Care. The plan calls for tuberculosis testing and monitoring of all elephants covered under the Animal Welfare Act. More work for the Animal Care staff!

The Animal Care field staff of 44 Veterinary Medical Officers and 30 Animal Care Inspectors must inspect to ensure compliance with the Act, including provision of food, water, housing and veterinary attention, at the more than 10,000 sites of dealers (random source suppliers, breeders, brokers and operators of auctions), exhibitors (zoos, circuses and carnivals), research facilities (hospitals, pharmaceutical companies, universities and private firms), intermediate carriers (airlines and railroads), and intermediate handlers (service between consignor and carrier).

Approximately $800,000 in license fees currently go to USDA's general treasury; at minimum, these funds should be provided as additional funding to Animal Care. Animal Care is taking a get tough attitude towards licensees and registrants who habitually violate the Animal Welfare Act; in fiscal year 1997, violators of the Animal Welfare Act were assessed more than $820,000 in fines. License revocations and suspensions increased substantially.

Critical additional needs of Animal Care include:

Laptops for all inspectors (to facilitate data transfer and storage)	$350,000
Training (program implementation and computer instruction)	120,000
Addition of 15 Veterinary Medical Officers	1,243,000
Addition of 12 Animal Care Inspectors	715,000
Tuberculosis testing/monitoring in elephants	190,000

Cost savings in the existing Animal Care Program could be achieved through the elimination of Random Source (USDA licensed Class B) dealers who supply dogs and cats to research. Report language could offer support to H.R. 594, The Pet Safety and Protection Act, sponsored by Agriculture Committee Members Congressman Charles Canady and Congressman George Brown. As you can see from the attached book, The Animal Dealers: Evidence of Abuse of Animals in the Commercial Trade, 1952–1997, this legislation would greatly reduce USDA's regulatory burden, while still allowing research to continue unhindered.

$900,000 LINE ITEM FOR THE ANIMAL WELFARE INFORMATION CENTER AT THE NATIONAL AGRICULTURAL LIBRARY

In 1985, Congress had the ingenuity and foresight to create the Animal Welfare Information Center (AWIC) to serve as a resource for all individuals involved in the care and use of animals in research (scientists, veterinarians, caretakers, administrators, members of Institutional Animal Care and Use Committees and USDA inspectors responsible for enforcing the law).

The Center provides information on: (a) appropriate care for animals including minimization of pain and distress, (b) reduction and/or replacement of the use of animals in research where possible, (c) preventing unintended duplication of experiments, (d) training for employees in the laboratory, and (e) legal requirements regarding the use of animals in research.

Its value to the research community has led to an ever-increasing demand for assistance. However, AWIC has not received an increase in appropriations during its 11 years, making it impossible to provide services as needed. The Center has had to stop use of a work study student and is facing the laying off of additional staff it will not be able to afford. AWIC staff have responded to more than 24,000 requests for specific publications and more than 2,500 request for reference services. The Center produces a newsletter, now in its eighth year. It also maintains a worldwide web site (http://www.nal.usda.gov/awic) which is being used an average of 860 times per day!

An increase in appropriations to $900,000 provided as a line item with report language preventing use of these funds for other purposes is desperately needed. (The report language is necessary to stop the siphoning off of funds by the National Agricultural Library.)

$500,000 FOR THE HORSE PROTECTION ACT

APHIS Animal Care is in need of an appropriation of $500,000 to maintain at least a minimal level of enforcement of the Horse Protection Act (HPA). The HPA, passed in 1970 and amended in 1976, prohibits the cruel practice of "soring". According to APHIS, soring is defined as "the application of any chemical or mechanical agent used on any limb of a horse or any practice inflicted upon the horse that can be expected to cause it physical pain or distress when moving." Soring is done to give the animal an exaggerated gait. Tennessee Walking Horses are the common victims.

Due to a lack of basic funding, enforcement of the Horse Protection Act is being increasingly turned over to industry. Unfortunately, industry has demonstrated a failure to achieve the level of enforcement of the unbiased, well-trained, professional inspectors who work for Animal Care. The inspectors from industry are called "Designated Qualified Persons". The rate at which DQP's turned-down horses for soring in fiscal year 1996 was 1.09 percent, less than half the rate of government inspectors who had a turn-down rate of 2.55 percent.

Nearly 600 horse shows took place in fiscal year 1996, yet Animal Care inspectors were only able to inspect 22! Additional resources are needed to permit Animal Care inspectors to attend more shows thereby ensuring significantly stronger compliance with the HPA.

USDA possesses thermography equipment which is used to look for abnormal heat indications as a means to detect apparent soreness. Resources are needed to permit training of inspectors to maximize use of this important enforcement tool. Thermography can greatly strengthen enforcement efforts by providing an accurate, scientific determination of soreness in horses and by serving as a useful deterrent against would-be violators.

INCREASED OVERSIGHT OF WILDLIFE SERVICES

Animal Damage Control changed its name to Wildlife Services (WS) to signify a re-birth of the program with increased effectiveness and an improved consciousness. Unless key changes are made, Wildlife Dis-Services may be a more appropriate title. We, therefore, hope that Congress will provide increased oversight of both the research and field operations of Wildlife Services.

A basic principle of WS is supposed to be consideration of non-lethal methods of control prior to the conduct of any lethal control activities. Last year, WS was preparing a non-lethal report form as a means of documenting efforts at non-lethal control. We supported use of this form. However, WS announced recently that it has curtailed development and implementation of the reporting form and instead "will work with the National Agricultural Statistics Service to obtain information regarding the extent to which WS cooperators use non-lethal control methods." No reason

for this change has been offered. We strongly object to WS' abandonment of the reporting form which would have provided accountability here to fore lacking in the program.

A fundamental matter is continued use of steel jaw leghold traps by WS. 30,000 steel traps are owned by WS for use in predator control. Polls reveal that the vast majority of Americans want these traps banned, and the American Veterinary Medical Association has condemned them as "inhumane". A growing list of states are prohibiting or severely restricting their use. A switch to less cruel methods must take place if WS wants to retain the ability to manage predators when necessary.

In an international trapping agreement reached on December 11, 1997, between the U.S. and the European Union, the U.S. agreed to phase out use of "conventional steeljawed leghold restraining traps" within 6 years. WS has the responsibility of complying with the U.S. obligation by ending its use of these traps. Steps should be undertaken immediately.

Last year Congress provided $350,000 for trap testing "to determine the most humane design while maintaining efficiency." (Senate Report language). The testing was necessary "to meet U.S. obligations under an international agreement for trap standards." (House Report language) The U.S.-E.U. agreement was reached in response to E.U. Regulation 3254/91 against the leghold trap. Under the terms of the agreement, in addition to phasing out use of leghold traps, the U.S. agreed to implement trap standards within 8 years.

Instead of conducting trap research with the funds, Wildlife Services passed the bulk of the monies received from Congress on to the International Association of Fish and Wildlife Agencies (IAFWA). The research being conducted under the auspices of the IAFWA needs careful scrutiny as we are gravely concerned that the funds are being misused.

The only traps being tested are different types of steel jaw leghold trap and the EGG trap (a painful, footholding trap used on raccoon). We were shocked to discover that the control traps for the studies are standard steel jaw traps. There is no excuse for continued use of these traps. Box traps are extremely efficient at capture of raccoon, and they cause virtually no injuries to the animals, thus we fail to understand why they are not being considered. Further, since box traps are such a successful trap both at minimizing injuries as well as at catching animals, we fail to see the need for conducting painful tests of leghold traps on approximately 800 raccoon.

Although USDA was presented with proposals for testing of footsnares on coyote and killing traps on muskrat, the Department elected to spend their money on leghold traps, that have been tested innumerable times over the years. By narrowing their testing to leghold traps, they guarantee results concluding that a leghold trap is acceptable. No further funding should be provided for trap testing while the process for determining which traps are tested and why is examined.

PREPARED STATEMENT OF PETER M.P. NORRIS, PRESIDENT, SPIN–2

Mr. Chairman, thank you for this opportunity to present a short statement for the hearing record for outside witnesses. The subject of my statement concerns the potential for improved accuracy of agricultural usage and yield estimates in USDA's food and fiber supply and demand reports.

There shortly will be a new data source available for high resolution remote sensing information. SPIN–2, which stands for "Space Information/2-meter", is a joint commercial venture with SOVINFORMSPUTNIK, the commercial division of the Russian Space Agency, utilizing Russian mapping satellites and launch vehicles. SPIN–2 is located in Washington, D.C., and is wholly owned by Aerial Images, Inc. of Raleigh, North Carolina. At two meter resolution, SPIN–2 data is 250 percent higher resolution than previously available through commercial remote sensing channels. Ten meter resolution stereographic SPIN–2 data is used to produce the most accurate digital elevation models in the world made from satellite data.

The first launch and recovery of data was highly successful. The catalog of data will be available through the Internet, utilizing Microsoft's Terraserver. The concentration of the first mission was the Southeastern United States and Southern California. However, large data sets were also gathered from the following regions: China, Brazil, Australia, the Middle East and Canada. These regions include major crop production areas. Many local, several state, and international governments have placed orders for the data. The data will be used in local planning, assessment and decision making regarding land use, natural resource assessment, and environmental change.

What does this mean to the Department of Agriculture and USDA missions? There are two answers to this question.

(1) USDA has the responsibility of producing world food and fiber supply and demand estimates. These estimates heavily influence futures prices of commodities, and also impact decision making on planting for numerous crops. The accuracy of USDA's supply and demand estimates depends on the refinement of the data from which the estimates are based. Today's estimates are derived from technology and equipment that have been eclipsed by several generations of improvement. Two meter resolution SPIN–2 data offers information not available through current methods (a) by providing refined field boundary definition, a major element in determining crop yields, and (b) crop differentiation by interpretation of feature texture on images. The accuracy of crop and growing condition estimates through the use of SPIN–2 data can be improved by 15 percent to 25 percent.

(2) USDA has the responsibility of managing vast areas of natural resources through its conservation programs and the U.S. Forest Service. While the Forest Service is not funded through this appropriations bill, USDA decisions on Forest Service programs depend heavily on input through the portions of USDA that are funded through this bill. Improved information on the environment would help provide more accurate assumptions to Department officials in program decisions that were environmentally fragile or subject to change. USDA's stewardship of natural resources would be improved through better information and a more accurate data base.

Some federal agencies are becoming aware of SPIN–2's resource base, and are exploring ways in which the new information can be applied to the better management of their programs. We think USDA should be among those who utilize this new source of information.

The key aspect of my statement relates to the timely availability of information. If USDA were to access the SPIN–2 information this year, savings could be realized in the current growing season, and subsequent marketing season, as opposed to waiting for later data that could not be used for the current growing season, both domestically and world wide. USDA's timely access to this information would, in our estimate, result in real-time savings and more accurate forecasts one year in advance of later systems.

Mr. Chairman, that concludes my brief remarks. If there are any questions regarding my testimony, we would be pleased to address them. Thank you again for this opportunity to present these views in the hearing record.

PREPARED STATEMENT OF WILLIAM K. QUARLES, VICE PRESIDENT, CORPORATE RELATIONS AND COUNSEL, SUNKIST GROWERS

Chairman Cochran, Senator Bumpers, Members of the Subcommittee, Sunkist Growers appreciates this opportunity to bring to the Subcommittee's attention several matters of great importance to Sunkist Growers and to American agriculture as you undertake the difficult task of crafting the agriculture appropriations measure for the final fiscal year of this millennium.

As you know, Sunkist Growers is a non-profit, farmer-owned marketing cooperative serving 6,500 citrus farmers in California and Arizona. For 105 years Sunkist has successfully marketed fresh citrus fruit grown by its farmer-members. Today, Sunkist Growers produce approximately 65 percent of the oranges, lemons, grapefruit and tangerines grown in Arizona and California. Eighty percent of our member's farms are fewer than 40 acres, truly small farms by U.S. standards. Our cooperative enjoys a long history of dedicated effort to create and develop markets around the world for our U.S.-grown citrus. Sunkist exports currently account for nearly 45 percent of our farmers' annual fresh fruit sales. Competition is intense with 18 countries now producing for the international market. Conditions in those markets is often inequitable and the terms of trade under which we have to compete are often unfair. For these reasons we need the continued help and partnership of our government.

MARKET ACCESS PROGRAM

Concerning the U.S. Department of Agriculture programs that assist American farmers export their products, we urge the Committee to continue to fully fund at $90 million the very effective, essential and extensively reformed Market Access Program (MAP) which provides at least some limited help to American farmers confronted by the highly competitive and often inequitable market environments beyond our borders. The many reasons why American farmers need this vital USDA help to secure and maintain market access for American agricultural products con-

tinue to validate this program. Unfair trade barriers to U.S. products have not been eliminated. Increasingly we are having to counter bogus sanitary and phytosanitary allegations concerning U.S. agricultural products. High protectionist tariffs against American-grown fruit in key markets have not been reduced. In a direct challenge to displace American-grown commodities in markets around the world, foreign governments like the European Union have significantly increased market promotion assistance for their countries' competitor products. Unlike the U.S., many foreign governments continue to subsidize the transportation costs of our foreign competitors to help them move their products to market and be able to undercut our prices. At a time when America is once again confronted by massive trade deficits, American agriculture continues to be the one industry sector contributing a positive trade balance for our country. This effort needs to be fostered not undermined.

The bottom line is this—if American farmers didn't have to contend with this host of anti-competitive, trade-distorting, tariff-imposed, foreign government-subsidized, discriminatory practices and inequitable conditions in the global marketplace, we could deliver the very best products at the most competitive price anywhere in the world. But reality is we do have to contend with these unfair conditions and we need our government's help to do so.

We urge the Committee to continue to support full funding for the Market Access Program at USDA.

FOREIGN AGRICULTURAL SERVICE

The work of USDA's Foreign Agricultural Service (FAS) is a critical component in America's global effort to compete with our products in overseas markets. FAS, with its corps of dedicated and very able professionals, both here and abroad, provides insightful information and guidance in overcoming trade barriers, responding to the actions of foreign competitors, and intervening to address unfavorable regulatory policies of foreign governments which negatively impact American farm exports into those markets. During the past year alone, FAS actions on behalf of our industry have been critically important in Korea, Japan, China, Thailand, Mexico, Chile, Argentina and other countries. The reality of a globalized marketplace increases FAS' workload and makes their that much more significant to American agriculture. We urge the Committee to provide increased resources to the Foreign Agricultural Service to meet this challenge in the year ahead. Specifically, we strongly support USDA's request for $145.6 million for FAS operations in fiscal year 1999. The workload and responsibilities of FAS will only increase in the days ahead as we commence in 1999 the next round of WTO negotiations on agricultural trade.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Despite progress in the Uruguay Round of trade negotiations, those still intent upon maintaining protectionist barriers now resort to sanitary and phytosanitary claims to thwart successful importation of U.S. agricultural products like our citrus fruit. SPS issues have become increasingly significant in determining the course of international trade for agricultural products. SPS issues, including pest quarantines, have with growing regularity become the linchpin of trade negotiations in determining market access for fresh produce. For example, the U.S. citrus industry's efforts to gain market access to the huge and potentially profitable consumer market in China is dependent upon the success of USDA's Animal and Plant Health Inspection Service (APHIS) in negotiations with its Chinese counterpart agency (CAPQ) to satisfactorily address concerns about periodic outbreaks of Mediterranean fruit fly in California and Florida. Only when these technical issues are resolved will market access efforts prove successful. Similar technical and scientific SPS issues have become pivotal in various markets for a host of American commodities. As a result, the manpower and resources of agencies like APHIS and ARS are spread dangerously thin.

Concerns about proper management of production areas, assurance of swift eradication of destructive pests and diseases and mandatory certification that the fruit exported is pest free have become critical components of international trade. The surest way for us to have foreign markets slam shut their doors to our products is the advent of an exotic pest like Mediterranean fruit fly in or near our production areas. That is why USDA's Agricultural Quarantine and Inspection Service (AQI) which seeks to prevent exotic pests and diseases from entering the U.S. from abroad is vitally important to the health and well being of agriculture in California and Arizona.

Sunkist Growers urges the Committee to fully fund APHIS at the requested fiscal year 1999 amount of $461,352,000 which includes $237,642,000 for Plant Protection

and Quarantine (PPQ); $30,648,00 for AQI-appropriated; $6,685,000 for Pest Detection; and $22,322,000 for Fruit Fly Exclusion.

Contrary to its actions in fiscal year 1997 and 1998, Congress should, we believe, appropriate the full $100 million for the AQI-User Fee budget. The reduced appropriations by Congress in fiscal year 1997 and fiscal year 1998, totaling $14 million, imposed a severe hardship on these inspection and enforcement programs so vital to assuring pest protection for vulnerable U.S. farming areas like California where we are already witnessing increased volumes of contraband produce surreptitiously entering the U.S. If not fully funded, further reductions in the appropriated amount will likely reduce already deficient inspection levels at ports of entry and increase significantly the risk of exotic pest and disease.

Similarly we strongly urge approval of the USDA budget request for Fruit Fly Exclusion and Detection. This program carries out all fruit fly trapping in Florida, Texas and California; the sterile fly release program to combat Medfly in California; the Mexican fruit fly program in the lower Rio Grande Valley in Texas; the Medfly programs in Mexico and Guatemala; and the sterile fruit fly rearing programs in Hawaii and Guatemala. This is preventive action needed to avoid the costly incidence of exotic pest infestation that destroys export markets because of quarantines and imposes tremendous costs of eradication both on industry and government.

ARIZONA CITRUS RESEARCH PROJECT

Last year, the Committee provided $250,000 to the University of Arizona for research of attacking the problem of brown wood rot fungus citrus trees in southern Arizona. Nearly 40 percent of the commercial lemon groves in the region, which now includes the Coachella Valley in southern California, have been infected by the Coniophora eremophila fungus which is indigenous to the Sonora Desert. We ask the Committee to continue the same level of funding for this research, which will be the second of a planned three year effort.

Mr. Chairman, we appreciate the opportunity to apprise the Committee of our interests and concerns about the fiscal year 1999 agriculture appropriations legislation. Recognizing the significant reductions in funding levels imposed on agriculture programs over the last several years relative to other sectors of the federal budget, it is our fervent hope the Committee will ably defend existing programs and work to meet the needs identified as important to American farmers.

PREPARED STATEMENT OF A. ELLEN TERPSTRA, PRESIDENT AND CEO, USA RICE FEDERATION

My name is Ellen Terpstra and I serve as president and chief executive officer of the USA Rice Federation. I am submitting this statement in behalf of the Federation to recommend several items of particular concern to the organization that we would like to see included in the fiscal year 1999 appropriation bill for the Department of Agriculture (USDA). The USA Rice Federation is a trade association that consists of producers from States that are responsible for production of over 80 percent of the rice grown in the United States, as well as practically all the rice millers in the United States, wherever they may be located, and allied organizations.

I would like to preface my remarks to thank the Subcommittee for its actions in the past in behalf of U.S. agriculture. Those engaged in agricultural production, processing, and marketing of U.S. agricultural products owe much to the efforts of the Subcommittee. When the farm bill was enacted in 1996, it heralded the end of an era for government supports which are gradually being phased down over a seven-year period. Producers are adjusting to the new environment where they must depend more and more on market forces for income. Increasingly they are reliant on export markets and research to maintain their competitive edge in world and domestic markets. Accordingly, we strongly recommend that appropriations for the export programs and research programs be maintained at current levels, if not increased. They should not be reduced as has been recommended by the Administration in several instances.

1. For example, the Administration has recommended a drastic reduction in the appropriation for title 1, Public Law 480 from the current appropriated level—a reduction of more than 50 percent from $245 million to $112 million that would practically phase out the program completely. As the Administration has stated in its proposed budget, priority under title 1 is given to agreements which provide for the export of U.S. agricultural commodities to those developing countries which have demonstrated the potential to become commercial markets, among other things. Despite severe budgetary limitations in recent years, title 1 has remained vital and provided the stimulus to developing strong commercial markets for U.S. agricultural

commodities. This concessional program continues to be America's ticket of admission into new markets for the future. It is particularly important today as the "Asian flu" has caused a reduction of over $2 billion in anticipated exports of U.S. agricultural commodities.

2. Another item for which we recommend additional support is the appropriation for the Foreign Agricultural Service (FAS) which provides funding for the foreign market development program. It is our understanding that to maintain this program at current levels it will be necessary to increase the appropriation for FAS slightly. In the past the FMD program has been sustained in part by funds from a reserve that is almost exhausted and will no longer be available to supplement the FAS appropriation. This program is operated on a cost share basis with cooperators and has shown success in maintaining and expanding markets abroad. This program, like the title 1, Public Law 480 program, is part of the Department of Agriculture's "arsenal" in assuring that the U.S. can remain competitive in world markets.

3. The USDA research program is another area that is of great importance to the rice industry. Construction of a National Rice Germplasm Evaluation and Enhancement Center at Stuttgart, Arkansas, is nearing completion. The work of this Center will enable the rice industry to improve efficiency and yields. The current year's appropriation bill provides an additional allocation of $700,000 in base funding for the Center's program of work from the appropriation to the Agricultural Research Service (ARS). However, the Administration eliminated this allocation in base program funds from its recommended fiscal year 1999 appropriation bill. Therefore, this allocation of $700,000 needs to be restored for fiscal year 1999, and an additional amount of $800,000 in program funds should be provided to complete staffing of the Center in fiscal year 1999. We urge that this additional allocation in a total amount of $1.5 million be provided from the appropriation to ARS to fully fund the Center's operations in the next fiscal year.

4. Finally, we wish to express support for maintaining at current levels the existing USDA program to control blackbird damage to rice producers and others. The Administration's proposed budget would reduce the appropriation for the animal damage control activities, now part of the Wildlife Services Operations. The USDA has reported that blackbirds are the most frequently reported source of wildlife damage throughout the United States causing annual damage to a variety of U.S. commodities and to livestock feedlots and aquaculture. They congregate in large roosts where they also cause health, aesthetic and nuisance problems in addition to agricultural losses. USDA is constantly conducting research and testing methods to better control blackbirds, and adequate resources are needed to continue this work.

We appreciate the opportunity to advise you of the recommendations of the USA Rice Federation and would appreciate it if you would include this statement in the record. Thank you again for the help you and the Subcommittee have provided the rice industry in the past.

PREPARED STATEMENT OF THE U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL

U.S. agricultural exporters want to compete on a level playing field. However, the large amount of foreign government manipulation of markets and production means U.S. agricultural exporters need Washington's support to make this happen. The record shows that U.S. agriculture is serious enough about this public-private partnership to contribute significant amounts of its own resources to the effort. Further, U.S. agriculture and the U.S. Department of Agriculture (USDA) are using strategic planning, program evaluation, quantifiable goals, and a competitive award process to ensure that taxpayer's money is being used in a way which generates the biggest returns for the U.S. economy and its 1.1 million citizens who depend on a healthy agricultural export sector for their livelihood. The U.S. Agricultural Export Development Council (USAEDC) respectfully urges this subcommittee to fully support all USDA export promotion efforts in the fiscal year 1999 budget, especially the FMD program at a level of $30 million, and an MAP program at $90 million. We also urge the subcommittee to support a strong USDA Foreign Agricultural Service (FAS), our partner in promoting increased U.S. agricultural exports.

First and foremost, it is important to revisit the role agricultural exports play in the health of our national economy and the well being of our citizenry. Every $1 billion in agricultural exports supports approximately 20,000 U.S. direct and indirect jobs. With our $57 billion in agricultural exports in 1997, this means a successful U.S. agriculture export effort was responsible for 1.1 million jobs. According to the U.S. Department of Agriculture Foreign Agricultural Service (FAS), more than ten percent of this total work force is in California (137,000 jobs). Iowa and Texas

have the second and third largest number of agricultural export related jobs at 96,000 and 77,000 respectively. Agricultural exports play an important role in every region of the country, including the South (189,000 jobs), the Pacific Northwest (67,000 jobs), and the Northeast (24,300 jobs). These jobs not only ensure family incomes, but help grow the national tax base and thus increase revenue to the Treasury, contributing to the reduction of our national debt. It is clear that without a healthy agricultural export sector, we all lose.

Ensuring the long-term vitality of U.S. agricultural exports is the reason the U.S. Agricultural Export Development Council (USAEDC) exists. We are a national, nonprofit, private sector trade association funded solely by our members. Our nearly 80 members are U.S. farmer cooperatives and agricultural trade associations who in turn represent the interests of farmers and agribusinesses in every state of the Union. Our members represent producers of both bulk and high-value processed products, including grains, fruits and vegetables, cotton, livestock, dairy products, seeds, fish, wood products, wine, poultry, nuts, and rendered products among others.

Our members continually strive to ensure the United States remains one of the most active agricultural exporting countries in the world. We proudly produce among the world's highest quality products as evidenced by our ability to be one of the few sectors of the U.S. economy to consistently run a positive balance of trade. In 1997, U.S. agriculture racked up an impressive year in exports: $57 billion in sales to more than 40 countries.

THE WORLD AGRICULTURAL PLAYING FIELD IS TILTED AGAINST U.S. EXPORTERS

Unfortunately, record exports do not tell the whole story. U.S. agriculture has done well, but international conditions are increasingly competitive. Foreign governments are bolstering agricultural production, putting the United States at a competitive disadvantage in foreign markets. With the demise of the Cold War, more and more countries have turned their attention to increasing support for agricultural production for both their domestic and export markets. Through their spending and production decisions, foreign governments have strengthened traditional, and created new, competitors for U.S. exports.

U.S. exporters are also encountering a rapid increase in the proliferation of new non-tariff barriers to agricultural products. With the Uruguay Round's move to reduce tariffs, many countries have turned to sanitary and phytosanitary requirements as barriers to market entry of U.S. agricultural products. Although said by their proponents to be objective, many of these sanitary and phytosanitary barriers are in actuality an attempt to use scientific data (or lack thereof) to establish import regimes which effectively halt or severely restrict U.S. imports. The recent EU uproar concerning U.S. genetically modified corn and soybeans is a perfect example.

A myriad of other types of non-tariff barriers exist. FAS and its overseas offices have gathered plentiful information on the numerous cases of foreign assistance for agricultural production as well as barriers to trade which prevent U.S. agriculture from reaching the exports levels of which it is capable. The National Trade Estimate of the Office of the U.S. Trade Representative catalogues this loss to U.S. agricultural exports from unfair foreign competition. Despite a significant commitment of their own resources, the U.S. private sector cannot overcome such an extensive amount of barriers alone.

A U.S. PUBLIC-PRIVATE PARTNERSHIP IS NECESSARY AND APPROPRIATE

Given the magnitude of the task, it would be impossible to expect either the U.S. private sector or the U.S. public sector to be able to remedy the unfair competition which U.S. agriculture faces overseas on their own. In the past, U.S. agriculture has worked successfully with the U.S. Government to remedy foreign unfair competition and market access barriers which have prevented U.S. exports from fulfilling their potential. To those who say there is no appropriate role for Washington in this fight, former U.S. Under Secretary of Commerce Jeffrey Garten, now dean of the Yale School of Management, sums up the situation quite well: "In the best of worlds, governments ought to get out of this business [of export promotion] altogether. But the marketplace is corrupted by the presence of government. So do you sit on the side and pontificate about Adam Smith, or do you enter the fray?"[1] Mr. Garten argues that Washington must enter into the battle or risk losing U.S. jobs.

In the fiscal year 1999 Federal Budget, USDA proposes funding a number of programs for U.S. agriculture which help the sector overcome these foreign trade barriers and market distortions. USAEDC commends the actions of this subcommittee in the past to fund these programs. We strongly support efforts by this Congress

[1] "Don't Be Salesmen", The Economist, Jan. 2, 1997.

and the Administration, as provided for in the fiscal year 1999 Federal Budget, to again provide a dynamic arsenal of programs to boost the efforts of U.S. agricultural producers to maintain current, and establish new, markets around the world.

The Federal Agricultural Improvement and Reform Act of 1996 (the 1996 Farm Bill) re-authorized and refocused a number of important export-related programs to help achieve the specific U.S. agricultural export goals contained in the Act itself. It is essential that the full range of USDA's export programs be fully funded and aggressively implemented this coming year, including the Foreign Market Development (FMD) program and the Market Access Program (MAP).

Nowhere is the record of success of the public-private partnership move evident than in the FMD and MAP programs. USAEDC members consider these programs the "heavy artillery" in the USDA arsenal. These complementary programs have been instrumental in our record export performance. The Foreign Market Development Program is aimed at long-term marketing efforts, i.e., making infrastructural changes to foreign markets through training and educational efforts among members of the foreign trade. Successful efforts result in a modification of the foreign market structure so that U.S. products become an available, attractive, well understood alternative to other sources of competing products. FMD activities help the foreign importer, processor, and retailer to understand not only how to properly store, handle, process, and market the U.S. product, but also to appreciate its unique characteristics, high quality, and reliability of supply.

The FMD program helps create new markets for U.S. agricultural exports. For example, as a result of FMD-funded market development efforts by the U.S. Beef Breeds Council and the American Shorthorn Association—one of their seventeen U.S. partner associations contributing their own resources to this program—150 head of U.S. breeding beef cattle departed in 1996 for China. This was the first-ever shipment of U.S. purebred cattle breeders to China. Now that an agreement has been reached between Washington and Beijing on a health regulation protocol, further purchases are expected. And, a Chinese buying team made inspections and selections for a second shipment completed within the first half of 1997. Without the FMD program, the Council does not believe they would have had the opportunity or resources to establish this new market for U.S. cattle. With the sustained effort of the U.S. cattle industry and the FMD program, China could become a multi-million dollar market for U.S. cattle exporters in the near future.

The FMD program helps expand existing markets. Last year, the American Forest & Paper Association (AF&PA) succeeded in having the Government of Japan accept U.S. grade stamps for softwood lumber, a major non-tariff barrier to U.S. value-added wood products exports to Japan. AF&PA and the Western Wood Products Association—one of AF&PA's four U.S. partner associations contributing their own resources to this program—have been able to work with the Japanese for almost ten years on this issue. As the number one export market for U.S. wood products, Japan is currently a billion dollar market for the U.S. wood products industry and is expected to expand further with this major development. Without it, U.S. exports would have been lost to the Canadian wood industry which has already had its grade marks accepted by Japan. FMD resources, combined with those of the U.S. wood products industry, made this U.S. export expansion possible.

The Market Access Program (MAP) is the complement to the FMD program. Where the FMD program is aimed at long-term market infrastructural change, MAP targets more immediate, shorter-term market opportunities. MAP funds are often used for consumer promotion efforts to create or capitalize on new trends in foreign consumption. Activities tend to be targeted at the foreign consumer, increasing their awareness and level of comfort with the imported U.S. product. Consumer promotions have taken the form of in-store promotions, contests, advertising, and cooking demonstrations to name but a few. Numerous examples of both successful FMD and MAP programs are contained in the attached pamphlet, "A Working Partnership Builds Markets Abroad, Creates U.S. Jobs," which catalogues USAEDC member successes with both programs.

Therefore, USAEDC strongly supports an fiscal year 1999 FMD funding level of $30 million. This amount does not grow the program, but keeps it at a level U.S. agriculture feels is necessary to support meaningful export promotion. It is consistent with recent funding levels of the program following years of program budget reductions. In addition, USAEDC strongly supports a fiscal year 1999 MAP funding level of $90 million.

It is important to realize that the program participants put up their own money to participate in these programs. As such contributions are part of the rules of both the FMD and MAP programs, no one is getting a "free ride." Program participants are required to contribute their own cash and manpower to run these programs. Thus, the program participants have just as much, if not more, impetus to conduct

responsible and effective FMD and MAP marketing programs. For example, in fiscal year 1995 (the most recent date available), USDA reports that U.S. program participants contributed over $60 million of their own funds to match the $92 million in MAP funds expended. Thus, U.S. agriculture contributed 65 cents for every MAP program dollar used. The FMD ratio is even higher, with U.S. agriculture contributing $1.12 for every FMD program dollar used in fiscal year 1996. These numbers clearly illustrate the private sector's strong belief that the FMD and MAP programs are essential, and that the public-private partnership approach is effective.

U.S. agriculture is also active on other fronts to maximize opportunities for export increases, e.g., our public-private partnership with Washington extends into the trade policy arena. U.S. trade policy efforts have met with success in opening new markets to U.S. agricultural products. We are encouraged that the Administration appears set to continue this effort, as evidenced by Acting U.S. Trade Representative Charlene Barshefsky's comments to the House Appropriations Commerce, Justice, State Subcommittee March 14, 1997, indicating that increasing U.S. agricultural exports will be one of her top priorities.[2] However, trade policy alone is not enough. Bringing down barriers to trade is only truly effective at increasing U.S. agricultural exports when followed by intensive marketing efforts. The FMD and MAP programs help U.S. agriculture do just that.

FINE TUNING OF THE FMD AND MAP PROGRAMS HAS ENHANCED EFFECTIVENESS

USAEDC members are as concerned as anyone else in America about the federal budget deficit and the long-term fiscal health of this country. The public-private partnership in the FMD and MAP programs allows us to do something about it, namely increase U.S. agricultural exports beyond that which U.S. agricultural interests would be able to do on their own. USDA's own evaluation efforts indicate that for every federal dollar spent on agricultural export promotion, $16 worth of exports are generated. In addition, USDA program rules require all program participants to conduct independent annual evaluations to determine the past impact and future direction of their marketing programs. This evaluation is in addition to that conducted independently by many of the associations themselves as part of their own strategic planning. Program evaluations are reviewed jointly by USDA and program participants to determine the appropriate promotional programs for particular markets in the future. These evaluations are evidence that USDA and program participants are serious about getting the best possible return on FMD and MAP funds.

Both generic and branded promotion have a place in marketing U.S. agricultural products abroad. Depending on the type of product and foreign market involved, branded promotion can be more effective than generic promotion as a way to increase U.S. farmers' exports. In fiscal year 1997, 100 percent of FMD funds and more than 70 percent of MAP funds were awarded for generic marketing efforts overseas. More than 80 percent of MAP branded marketing funds went to U.S. farmer cooperatives and small agribusinesses which met the Small Business Administration's definition of a "small business." In accordance with recent program reforms, in fiscal year 1998 only farmer cooperatives and small businesses are eligible to receive MAP branded promotion funds. Additionally, all applicants—whether large or small, non-profit or corporate, for FMD or MAP programs—must go through a rigorous competitive award process for program funds. Recent program reforms have resulted in application and allocation criteria being much more widely known and transparent for all potential applicants.

USDA has also made other changes to the FMD and MAP programs over the past several years in response to General Accounting Office and Office of Management and Budget recommendations to ensure the best possible return to the U.S. taxpayer and the U.S. Treasury. Changes also reflect public comment on various proposed changes published in the Federal Register. These changes include: per the Government Performance and Results Act, changes to evaluation procedures and demonstrations of additional sales as a result of the programs; a reduction in paperwork requirements; the addition of an appeal procedure for compliance findings; and the expediting of routine administrative issues by delegating approval authority to lower levels within FAS. FAS is to be commended for its work in implementing these changes as well as its continuing efforts to support efforts by U.S. agriculture to expand our exports. A continued strong and well-funded FAS is an important part of our successful public-private partnership.

The U.S. Agricultural Export Development Council (USAEDC) appreciates this opportunity to submit written testimony in support of an aggressive U.S. effort in

[2] "China Dominates Barshefsky Hearing," Annie Tin, Congressional Quarterly Daily Monitor, March 17, 1997, on-line service.

fiscal year 1999 to increase U.S. agricultural exports, specifically with an FMD program funded at $30 million, and an MAP program funded at $90 million.

PREPARED STATEMENT OF THE U.S. APPLE ASSOCIATION

On behalf of the U.S. apple industry, the U.S. Apple Association appreciates the opportunity to provide comments on the appropriations for the U.S. Department of Agriculture (USDA) for fiscal year 1999.

Our focus is on four agencies of the Department: the Agricultural Research Service (ARS), the Foreign Agricultural Service (FAS), the Cooperative State Research, Education, and Extension Service (CSREES) and the Agricultural Marketing Service (AMS).

The U.S. Apple Association is a non-profit national trade association representing all segments of the U.S. apple industry. Our membership includes 30 state organizations representing approximately 9,000 producers and over 450 individual firms which handle and market the bulk of the nation's apples. Apples are grown commercially in 35 states, with gross returns to growers last year totalling $1.7 billion. Top producing states include Washington, New York, Michigan, California, Pennsylvania, Virginia, North Carolina, Oregon, Idaho and West Virginia.

FOREIGN AGRICULTURAL SERVICE—MARKET ACCESS PROGRAM (MAP)

All segments of the U.S. apple industry benefit directly from the use of the export promotion funds, which build markets and demand for our domestically produced product, and indirectly strengthen our markets in this country as well. While many FAS activities are important to the apple industry, the U.S. Apple Association believes the Market Access Program (MAP) in particular should be fully funded at its current authorized level of $90 million. This program is consistent with new international trade rules, helps small businesses, and is effective in promoting U.S. exports.

After nearly a decade of multinational trade negotiations in the Uruguay Round, the global agricultural community is facing substantial trade liberalizing policies. One of the few areas in which government policies can still effect agriculture is export promotion. We support a strong MAP, which is permissible under the Uruguay Round international trade rules.

The U.S. apple industry faces severe competition from around the globe. Most competitors receive significant government funds for generic promotions. Both production and exports from European Union (EU) countries receive government subsidies. Foreign governments spend approximately $500 million on export promotion and market development. With apple production increases occurring around the world, already severe competition is expected to intensify further.

Apple industry members believe in agricultural export programs and back their support of these programs with cost-sharing contributions of 30 to 75 percent of the total. According to USDA estimates, every $1 in export promotion funds translates into $16 in additional agricultural exports. MAP is an investment by the federal government that generates substantial returns to the Treasury and helps American business. MAP has been a sound investment in this nation's agricultural economy.

California, Colorado, Connecticut, Idaho, Maine, Massachusetts, Michigan, New Hampshire, New York, Pennsylvania, Utah, Vermont and Virginia are members of the U.S. Apple Export Council (USAEC). USAEC manages the export promotion activities of these states.

Each year export markets become increasingly important to apple businesses and related industries. U.S. apple production has steadily grown over the past decade, and these new markets provide outlets for this increased production. It is vital not only to the apple industry but agriculture as a whole to continue trade promotion efforts to help U.S. producers and exporters take full advantage of emerging and existing export markets. It is critical that assistance to small businesses is continued. The program makes export markets more accessible to smaller businesses which would otherwise be unable to individually effectively promote and market their apples around the world.

AGRICULTURAL MARKETING SERVICE—PESTICIDE DATA PROGRAM (PDP)

As requested in the President's budget, we recommend appropriation of $12 million for the Pesticide Data Program (PDP), managed by the Agricultural Marketing Service (AMS) of USDA.

Since 1991, USDA has utilized PDP to collect reliable, scientifically-based pesticide residue data that benefit consumers, food processors, crop protection pesticide

producers, and farmers. These data accurately reflect the consumer's actual exposure to pesticides from certain dietary sources. This real-world information allows the U.S. Environmental Protection Agency (EPA) to make more accurate assessments of risk. Without the actual residue data, overly conservative theoretical assumptions of risk are used. These assumptions could lead to withdrawal of pesticide uses that pose no actual human health risk.

On August 3, 1996 the President signed into law the Food Quality Protection Act (FQPA). This landmark legislation requires extensive reevaluation of the safety of agricultural pesticides and requires extensive data to evaluate the risk associated with the exposure to pesticides. Over the next three years, EPA will reevaluate the pesticide tolerances of many of the most important pesticides used on apples. Lacking sufficient data, EPA will make conservative assumptions about the use of pesticides and the resulting exposure. The conservative assumptions could lead to unnecessary cancellations or restrictions of critically important pesticides used on apples. EPA will be able to make a more accurate assessment of the actual risk associated with pesticides using data from PDP. As a result, apple growers will benefit from the continued availability of safe and effective pesticides. It is imperative that the subcommittee support PDP.

AGRICULTURAL RESEARCH SERVICE—FOOD CONSUMPTION SURVEY

The U.S. Apple Association supports the $2 million funding of the USDA food consumption survey as proposed in the USDA fiscal 1999 budget. The data from this survey is expected to lessen the potential that critical pesticides used on apples will be unnecessarily canceled or restricted as a result of implementation of the Food Quality Protection Act.

EPA uses food consumption data from the USDA food consumption survey to evaluate dietary pesticide exposures resulting from different food consumption patterns. EPA currently uses data which was produced from the latest survey conducted in 1978. The data from this survey are inadequate for certain demographic categories such as infants and children.

As previously noted, FQPA implementation will require accurate data to avoid the unnecessary cancellation of critical pesticides used on apples. Under FQPA, EPA must issue a finding that tolerances are safe for infants and children. Lacking sufficient data on infants and children, EPA is required by the new law to use additional margins of safety that could threaten the availability of pesticides used on apples. Data from a new consumption survey would refine EPA's risk assessments and possibly prevent unnecessary cancellations or restrictions on pesticides used on apples. It is also important that the survey is completed as quickly as possible since EPA will make many of its most critical decisions on apple pesticides within the next three years and will proceed on that schedule regardless of the availability of the data.

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)—PESTICIDE USE SURVEYS

The U.S. Apple Association supports the $7 million fiscal year 1999 budget request for NASS pesticide usage surveys. On an annual basis, USDA conducts statistical surveys on the use of agricultural pesticides. These surveys provide up to date information on the amount of pesticide use, the percentage of agricultural crops that are treated and other specific information on pesticide usage patterns. These data are used by the public and government agencies charged with the responsibility of tracking pesticide use and its implications. EPA currently uses the data in risk assessments that measure the theoretical health risk to the public from exposure to pesticides. Accurate information on pesticide use has never been so critical to the apple industry. Under FQPA, EPA will reassess the pesticide tolerances of some of the most important pesticides used on apples. The outcome of those assessments and the overall availability of pesticides for apple production will depend on the availability and accuracy of the pesticide usage data. A well funded USDA program that gathers pesticide use data on apples is critical to the proper implementation of the Food Quality Protection Act and to a realistic health risk assessment.

AGRICULTURAL RESEARCH SERVICE—TEMPERATE FRUIT FLY RESEARCH POSITION—YAKIMA, WASHINGTON

The U.S. Apple Association requests support for ongoing apple-specific research of $825,000 and requests an additional $300,000 in fiscal year 1999 for a temperate fruit fly research position at the USDA Agricultural Research Service facility in Yakima, Washington. Implementation of the food Quality Protection Act is expected to significantly reduce the number of pesticide alternatives that growers currently use to control a family of insects such as cherry fruit fly and apple maggot that are

devastating pests to tree fruit growers. Research on this family of pests is critically important because alternative pest controls are presently unavailable without the use of organophosphate pesticides. Over the next two years, EPA is expected to take regulatory action that will significantly reduce if not eliminate the use of organophosphate pesticides. This action will leave growers without a commercially viable control. The apple industry believes that research on this family of insects must be undertaken immediately if growers are to avoid a future crisis in pest management.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE (CSREES)—"SAFEGUARDING THE SUPPLY OF SPECIALTY CROPS FOR CONSUMERS" MICHIGAN STATE UNIVERSITY

The U.S. Apple Association requests funding of $700,000 for funding of a special grant to Michigan State University to develop alternative pest management strategies on key apple pests such as plum curculio and apple maggot. Implementation of the Food Quality Protection Act is expected to eliminate organophosphate pesticides, the primary pesticides that currently control those pests. If other pesticide alternatives are used they will destroy the ability of growers to utilize Integrated Pest Management (IPM), cause growers to use more miticides, and eventually will lead to massive pesticide resistance. Apple growers and pest management experts agree that without organophosphate pesticides, growers will not be able to control apple maggot or plum curculio in the future. Plum curculio and apple maggot feed directly on the apple causing worm holes, surface defects and misshapen fruit that is unmarketable in the fresh or processing market. This special project will investigate alternative pest management strategies that could control these pests. The research enjoys broad support among the apple industry since the research results will be applicable to many major apple growing regions outside of Michigan.

AGRICULTURAL RESEARCH SERVICE—NATIONAL AGRICULTURAL PESTICIDE IMPACT ASSESSMENT PROGRAM MINOR-USE PEST MANAGEMENT OFFICE

The U.S. Apple Association supports an increase of $1.5 million for the National Agricultural Pesticide Impact Assessment Program (NAPIAP) in the ARS budget to support the Office of Pest Management Policy established in August 1997 to improve coordination and communication with grower associations, USDA agencies and the U.S. Environmental Protection Agency. In passing the FQPA, Congress provided for the establishment of a minor-use program within USDA. The primary purpose of this office is to provide coordination and policy oversight for specific program areas within USDA that impact minor-use pest management practices. The $1.5 million increase will enable USDA to staff the Office of Pest Management Policy appropriately to meet the needs of minor-use industries.

Some of the areas of emphasis for the Office of Pest Management Policy would include the issue of meeting grower needs for chemical or nonchemical pest management tools, providing extension and educational services, and direct coordination with other federal agencies, primarily with the U.S. Environmental Protection Agency.

The minor-crop community believes that responsibility for this program must be placed at the highest levels of USDA. The U.S. Apple Association believes that the office should take an aggressive leadership role in providing for the needs of minor-use growers in the implementation of FQPA.

COOPERATIVE STATE RESEARCH, EDUCATION AND EXTENSION SERVICE (CSREES)—IPM RESEARCH GRANT PROGRAM

The U.S. Apple Association supports the President's fiscal year 1999 budget request of $8 million for the CSREES IPM Research Grant Program. Apple growers in all regions of the United States are taking steps to avoid pesticide applications whenever possible. The apple industry has made tremendous progress in reducing pesticide applications and reducing the risks associated with the use of pesticides through the use of IPM. Increased IPM funding is necessary to discover improved IPM practices that will lead to even more environmentally-friendly production practices.

PREPARED STATEMENT OF DR. D. JAY GRIMES, DIRECTOR, GULF COAST RESEARCH LABORATORY

Mr. Chairman, I am pleased to be here today and to have this opportunity to provide the Committee an overview of the activities of the U.S. Marine Shrimp Farming Program.

Mr. Chairman, the United States imports 70 percent of the marine shrimp it consumes, resulting in annual trade deficits well in excess of $2 billion. The U.S. Marine Shrimp Farming Program, supported by this Committee since 1985, undertook the development of high tech processes, products and services designed to make U.S. shrimp farmers competitive in the world market.

The Consortium enlisted the participation of top scientists, their institutions and states, the cooperation of the fledgling industry, and participation of government scientists and administrators to undertake narrowly focused and results oriented projects, to provide a sound scientific basis for industry expansion. Its approach is based on financial accountability, and minimal bureaucratic constraint. The Program has been administered by CSREES/USDA, which provides oversight and conducts periodic review by independent scientific panels.

The obstacles to be overcome by new technologies and products, in order to underpin a competitive advantage for U.S. agriculture, were formidable. By comparison, worldwide shrimp farming practices are primitive as compared to modern animal husbandry standards. They depend on catching wild shrimp stocks, have little regard for the environmental consequences of their actions, use drugs and chemicals indiscriminately, and contribute to the spread of shrimp diseases with their products; this approach has often been referred to as "rape and run."

These practices, while low-cost in the short-run, are not sustainable environmentally or economically in the long-run. Currently, worldwide producers are experiencing increasing shrimp mortalities, lower quality product, and lower profits. These world wide problems provide a substantial opportunity for exploitation of the technologies and products developed by the Consortium.

The Consortium has made the United States a world leader in the development and use of:

—domesticated stocks of high health and genetically improved shrimp broodstock and seed. Shrimp with superior growth and disease resistance traits are made available to U.S. farmers;

—the most advanced molecular diagnostic tools for disease screening and control, including monoclonal antibodies and gene probes. Consortium scientists serve a primary role in the U.S. risk assessment of viral pathogens in imported shrimp products;

—environmentally sound, sustainable and biosecure shrimp production systems that offer protection against viral pathogens and produce virus free products; and

—advanced feeds and feeding methods in support of the domesticated stocks and biosecure production systems to maximize feed conversion and system stability, while minimizing and containing system wastes.

The accomplishments above, while very encouraging, are not yet complete. We are in the process of integrating these advances into working shrimp farming systems for demonstration purposes. The industry does not yet have the complete technology package and remains dependent upon the Consortium for critical products and services. The Consortium is the only supplier of high health and genetically improved shrimp stocks in the United States and these stocks are provided at cost. The industry is equally dependent upon the Consortium for disease diagnosis, prevention and treatment methods, and services.

Abrupt loss of Consortium support would cut the existing industry off at the knees and preclude completion of this important pioneering work. In anticipation of near term technology transfer, we are encouraging the industry to establish its own breeding program and disease control operations. The risks, however, are as yet too high to encourage the movement of investment capital. We are making substantial progress toward increasing profitability and reducing risk.

Mr. Chairman, it is envisioned that the United States, with the best animal feed grains and health care in the world, will become a nonpolluting producer and major competitor in the shrimp farming world. Superior technologies, products and services will deliver higher quality and lower cost shrimp products to the nation and to the world.

The Consortium receives substantial support and encouragement from CSREES/USDA. They have suggested that this is a model program for resolving important problems and capturing opportunities in both agriculture and aquaculture. Such

sentiments have been repeatedly expressed by independent scientific review teams in 1988, 1991 and 1995.

To complete the tasks identified, the Consortium is requesting continued support of $3.5 million for fiscal year 1999. We deeply appreciate the Committee's support to date, and respectfully ask for favorable consideration.

PREPARED STATEMENT OF THE UNITED STATES TELEPHONE ASSOCIATION

SUMMARY OF REQUEST

Project involved.—Telephone Loan Programs Administered by the Rural Utilities Service.

Actions proposed.—Supporting RUS loan levels for the hardship, cost of money, Rural Telephone Bank and loan guarantee programs in fiscal year 1999 in the same amount as loan levels specified in the Fiscal Year 1998 Agriculture Appropriations Act (Public Law 105–86). Also supporting an extension of the language removing the 7 percent interest rate cap on cost of money loans for fiscal year 1999. Also supporting continuation of the restriction on the retirement of class A Rural Telephone Bank stock in fiscal year 1999 at the level contained in Public Law 105–86) and an extension of the prohibition against the transfer of Rural Telephone Bank funds to the general fund. Supporting funding for $150 million in loan authority and $15 million in grants designated for distance learning and telemedicine purposes.

The United States Telephone Association (USTA) represents over 1000 local telephone companies that provide over 95 percent of the access lines in the United States. USTA members range from large public held corporations to small family owned companies as well as cooperatives owned by their customers. We submit this testimony in the interests of the members of USTA and their subscribers.

USTA members firmly believe that the targeted assistance offered by a strong telephone loan program remains essential in order to maintain a healthy and growing rural telephone industry that contributes to the provision of universal telephone service. We appreciate the strong support this committee has provided for the telephone program since its inception in 1949 and look forward to a vigorous program for the future.

A CHANGING INDUSTRY

As Congress recognized through passage of the Telecommunications Act of 1996, the telephone industry is in the midst of one of the most significant changes any industry has ever undergone. Both the technological underpinnings and the regulatory atmosphere are dramatically different. Without system upgrades, rural areas will be left out of the emerging information revolution.

The need has never been greater for the technology employed by RUS borrower rural telephone companies to continue to be modernized. The demand for new switches to serve rural areas could be unprecedented in the next year. What is driving this demand? First, there are several Federal Communications Commission mandates that incumbent local companies will have to meet. Upgrades related to new rules regarding pay phone compensation, implementation of four digit Carrier Identification Codes (CIC's), and number portability are all new Commission requirements driven by the 1996 Telecommunications Act. Second, there are still some companies that are not equipped to offer equal access to competing long distance carriers. Third, the Communications Assistance for Law Enforcement Act (CALEA) imposes new requirements on all carriers to upgrade their capabilities to assist the Federal Bureau of Investigation and other law enforcement agencies. Fourth, telephone company switches, which are really just sophisticated computers, are impacted by the "year 2000" problem.

In addition to upgrading switching capability, it is important that rural areas be included in the nationwide drive for greater bandwidth capacity. In order to provide higher speed data services, such as ISDN (Integrated Services Digital Network) or even faster connections to the Internet, outside plant must be modernized in addition to new electronics being placed in switching offices. Rural areas with relatively long loops are particularly difficult to serve with these higher speed connections and require additional investment to allow modern services to be provided.

Provision of greater bandwidth and switching capabilities are crucial infrastructure elements which will allow rural businesses, schools and health care facilities to take advantage of the other programs available to them as end users. The money spent on having the most modern and sophisticated equipment available at the premises of the business, school or clinic is wasted if the local telephone company cannot afford to quickly transport and switch the large amounts of data that these

entities generate. RUS funding enhances the synergies among the FCC and RUS programs targeted at improving rural education and health care through telecommunications.

The RUS program provides needed incentives to help offset regulatory uncertainties related to universal service support and interconnection rules with a reliable source of fairly priced long term capital. After all, RUS is a voluntary program designed to incent local telephone companies to build the plant essential to economic growth. RUS endures because it is a brilliantly conceived public private partnership in which the borrowers are the conduits for benefits from the federal government to flow to rural telephone customers, the true beneficiaries of the RUS program. The government's contribution is leveraged by the equity, technical expertise and dedication of local telephone companies.

IMPACT OF CREDIT REFORM ON THE RURAL TELEPHONE BANK

Contrary to the intent of Congress, the interpretation of credit reform by the Office of Management and Budget (OMB) has significantly affected the operation of the Rural Telephone Bank (RTB). One of the most damaging impacts of OMB's interpretation of the credit reform law is to essentially cleave the RTB into two banks—a liquidating account bank which is responsible for pre-credit reform loans, and a financing account bank which is responsible for post credit reform loans. Until the Administration's current budget proposal, OMB has clung to the proposition that funds from the two banks could not be intermingled. USTA has protested this arrangement since it began, since it prevents the relending of borrower repayments to fund new loans in direct contravention of Sec. 409 of the Bank's enabling act. This, in turn, forces the RTB to borrow unnecessarily from the Treasury to fund new loans. It also permits funds to build up in the liquidating account that were generated by GAO documented interest rate overcharges, instead of those funds being returned through relending to the same universe of borrowers that initially generated them.

In this new budget proposal, the Administration proposes to take funds from the liquidating account and fund the loan subsidy for new loans as well as the RUS administrative expenses allocated to the RTB beginning in 1999. This is in direct conflict with an existing provision of law, Sec. 403(b) of the Rural Telephone Bank Act (Public Law 92–12). That provision states ". . . in order to perform its responsibilities under this title, the telephone bank may partially or jointly utilize the facilities and the services of employees of the Rural Electrification Administration or of any other agency of the Department of Agriculture, *without cost to the telephone bank*". (Emphasis added)

OMB has clearly changed its position on whether the liquidating account funds can be used for purposes other than liquidating the pre-credit reform loans. And on this point OMB is correct. However, instead of using the repayments into the liquidating account to fund the expenses of the RTB (contrary to the Rural Electrification Act) or to fund the loan subsidy, neither of which would result in any budget savings, OMB should adhere to Sec. 409 of the Rural Electrification Act and allow those repayments to be used to fund new RTB loans. It is ironic that in the same budget proposal that purports to have the RTB act more like a private bank, OMB continues to maintain the artificial split of the bank's resources which prevents it from acting as would a private bank—relending repayments.

RUS TELEPHONE PROGRAM PROCEDURES SHOULD BE STREAMLINED

The Government Performance and Results Act of 1993 (Public Law 103–62) was designed by Congress to establish clear goals for government programs and places a strong focus on results, service and customer satisfaction. This Act applies to all RUS lending programs. Streamlining the practices and procedures of the RUS telephone programs is an extremely meritorious notion. USTA is fully in support of less regulation and improved service delivery, within the context of the government's interest in security for these rural telecommunications infrastructure improvement loans. We have consistently requested RUS to examine and streamline its rules and procedures for the benefit of both the agency and the borrowers and their subscribers. Unfortunately nothing has been done by RUS to move in this direction. We hope that the Government Performance and Results Act provides the needed spur to encourage RUS to expeditiously accomplish this goal.

RECOMMENDATIONS

Continuation of the loan levels and necessary associated subsidy amounts for the RUS telephone loan programs that were recommended by this committee and signed

into law for fiscal year 1998 would maintain our members' ability to adequately serve the nation's telecommunications needs and to maintain universal service.

For a number of years, through the appropriations process, Congress has eliminated the seven percent "cap" placed on the insured cost-of-money loan program. The elimination of the cap should continue. If long term Treasury interest rates exceeded the 7 percent ceiling contained in the authorizing act, adequate subsidy would not be available to support the program at the authorized level. This would be extremely disruptive and hinder the program from accomplishing its statutory goals. Accordingly USTA supports continuation of the elimination of the seven percent cap on cost-of-money insured loans in fiscal year 1999.

The restriction on the retirement of the amount of class A stock by the Rural Telephone Bank, adopted in fiscal 1997, should be continued. The Bank is currently retiring Class A stock in an orderly, measured manner as current law requires. This should continue. The Committee should also continue to protect the legitimate ownership interests of the Class B and C stockholders in the Bank's assets by continuing to prohibit a "sweep" of those funds into the general fund.

Recommended Loan Levels.

USTA recommends telephone loan program loan levels for fiscal year 1999 as follows:

RUS Insured Hardship Loans (5 percent)	$75,000,000
RUS Insured Cost-of-Money Loans	300,000,000
Rural Telephone Bank (RTB) Loans	175,000,000
Loan Guarantees	120,000,000
Total	670,000,000

The President's budget proposes a reduction of $25 million in the hardship program designed for the neediest borrowers. There is strong demand for hardship loans. Rural Americans cannot wait any longer to be full participants in the Information Age. A minimum amount of subsidy authority would restore this proposed $25 million cut in the hardship loan level. We cannot imagine a more deserving use of scarce government resources for the benefit of rural Americans.

Distance Learning and Telemedicine

USTA strongly supports the loan and grant proposal and recommends its funding for fiscal year 1999 at the levels proposed in the Administration's budget submission, that is, $15 million for the grant program and $150 million for the loan program. This program is a perfect complement to the traditional RUS telephone loan programs. For distance learning and telemedicine to become a reality, schools and hospitals need training and equipment. Similarly, local telephone companies need modern infrastructure to connect these facilities to the telecommunications network.

CONCLUSION

Our members take pleasure and pride in reminding the Subcommittee that the RUS telephone program continues its perfect record of no defaults in almost a half century of existence. RUS telephone borrowers take deadly seriously their obligations to their government, their nation and their subscribers. They will continue to invest in our rural communities, use government loan funds carefully and judiciously and do our best to assure the continued affordability of telecommunications services in rural America. Our members have confidence that the Subcommittee will continue to recognize the importance of assuring a strong and effective RUS Telephone Program through authorization of adequate loan levels.

PREPARED STATEMENT OF CYRUS M. JOLLIVETTE, VICE PRESIDENT FOR GOVERNMENT RELATIONS, UNIVERSITY OF MIAMI

Mr. Chairman and Members of the Subcommittee: I am pleased to submit testimony on behalf of the University of Miami and Florida State University. My colleagues in Florida are deeply appreciative of your leadership, Mr. Chairman, and the Subcommittee's confidence in our respective institutions. We recognize that you and your colleagues on the Appropriations Committee face difficult choices as you prepare for the Subcommittee's priorities for fiscal year 1999 and we know that you will continue to make the difficult choices with the best interests of the nation guiding your decisions. My colleagues and I hope that you will find it possible to fund an important initiative detailed below in the fiscal year 1999 appropriations cycle.

In the past several years, the Congress has been especially responsive to the Florida Congressional Delegation's requests concerning The Florida Consortium for Climatic Research, a project involving the University of Miami, Florida State University, the University of Florida, and the University of South Florida. We greatly appreciate your support of this critical area of research.

The importance of El Niño South Oscillation (ENSO) events as a major source of climate fluctuations, together with advances in ENSO predictability, suggest that forecasts have significant potential for benefiting agricultural productivity and economic decision-making. The Florida Consortium for Climatic Research proposes to focus on the southeastern United States geographical area., a large food producer whose productivity is significantly impacted by weather conditions generated by the ENSO phenomenon. Decisions made by well-informed participants from farm to policy level, made several months or seasons in advance, can significantly benefit productivity, an especially farmers' ability to plan ahead.

This project presents an end-to-end approach that will provide the bridge between climate and forecast producers, such as the recently-formed International Research Institute for Climate Prediction (IRICP), and agricultural decision makers. Specific objectives for the project are to: (1) adapt, develop, and evaluate a generic, flexible set of tools and methodologies for assessing regional agricultural consequences of El Niño events and for applying forecasts to improve agricultural decision-making; (2) demonstrate by successful applications of forecasts to agriculture and other sectors which would benefit best in the southeastern United States that began in 1996; and (3) assess the value of climate predictions to different agricultural sectors in these southeastern region.

The consortium's objectives include developing scientific applications for climate data. This consortium draws upon the expertise of scientists at FSU (climate analyses and coupled ocean-atmosphere prediction models), UM (climate analyses and economic value of forecasts), and the University of Florida (agriculture) to quantify climate variability (e.g., the El Niño phenomena) for the SE and to explore the potential value and practical application (there is a strong emphasis on agricultural applications) of climate forecasts.

During the initial phase of this effort, the FSU team described qualitatively the impact of El Niño (and the other extreme, La Niña) on temperature and precipitation patterns across the SE. Additionally, they found a geographic shift in tornadic activity associated with El Niño events. A new climate forecast system to provide predictions of seasonal temperatures and precipitation with longer lead times and improved skill is in the testing phase. Improvements are due partly to the coupled nature (i.e., linking the ocean and atmosphere so they respond to each other dynamically) of the forecast system. Our colleagues at the University of Florida identified several crops in Florida which are vulnerable to shifts in weather patterns associated with El Niño and La Niña, but noted further that the impact is not uniform in nature across the state.

Continuing with this collaboration, we hope to estimate the economic advantages that could be achieved by incorporating climate forecast information into farming management systems and eventually work with sector representatives in developing guidance products for the agricultural community. We believe that the Department of Agriculture is a major stakeholder in this critical area. We respectfully seek $3 million from USDA to continue and expand this important research activity in fiscal year 1999.

PREPARED STATEMENT OF DR. SHELBY F. THAMES, PROFESSOR OF POLYMER SCIENCE, UNIVERSITY OF SOUTHERN MISSISSIPPI

Mr. Chairman, distinguished Members of the Subcommittee, I would like to thank you for this opportunity to provide testimony to you concerning the ongoing efforts of The University of Southern Mississippi (USM) and the Mississippi Polymer Institute. I would also like to repeat my expression of gratitude to the Subcommittee for its leadership and support of the Institute and its work. This testimony will include an update on the progress of the Institute since my testimony of approximately one year ago. During the past year, our efforts have primarily focused on the commercialization of novel inventions resulting from our emulsion polymerization team and efforts to produce multi-functional additives. I am happy to report that we have secured industrial partners who wish to manufacture and sell our novel agricultural based materials into the polymer industry. Specifically, we have designed and synthesized novel monomers or polymer building blocks that allow the production of solvent-free, non-polluting, latex coatings. This is novel technology, and promises to be significant in reducing emissions of polluting materials into our atmosphere. In

yet another, invention we have developed formaldehyde-free adhesives for use in the particle board industry. The new adhesives are composed of more than 98 percent agricultural products, and are comparable in properties with traditional formaldehyde adhesives. The examples noted herein are two of several active ongoing commercializing efforts.

In 1983, the Mississippi Legislature authorized the Polymer Institute at USM to work closely with emerging industries and other existing polymer-related industries to assist with research, problem-solving, and commercializing efforts. During the past year, seventeen new polymer-related industries have located in Mississippi. The Institute provides industry and government with applied or focused research, development support, and other commercializing assistance. This effort complements existing strong ties with industry and government involving exchange of information and improved employment opportunities for USM graduates. Most importantly, through basic and applied research coupled with developmental and commercializing efforts of the Institute, the Department of Polymer Science continues to address national needs of high priority.

The focus of my work is commercialization of alternative agricultural crops in the polymer industry. This approach offers an array of opportunities for agriculture as the polymer industry is the largest segment of the chemical products industry in the world, and heretofore has been highly dependent upon petroleum utilization. However, my efforts are directed to the development of agricultural derived materials that can improve our nation's environment, and reduce our dependence on imported petroleum. As farm products meet the industrial needs of American society, rural America is the benefactor. Heretofore this movement to utilize alternative agricultural products as industrial raw materials has received some attention but much less than the opportunities warrant. Your decisions are crucial to the accomplishment of these goals as funding from this Subcommittee has enabled us to implement and maintain an active group of university-based polymer scientists whose energies are devoted to commercializing alternative crops. We are most grateful to you for this support and ask for your continued commitment.

The faculty, the University, and the State of Mississippi are strongly supportive of the Mississippi Polymer Institute and its close ties with industry. Most faculty maintain at least one industrial contract as an important part of extramural research efforts.

Polymers, which include fibers, plastics, composites, coatings, adhesives, inks, and elastomers, play a key role in the materials industry. They are used in a wide range of industries including textiles, aerospace, automotive, packaging, construction, medical prosthesis, and health care. In the aerospace and automotive applications, reduced weight and high strength make them increasingly important as fuel savers. Their non-metallic character and design potentials support their use for many national defense purposes. Moreover, select polymers are possible substitutes for so-called strategic materials, some of which come from potentially unreliable sources.

As a polymer scientist, I am intrigued by the vast opportunities offered by American agriculture. As a professor, however, I am disappointed that few of our science and business students receive training in the polymer-agricultural discipline as it offers enormous potential.

I became involved in the polymer field 34 years ago, and since that time have watched its evolution where almost each new product utilization offered the opportunity for many more. Although polymer science as a discipline has experienced expansion and a degree of public acceptance, alternative agricultural materials are an under-utilized national treasure for the polymer industry. Moreover, there is less acceptance of petroleum derived materials today than ever before and consequently the timing is ideal for agricultural materials to make significant inroads as environmentally friendly, biodegradable, and renewable raw materials. These agricultural materials have always been available for our use, yet society, for many reasons, has not recognized their potential. I would like to share with you several examples to support this tenet:

—I have described our efforts at meeting volatile organic compound (VOC) emission standards via the design and synthesis of solventless emulsion polymers. The novel technology which allows the synthesis of solventless emulsion polymers is based on the use of an agricultural material. For instance, this natural product allows the synthesis of emulsion polymers that perform their intended uses at room temperature and without any organic solvents. Thus, we have developed a truly no VOC coating. Most coatings of this type contain approximately 400 to 1500 grams of VOC/gallon. It is expected that this monomer will be offered for sale in the first quarter of 1999.

—A waterborne, waterproofer has been designed and formulated with the help of several natural products. The material functions as a waterproofer yet is carried

in water. However, after application to the intended substrate, typically wood or cementous products, the material becomes hydrophobic and highly water resistant. We have collected two and one-half years of exposure data on this product with excellent success. It is currently being marketed via Southern Chemical Formulators of Mobile, AL.

—A new, multi-functional polymer additive has been designed, synthesized, and tested. It is currently being evaluated by the J.W. Hanson Company as a potential commercial product. It is a highly efficient, multi-faceted additive that functions as a dispersant, a defoamer, an adhesion promoter, a gloss enhancer, and corrosion inhibiting species. It is derived from an agricultural raw material and is very novel in its performance and applications.

—We continue to exploit the potential of lesquerella, a crop that produces a triglyceride similar to castor oil. Several products have been prepared and include: polyesters, stains, foams, pressure sensitive adhesives, and 100 percent solid ultraviolet (UV) coatings. This technology was highlighted at the AARC/NASDA meeting in Washington, DC.

—Novel open cell foams have been designed and prepared from lesquerella and/or castor oil. They are of high quality and can substitute for foams used extensively in industrial settings. The Union Camp Corporation has shown interest in these materials and will soon visit our facility to discuss possible application/commercialization of these foams.

—Closed cell lesquerella foams have been prepared from lesquerella derivatives and will be submitted for testing. This commercialization focus is attractive as castor foams are prepared from imported oil, i.e., at an annual $50–$75 million import cost. Thus, emergence of a lesquerella oil industry has the potential to reduce U.S. imports.

It is clear that commercial utilization of agricultural products is needed and that ag based products can play a viable role as industrial raw materials for the polymer industry. However, we simply must continue to devote support and effort to this rewarding undertaking.

U.S. agriculture has made the transition from the farm fields to the kitchen tables, but America's industrial community continues to be frightfully slow in adopting ag based industrial materials. Let us aggressively pursue this opportunity and in doing so:

—Intensify U.S. efforts to commercialize alternative crops.

—Reduce U.S. reliance on imported petroleum.

—Maintain a healthy and prosperous farm economy.

—Foster new cooperative opportunities between American farmers and American industry.

Mr. Chairman, your leadership and support are deeply appreciated by the entire University of Southern Mississippi community. While I can greatly appreciate the difficult financial restraints facing your Subcommittee this fiscal year, I feel confident that further support of the Mississippi Polymer Institute will continue dividends of increasing commercialization opportunities of agricultural materials in American industry. Advances in polymer research are crucial to food, transportation, housing, and defense industries. Our work has clearly established the value of ag products as industrial raw materials; however, while these are but a limited number of applications, our success confirms that it is time to move to yet another level of effort. Thus, we respectfully request $1.2 million in federal funding to exploit the potentials of commercializing alternative agricultural materials and to continue our initiatives. Thank you Mr. Chairman and Members of the Subcommittee for your support and consideration.

PREPARED STATEMENT OF SAM J. MASELLI, EXECUTIVE VICE PRESIDENT, WESTERN RURAL TELEPHONE ASSOCIATION

SUMMARY OF REQUESTS

Program of Interest.—Telecommunications lending programs administered by the Rural Utilities Service (RUS) of the U.S. Department of Agriculture.

Recommendation.—WRTA supports loan levels for fiscal year 1998 at such amounts as they have been designated in the Agriculture Appropriations Act for Fiscal Year 1997 (Public Law 105–86) for hardship, treasury-cost, Rural Telephone Bank (RTB), and guaranteed loan programs and the associated subsidy to support hardship and RTB loans at existing levels. WRTA also supports the President's budget request for funding of the RUS's Distance Learning and Telemedicine (DLT) programs at $15 million in grants and $150 million in loan authority. WRTA sup-

ports a continuation of the current fiscal year's policy of language removing the 7 percent interest rate ceiling on Treasury-cost loans for fiscal year 1998. WRTA supports the continued provisions contained in Public Law 105–86 restricting retirement of RTB class A stock in fiscal year 1998 and prohibiting the transfer of RTB funds to the general fund. Finally, we are opposed to the President's budget proposal to transfer funds from the unobligated balances of the liquidating account of the RTB for the bank's administrative expenses and loan subsidy costs.

Mr. Chairman and Members of the Subcommittee: It is an honor and privilege to have the opportunity to discuss the unique infrastructure financing needs of the rural local exchange carrier (LEC) industry. My name is Sam J. Maselli, and I am the Executive Vice President of the Western Rural Telephone Association (WRTA). WRTA is a regional trade association representing nearly 150 small rural commercial and cooperative telephone systems throughout the western United States and the Pacific Rim territories.

BACKGROUND

WRTA's member systems, like most of this nation's independent LEC's, evolved to serve the high cost, low density areas in the rural western United States. Congress recognized this unique dilemma confronting America's rural LEC's as early as 1949 when it amended the Rural Electrification Act (RE Act) to create the REA telephone loan program. With the future of rural America in mind, Congress charged the REA with the responsibility for making low interest rate loans to both "furnish and improve" rural telephone service at the local exchange level.

In subsequent years, Congress has periodically acted to amend the RE Act to insure that the original mission of the program is fully met. In 1971, the Rural Telephone Bank (RTB) was created as a supplemental source of direct loan financing. In 1973, the REA was provided with the ability to guarantee Federal Financing Bank (FFB) and private lender notes. And in 1993, the Congress established a fourth lending component, the Treasury-cost program, and Congress eliminated most of the subsidy costs associated with the administration of the program. The formal consolidation of the Department's utility programs through transferring the telecommunications loan and technical assistance programs of the REA to the Rural Utilities Service (RUS) in 1994 further served to enhance and update the effectiveness of the agency in promoting rural infrastructure development.

Due to the difficulty of providing service in high cost, low density areas, Congress provided for long-term, fixed rate loans available at reasonable rates to borrowers to assure that rural citizens benefited from the highest quality of telephone service and affordable subscriber rates. Through this ongoing commitment to capital financing, Congress affirmed the goal of comparable and affordable telephone service for rural Americans as their urban counterparts.

As a result of this commitment to rural telecommunications, rural America has greatly benefited from the highest quality of information technology. Through its effort, Congress has played a critical role in developing a rural telecommunications infrastructure financing program which best responds to the needs of rural America.

THE OBLIGATIONS OF THE INDUSTRY CONTINUE

The RUS telecommunications loan program represents a remarkable public/private partnership success story which continues to produce tangible results in the lives of rural citizens. With the assistance of RUS capital and technical standards, rural telephone systems are providing modern telecommunications services of a highly sophisticated quality. However, with the rapid pace of change in the development of information technology, the need for RUS telecommunications lending is greater than ever.

Due to the nature of rural areas, particularly in the rural West, the challenge of providing modern telecommunications services is formidable. Compared to their urban counterparts, rural communities are faced with higher poverty rates, lower income levels, physical isolation and higher costs associated with deploying modern infrastructure. Economic development is often frustrated by these unique rural conditions. With the United States in the midst of the "information revolution," rural areas are confronted with the dilemma of being left behind.

The implementation of the Telecommunications Reform Act of 1996 has also added to the uncertainty and collective uneasiness of the rural telecommunications industry. Despite the Act's solid rural safeguard provisions, the Federal Communications Commission (FCC) has embarked in a regulatory direction which explicitly threatens rural ratepayers, services, and infrastructure investment.

Congress must keep a vigilant watch over the FCC to ensure that implementation of the Act is consistent with congressional intent. This is particularly true of RUS

program borrowers where the federal government has a significant loan security interest at stake. Whatever the outcome of the regulatory process, the RUS telecommunications loan program will be as important as ever to rural systems attempting to modernize their networks and improve service to rural residents.

THE PROMISE OF THE RUS PROGRAM

Despite the obstacles to rural economic revitalization, information technology holds significant promise for our rural areas. As we have seen in recent years, information services can directly benefit our schools, libraries, hospitals and clinics. In addition, telecommunications services facilitate commercial opportunities such as telemarketing, insurance, and manufacturing not possible in previous years.

While the explosive nature of technological change offers our rural communities genuine opportunities for economic and social progress, special attention must be placed on providing rural areas with the appropriate tools to address their unique set of needs. In this context, the RUS telecommunications loan program is playing a critical front-line role in ensuring that rural America is linked to the Information Superhighway.

Today, RUS borrowers average only 6 subscribers per mile compared to 37 per mile for the larger, urban-oriented telephone systems. This results in an average plant investment per subscriber that is 38 percent higher for RUS borrower systems. Without the availability of affordable capital financing, enhancing telecommunications networks for rural communities would be untenable.

The RUS is providing affordable capital financing to allow its borrowers to upgrade their plant and facilities for digital switching, fiber optic cabling, emergency 911, and other enhanced features such as ISDN, SS7, and CLASS. Due to the dependability of the RUS program, borrowers provide their rural subscribers with cutting edge services.

RUS telecommunications lending also performs a pivotal function of stimulating substantial private investment. In fact, RUS borrowers invest in telecommunications plant at a rate of $4.80 for every RUS dollar spent.

In addition, the RUS telecommunications program boasts a proud financial record probably unprecedented for federal loan programs. To date, the program has never experienced a borrower-related default in its history. At the end of 1997, $4.5 billion in principal and $4.5 billion in interest had been paid by RUS borrowers. For nearly 49 years, this successful public/private partnership has worked.

In 1993, this partnership agreed to a $31 million cut in the name of debt reduction, and it agreed to a twelve year freeze in program loan levels while other programs grew by at least the rate of inflation. This partnership is committed to providing service to areas long neglected by others. Ultimately, this partnership will foster the rural information network of the 21st century.

SPECIFIC RECOMMENDATIONS FOR THE SUBCOMMITTEE'S CONSIDERATION

RUS Telecommunications Loan Program.—Increasing demands for expanded telecommunications services and infrastructure upgrades suggests that the level of need continues. Congressional mandates as a result of the Rural Electrification Restructuring Act (RELRA) of 1993 (Public Law 103–129) have placed additional obligations on RUS borrowers to upgrade their technology in order to maintain their loan eligibility. To address the persisting need, WRTA recommends that the Committee consider the following RUS Telecommunications Program loan levels for fiscal year 1999:

5 percent Hardship Loans	$75,000,000
Treasury-cost Loans	300,000,000
FFB Loan Guarantees	120,000,000
Rural Telephone Bank Loans	175,000,000
Total	670,000,000

These loan levels are the same as the current fiscal year's funding provided by Congress and represent a genuine commitment to rural telecommunications.

Removal of Interest Rate Ceiling on Treasury-cost Loans.—WRTA supports language removing the 7 percent interest rate cap on the program's Treasury-cost loans. This provision was originally included in the Agriculture Appropriations Act for fiscal year 1996 and continued for the current fiscal year. The inclusion of this provision for fiscal year 1999 will prevent a potential disruption of the program in the case where interest rates exceed 7 percent and insufficient subsidy cannot support authorized loan levels. Stated simply, it is a continuation of current policy, and it promotes the viability of the program at zero cost.

Rural Telephone Bank (RTB) Issues.—During the course of fiscal year 1996, the Rural Telephone Bank began the statutory retirement of class A, government-owned stock. WRTA supports the restriction on accelerating the privatization process as conceived beginning in fiscal year 1996 of no more than 5 percent of total class A stock retired in one year. We believe that a continuation of this policy best addresses the orderly and systematic privatization of the RTB. WRTA also urges the Committee to continue the prohibition against the transfer of bank funds to the general fund of the Treasury along with the requirement that the bank receive interest on those funds. The private B and C stockholders of the RTB have an interest in the assets of the bank and the protection of all funds.

For these reasons, WRTA is also opposed to the proposal contained in the President's budget that the costs of RTB administration and loan subsidy be funded by a transfer from the unobligated balances of the bank's liquidating account rather than by appropriations consistent with the federal credit reform act. WRTA believes that this proposal would impinge upon the ownership interests of the bank's stockholders.

In addition, we believe that funding the administrative costs of the bank through a transfer of unobligated balances of the bank's liquidating account rather than through appropriation is contrary to the RTB enabling act (Public Law 92–12). Budget language suggests that these recommendations would not result in budgetary savings, and no justification for this proposal is contained in the budget. Furthermore, this proposal would require new authorizing legislation prior to an appropriation.

Distance Learning and Telemedicine (DLT) Loans and Grants.—The RUS Distance Learning and Telemedicine (DLT) program has proven to be a remarkable tool for promoting rural development. The DLT loan and grant program administered by the RUS significant promise for the deployment of modern technology for scores of our rural communities. WRTA supports the President's request for $150 million in loans delivered at the government's cost-of-money and $15 million in grants for DLT purposes. We believe that the proposed level adequately responds to the overwhelming demand for DLT resources since the implementation of the program by the RUS in 1993.

CONCLUSION

Rural economic and social development and access to advanced information services are an inseparable combination for the future. The RUS telecommunications program has proven to be an indispensable tool for rural America. Its existence continues to improve the nature of rural life in our nation, particularly in our isolated Western communities.

We appreciate the opportunity to comment on this critical program. Thank you for your time and consideration of this issue.

PREPARED STATEMENT OF RONALD R. HELINSKI, CONSERVATION POLICY SPECIALIST, WILDLIFE MANAGEMENT INSTITUTE

I am Ronald R. Helinski, Conservation Policy Specialist of the Wildlife Management Institute. Established in 1911, the Institute is staffed by professional wildlife scientists and managers. Its purpose is to promote the restoration and improved management of wildlife in North America.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES)

The Wildlife Management Institute (WMI) recognizes that the research and educational programs of the CSREES and its Land Grant Partners effect relevant, positive changes in attitudes and implementation of new technologies by private landowners, managers, community decisionmakers, and the public. This results in significant benefits to individuals and to the Nation through building and sustaining a more viable and productive natural resource base and a competitive and profitable agriculture. Since over two-thirds of our lands, approximately 1.35 billion acres, are controlled by over 10 million private landowners and managers, it is most appropriate that the CSREES-Land Grant System, with its grass roots credibility and delivery system, be adequately funded to translate and deliver research-based educational programs and new technologies to help the Nation's private landowners and managers move towards a more sustainable society. However, in the President's fiscal year 1999 budget, we see very little emphasis on natural resources research and education directed toward helping these clientele.

PURPOSE

The Wildlife Management Institute recommends that the fiscal year 1999 budget for CSREES should redirect funding to accomplish the following goals:

WMI recommends that the Renewable Resources Extension Act be funded at a minimum level of $9.5 million in fiscal year 1999. The RREA funds, which are apportioned to State Extension Services, effectively leverage cooperating partnerships at an average of about four to one, with a focus on the development and dissemination of useful and practical educational programs to private landowners (rural and urban) and continuing education of professionals. The increase to $9.5 million would enable the Extension System to accomplish the goals and objectives outlined in the 1991–1995 Report to Congress. The need for RREA educational programs is greater today than ever because of the fragmentation of ownerships, the diversity of landowners needing assistance, and the increasing environmental concerns of society about land use. It is important to note that RREA has been reauthorized through 2002. It was originally authorized at $15 million annually; however, even though it has been proven to be effective in leveraging cooperative state and local funding, it has never been funded at a level beyond $3.4 million. An increase to $9.5 million would enable the Extension Service to expand its capability to assist over 500,000 private landowners annually to improve decisionmaking and management on an additional 35 million acres while increasing productivity and revenue by $200 million.

WMI recommends that Smith-Lever 3(b)&(c) base program funding be increased by 9.0 percent to a level of $280,950,770 with an appropriate portion of this increase targeted to Extension's Natural Resource and Environmental Management programs (NREM). The President's fiscal year 1999 budget requests a reduction of $10,740,000 funding for Smith-Lever 3(b)&(c) funds from the fiscal year 1998 level. WMI appreciates that Smith-Lever 3(b)&(c) base programs provide "Block Grant" type funds for land grant universities to provide essential educational outreach based on local needs assessment. This will enable NREM programs to develop the critical mass of expertise at the state and local levels to redirect and leverage limited funding to address critical existing and emerging natural resource and environmental issues that are directly affecting small landowners and farmers in both rural and urban communities nationwide. Expanding Extension programs in natural resource public issues education on such issues as forest health, wetlands, endangered species, and human/wildlife interactions, as well as to strengthen its programs in urban and community forestry and environmental education as called for in the 1990 FACT Act is essential to address natural resource issues that are relevant to the sustainability of these critical resources. Such an increase targeted appropriately would help producers better understand and implement the changes in the 1995 Farm Bill Conservation Provisions. Moreover, we are concerned that appropriate positions in the Natural Resources and Environment Unit have not been retained to provide needed national leadership for critical interdisciplinary resources such as range management.

WMI encourages continuation of close cooperation between State CES's and their State Fish and Wildlife agencies, as well as other appropriate state and federal agencies and conservation organizations. Extension 4–H Youth natural resource programs and projects continue to increase with over 1,350,000 youngsters presently enrolled from both urban and rural communities across the Nation. Increased Smith-Lever funds targeted appropriately will enable CSREES to carry out its environmental education and NREM National Strategic Plan obligations nationwide.

WMI recommends restoration of the Rangeland Research Grants $500,000 budget for fiscal year 1999. The Institute is disappointed that the practical and applied problems addressed by the Rangeland Research Grants (RRG) program were zeroed out in the President's 1998 budget and totally ignored in this fiscal year 1999 budget. Over one-half of the land area of the United States is rangeland; and elimination of the only federal competitive grants program for rangelands has serious implications for wildlife, watersheds, and other natural resources. Modest appropriations for RRG in the past have supported some of the most important rangeland research conducted over the past decade, and wildlife issues on rangelands will present some of the more critical rangeland research problems over the next decade. This would help increase the interdisciplinary capacity of research and educational programs to help landowners improve the adoption of forests and rangelands ecosystem management and the conservation of biodiversity on an ecoregion level.

WMI recommends that an appropriate portion of the total increased appropriation for Pest Management should be dedicated to educational programs for prevention and control of vertebrae pests in urban and rural communities and to address invasive exotic species and noxious weed problems on rangelands for restoring, managing, and sustaining the biological integrity of the Nation's natural resource base

upon which the agricultural and natural resource economies depend. WMI notes that a combined total increase of almost $15.5 million has been recommended in the President's budget for Pest Management and related research and extension programs over and above increases received in fiscal year 1998. Vertebrate pests and invasive species have been identified in many states as posing the most significant problems, now and in the future, that agricultural and related crop producers and private landowners face. This targeting of Pest Management funds for research and educational programs would advance the knowledge and capability of landowners to reduce significant losses to vertebrate pests and invasive species.

WMI recommends that the Hatch and McIntire-Stennis funds be restored to fiscal year 1998 levels and, if necessary, redirected from the substantial $32,800,000 proposed increase in NRI funding, WMI is pleased that the Administration proposes a 9.5 million increase in basic research identified under the National Research Initiative (NRI) as Natural Resources and the Environment; however, what is proposed under this "Area of Special Emphasis" clearly does not address critical natural resource research needs that the Natural Resource Community and the public are vitally concerned about. The Institute is alarmed at the significant reduction in both the Hatch Act and McIntire-Stennis research programs of over $15.5 million. Both of these research programs, conducted by land grant university partners and other educational institutions, are crucial to addressing natural resource and environmental issues critical to agriculture and natural resource sustainability now and in the future.

SUMMARY

The Wildlife Management institute, based on the above considerations, recommends the following for the fiscal year 1999 budget of CSREES:

(a) The RREA budget be increased to $9.5 million;

(b) Smith-Lever 3(b)&(c) base program funding be increased by 9.0 percent;

(c) Rangeland Research grants be restored at $500,000 level;

(d) A portion of the Pest Management and related increase be targeted to provide increased research and education programs to address vertebrate pest prevention and control needs and invasive species and exotic weed problems; and

(e) McIntire-Stennis and Hatch Act funding be restored to fiscal year 1998 levels.

PREPARED STATEMENT OF HON. JIM GERINGER, GOVERNOR, STATE OF WYOMING

This testimony supports fiscal year 1999 funding for the Department of Agriculture in the amount of $300,000,000 for the Environmental Quality Incentives Program (EQIP). The State of Wyoming requests that $12,000,000 of that amount be directed for EQIP activities to continue the functions of the Colorado River Colorado River Salinity Control Program, one of the programs made a part of the EQIP by Public Law 104–127. Designation of Colorado River Basin salinity control as an EQIP national conservation priority area is requested.

This testimony supports fiscal year 1999 appropriations for the Department of Agriculture's Environmental Quality Incentives Program to carry out Colorado River salinity control activities. You recently received testimony from the Colorado River Basin Salinity Control Forum (Forum), on behalf of the seven Colorado River Basin States. The State of Wyoming, a member state of the Forum, concurs in that testimony submitted by the Forum's Executive Director, Jack Barnett. I wish to emphasize to this Subcommittee that EQIP funding to accomplish salinity control in the Colorado River Basin is critically important to maintaining the basin-wide Water Quality Standards for Salinity in the Colorado River System.

Interpretation by the Environmental Protection Agency of Public Law 92–500, the 1972 amendments to the Federal Water Pollution Control Act, led to the adoption of basin-wide water quality standards for salinity in the Colorado River in 1975. Those standards consist of numeric criteria at three lower river stations (Hoover Dam, Parker Dam and Imperial Dam) and a plan of implementation. Jointly developed by the States and involved Federal agencies, the Plan of Implementation is reviewed and updated each three years in accordance with Section 303 of the Clean Water Act. The overall strategy is to prevent salts from dissolving and mixing with the river's flow. The USDA's CRSC Program has focused on reducing deep percolation of applied irrigation water by reducing the amount applied through conversion from flood application to sprinkler systems and other irrigation water application procedure improvements. Changing irrigation methodologies and other irrigation improvements have provided some of the most cost-effective (dollars spent per ton of salt loading reduction) means to control salinity loading into the river system available in the Colorado River Basin.

In June 1974, Congress enacted the Colorado River Basin Salinity Control Act (CRBSCA) which directed the Secretary of the Interior to proceed with a program to enhance and protect the quality of the water available in the Colorado River for use in the United States and the Republic of Mexico. Implementation of the Salinity Control Act is necessary to assure that the U.S. complies with both the quality of water delivery requirement under a 1973 amendment to the Mexican Water Treaty and the water quality standards for salinity established in the United States. The USDA was directed to establish a major voluntary on-farm cooperative salinity control program by the 1984 amendments to the Act. Since that time, a cost-effective on-farm program involving six units located in the states of Colorado, Utah and Wyoming has been initiated. Through fiscal year 1996 almost 230,000 tons of salt loading reduction per year had been put into place on these USDA Colorado River Basin Salinity Control units. Prior to its incorporation into USDA's Environmental Quality Incentives Program, the USDA's on-farm Colorado River Salinity Control (CRSC) program was working; providing the least cost means of controlling salt loading available to the basin-wide program and providing important benefits to producers installing salinity reduction practices and downstream water users for whom the salinity concentrations of Colorado River water creates severe economic damages and detriments. The Bureau of Reclamation has recently updated studies on the economic impacts of these salt concentrations in the River and estimates that damages to United States' water users may soon be approaching $1,000,000,000 per year.

The Federal Agriculture Improvement and Reform Act of 1996 (Public Law 104–127) combined the CRSC Program and three other programs into the newly-created Environmental Quality Incentives Program (EQIP). Public Law 104–127 is explicit in stating that the functions of the CRSC Program would continue as a part of EQIP. We view the inclusion of the Salinity Control Program in EQIP as a direct recognition on the part of Congress of the Federal commitment to maintenance of the water quality standards for salinity in the Colorado River—and that the Secretary of Agriculture has a vital role in meeting that commitment. The intent and approach of the EQIP is that this agricultural program is to be "locally led and driven." We agree with that approach, but experience over the past several years has indicated that the basin-wide CRSC Program (now a part of EQIP) is not being funded at a level adequate to ensure that the water quality standards for Colorado River salinity can be maintained.

As we have observed the start-up and administration of the EQIP over that past year and a half, EQIP is not working relative to the Congressional directive to "carry out salinity control measures in the Colorado River Basin as part of the Environmental Quality Incentives Program" (Section 336.c.1 of the FAIRA, amending Section 202.c. of the CRBSCA). Locally led, locally-derived resource management priorities are both displacing and preempting salinity reduction program activities that have both international and basin-wide significance and importance. Experience is indicating, as we observe the EQIP resource allocation and funding process at work, that local working groups and state technical committees do not feel obliged to implement the above-mentioned Congressional directive with regard to salinity control. Local working groups and state technical committees are unable and perhaps should not be expected to maintain the "national perspective" (e.g., maintaining basin-wide water quality standards and a water quality commitment to the Republic of Mexico) when local priorities are competing for limited EQIP funding to accomplish very visible, local resource management goals and objectives.

For these reasons, the State of Wyoming urges this Subcommittee to direct the Department of Agriculture to establish an EQIP national conservation priority area for Colorado River Basin salinity control. Numerous requests by the Forum and its participating states for designation of the basin-wide salinity control program as an EQIP national conservation priority area have gone unheeded by the Department of Agriculture. It is our contention that the proposal for national conservation priority area designation has great merit and is urgently needed to keep the basin-wide salinity control program on track. As time passes, it is becoming clear that implementation of USDA's salinity control program is falling further behind under the present administration of the EQIP. I wish to emphasize that the USDA portion of the basin-wide salinity reduction effort is critical to the continued success of the salinity control program.

In the President's Recommended Budget, the Administration has indicated its intention to borrow $300,000,000 from the Commodity Credit Corporation (CCC) for EQIP in fiscal year 1999. This increase of $100,000,000 over the prior fiscal year's level will be most helpful in addressing important environmental needs across this nation. We urge the Subcommittee to remind the Secretary of Agriculture of his obligations to continue the Colorado River Salinity Control Program under EQIP and

to direct that no less than $12,000,000 of the fiscal year 1999 EQIP funding allocation be expended for Colorado River salinity control.

Wyoming is represented on both the Colorado River Basin Salinity Control Forum and the Colorado River Basin Salinity Control Advisory Council, created within the 1974 CRBSCA. Like the Forum, the Advisory Council is composed of gubernatorial representatives of the seven Colorado River Basin states. It serves as a liaison between the seven States and the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency (EPA). The Council advises these Federal officials and the involved agencies on the progress of efforts to control the salinity of the Colorado River and annually makes funding recommendations, including the amount believed necessary to be expended by the USDA for its on-farm Colorado River Salinity Control (CRSC) Program. The Forum's testimony is in accordance with the Advisory Council's written recommendations.

During its October, 1997 meeting, the Advisory Council recommended that at least $12,000,000 be expended by the Department of Agriculture for cost-sharing to implement salinity reduction practices (funds that are matched with individual contractor's cost-share funds) in fiscal year 1999, plus sufficient funds for administration, technical information and education activities. The Council's recommendation is based on assuring that the progress of removing salt and preventing additional salt loading into the Colorado River system stays on schedule with the Plan of Implementation. Should a lesser funding level be provided for this important basin-wide water quality program, the progress (as measured in tons of salt prevented from entering the Colorado River system) achieved by the USDA component of the multi-agency, state and federal Colorado River Basin Salinity Control Program will fall far short of meeting the rate of salinity control determined to be needed to maintain compliance with the water quality standard's numeric criteria for salinity.

Falling further behind the schedule set forth in the water quality standard's plan of implementation raises vitally important questions about whether the Basin States can be assured that the water quality numeric criteria for the Colorado River will continue to be complied with in the future. Accordingly, if less salt is removed from the Colorado River than specified in the Plan of Implementation, salinity concentration levels of Colorado River water at the three downstream stations will exceed the numeric criteria values established for those stations.

The Forum and Advisory Council have both enjoyed a good working relationship with the Department of Agriculture since the 1984 amendments to the CRBSCA mandated direct involvement and a significant role in salinity control by the Department of Agriculture. Prompt, appropriate measures to ensure the viability of USDA's salinity control efforts are needed to continue that productive relationship.

I wish to thank you for the opportunity to bring to your attention the status of the Colorado River Basin Salinity Control Program component of the Environmental Quality Incentives Program and the necessity to remind the Department of Agriculture to carry out the Congressional directive in Public Law 104–127 to continue the functions of the salinity control program. I am pleased to submit this testimony and would request, in addition to your consideration of its contents, that you make it a part of the formal hearing record concerning fiscal year 1999 appropriations for the Department of Agriculture.

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