

## II. ANNUAL PERFORMANCE REPORT

USDA's mission is to provide leadership on food, agriculture, natural resources and related issues based on sound public policy, the best-available science and efficient management. The Department carried out this mission in 2003 through such activities as:

- Providing farmers and ranchers with risk-management and financial tools;
- Meeting with experts from around the globe to discuss current and new economic opportunities;
- Ensuring the safety and protection of the Nation's food supply;
- Completing new Free Trade Agreements and opening new international markets;
- Fighting potential pests and disease outbreaks;
- Working to ensure the health and protection of the environment; and
- Providing aid to those impacted by severe weather.

USDA's public performance management reporting process includes the following key components:

- A strategic plan that depicts the Department's long-term goals and strategies;
- An annual performance plan that outlines year-to-year strategies and targets for achieving USDA's long-term goals; and
- A performance and accountability report that shows Congress and the American people how well the Department did in reaching the goals established in the previous fiscal year.

Most of the Department's programs and activities are represented in specific performance goals and targets. USDA also conducts and supports a broad range of research, educational and statistical activities that contribute to the achievement of each of its overall goals. The creation of knowledge at the frontiers of biological, physical and social sciences, and the application of that knowledge to agriculture, forestry, consumers and rural America are core processes for USDA. Accordingly, selected accomplishments in research are presented throughout this section.

Only Federal employees participated in the preparation of the performance information contained in this section.

Upon USDA's creation, it was President Abraham Lincoln's hope "that by the best cultivation in the physical world, beneath and around us, and the intellectual and moral world within us, we shall secure an individual, social and political prosperity and happiness, whose course shall be onward and upward, and which, while the earth endures, will not pass away." These next chapters of the *USDA Performance and Accountability Report* show how the Department committed itself to keeping President Lincoln's dream alive during 2003.

## STRATEGIC GOAL 1: ENHANCE ECONOMIC OPPORTUNITIES FOR AGRICULTURAL PRODUCERS

Exhibit 4: Resources Dedicated to Enhancing Economic Opportunities

USDA Resources Dedicated to Strategic Goal 1	FY 2003	
	Actual	Percent of Total USDA
Program Obligations (\$ Mil)	\$46,031	39%
Staff Years	25,612	23%

Recognizing the importance of agricultural exports to the U.S. economy, USDA worked hard to resolve many outstanding trade issues in 2003. Major milestones of the Department's work to ensure markets are kept open to U.S. agricultural products include: resolving a dispute with Russia involving U.S. poultry; negotiating an agreement with China to allow the export of U.S. biotech soy-beans; and stemming a number of trade actions against the U.S. by Mexico to allow for the continued flow of domestic products into that important market.

The Department also worked to create more international opportunities for agricultural producers. In FY 2003, USDA opened the export market for live cattle to Cuba for the first time in more than 40 years. USDA also successfully negotiated equivalent mitigation measures for the bluetongue and bovine leucosis viruses for live cattle being exported to the European Union. Working in international locations and scientific forums, USDA diplomats and scientists have been removing barriers to international trade, creating opportunities for U.S. agricultural producers.

### Objective 1.1: Expand International Marketing Opportunities

Exhibit 5: Resources Dedicated to Expanding International Marketing Opportunities

USDA Resources Dedicated to Objective 1.1	FY 2003	
	Actual	Percent of Goal 1
Program Obligations (\$ Mil)	\$6,169	13%
Staff Years	6,064	24%

#### Overview

The Department worked to ensure that agricultural producers had access to international markets. USDA assisted in completing two Free Trade Agreements (FTAs) and continues to work on the current or "Doha Round" of multilateral trade negotiations within the World Trade Organization (WTO) Framework. The WTO is hosting the trade negotiations to develop a comprehensive liberalization package for agriculture. USDA achieved major successes in resolving trade issues and monitoring existing agreements. This effort protected \$2 billion worth of U.S. agricultural exports through the WTO notification process. Additionally, the U.S. successfully challenged Japan's restrictions on U.S. apples at the WTO.

#### Serving the Public

On June 6, 2003, the U.S. and Chile signed a historic and cutting-edge FTA that, when fully implemented, eliminates bilateral tariffs, lowers trade barriers, promotes economic integration and expands

opportunities for Americans and Chileans. This agreement typifies the benefit derived from the Department's work in international trade policy. Within four years, U.S. farmers will gain duty-free access to the Chilean market for such important U.S. products as pork, beef, soybeans, durum wheat, feed grains, potatoes and many processed food products. USDA also completed an FTA with Singapore in FY 2003 and worked toward completing the Doha Round of multilateral trade negotiations.

To capitalize on the market openings that trade agreements create, it clearly is in the best interest of the agricultural community that the U.S. Government works with industry groups to introduce domestic products to international markets. Through its market-development programs (e.g., Market Access Program and Foreign Market Development Program), USDA works with trade groups through cost-sharing cooperative agreements to take full advantage of market opportunities. USDA also offers political and commercial risk insurance through its General Sales Manager Programs to help exporters enter markets in countries lacking adequate financial liquidity to meet all their food import needs through commercial channels.

An equally important function is trade education and outreach to increase domestic awareness of global opportunities, USDA export programs and the importance of trade and trade agreements. Important partnerships have been forged with universities, export-assistance centers, farm groups, State departments of agriculture, other State and Federal Government agencies, the media, and agricultural youth groups. USDA effectively uses this network of "partners" to convey to customers and stakeholders the message of export opportunities, Department programs and the importance of agricultural trade.

Agriculture is one of the most export-dependent industries in the U.S. According to USDA research, about 96 percent of the world's food consumers live outside U.S. borders. Sales of exported agricultural products are growing at two to three times the rate of the domestic market. This dynamic dramatically highlights the need to make the agricultural community aware of the export market. USDA data also show that, in FY 2002, agricultural exports:

- Supported 800,000 jobs of which 60 percent are in urban communities;
- Boosted farm cash receipts by 25 percent;
- Increased export-related job wages by 18 percent;
- Created another \$1.47 in related economic activity for each export dollar; and
- Benefited small businesses as 97 percent of all exporters are companies that employ three to four workers.

In relation to imports, USDA programs protect the U.S. livestock, poultry and wildlife populations from incursions of exotic diseases and parasites, including those transmissible from animals to humans. These programs also ensure that the myriad of agricultural and natural plant resources—commercial grains, native floriculture, commercial nursery stock, forests, grasslands, wetlands and deserts—are protected from exotic pests or diseases. By using sound science to evaluate the potential risks associated with the movement of international products *into* the U.S., USDA becomes a model for other nations to emulate. This attribute increases the likelihood that fairer trading agreements, based on scientifically supported sanitary (animal health) and phytosanitary (plant health) standards, will be used by international trading partners when they consider allowing U.S. plant and animal imports. This element also facilitates the development of international animal and plant health standards. The adoption of international standards and the reduction of unfair trade barriers benefit U.S. agriculture.

### **Challenges for the Future**

The next few years present exciting challenges for USDA, particularly in the trade policy arena. At the top of the Department's list is a successful conclusion to the Doha Round. The outcome of these negotia-

tions could provide valuable new opportunities for sales of U.S. agricultural products overseas. It also could require changes in USDA's export credit-guarantee programs, food aid and domestic support programs.

The Department also is negotiating several regional and bilateral agreements. The largest would include 34 democracies in the Western Hemisphere—a Free Trade Area of the Americas (FTAA). FTAA could expand U.S. agricultural exports by more than \$1.5 billion annually. Other negotiations underway or planned include agreements with Australia, Morocco, five Central American countries and the Southern African Customs Union. USDA also is participating in the Asia Pacific Economic Cooperation forum and working with countries that want to join the WTO, such as Russia and Saudi Arabia.

Another priority is confronting the issues surrounding products developed through biotechnology. The increasing number of countries issuing regulations related to these products presents a particular challenge, both for the Nation's infrastructure and its food and agricultural exports. USDA is using all available avenues to ensure that countries adopt science-based policies in this area.

Inherent in USDA's objective to expand international market opportunities is the need to anticipate and prevent disruptions to trade caused by new market barriers. It is a measure of its success that many issues are resolved quickly with little public awareness. Virtually every day, USDA works with other Government agencies and private-sector representatives to try to prevent or resolve issues.

During 2003, the Department implemented the Trade Adjustment Assistance for Farmers Program. This new program, established by the Trade Act of 2002, authorizes USDA to pay eligible producer groups when a Secretary determines that imports have contributed significantly to commodity price declines.

The job of ensuring that animal and plant health issues are not used unfairly as barriers to trade becomes more complicated as trade increases. As a greater variety of plant and animal material enters this country, the risk rises that a new pest or disease will enter the Nation's borders and cause significant damage to its valuable plant and animal resources. Technical experts must be prepared to respond to this growing array of potential risks and any emergencies which may arise.

Additionally, there is an increased demand for information about pests and diseases from all parts of the world. There also is a demand for the technology to store, retrieve and analyze this data. Without the necessary data, pest-risk analyses cannot be developed, and protocols cannot be negotiated.

## **Improve International Marketing Opportunities**

USDA works with the Office of the United States Trade Representative (USTR) to pursue new trade agreements and enforce provisions of existing agreements. In the trade policy arena, USDA works with industry partners to promote trade and outreach activities to educate producers, processors and exporters on emerging market opportunities in the increasingly competitive global marketplace.

New market opportunities are created for agriculture producers when: (1) export markets are opened or reopened; and (2) better requirements are negotiated for certifying or testing the health of animals and plants with international destinations. USDA seeks to lessen the financial burdens on U.S. exporters and adhere more closely to international science-based standards. The U.S. agricultural sector and export businesses benefit from fewer barriers when moving products overseas. Businesses become more profitable, and the international community experiences less conflict.

The most effective means of expanding international market opportunities is to make trade agreements with other countries covering the conditions applied to imports. A predictable system with basic sanitary

and phytosanitary norms for fair and safe trade assures trading partners that products will ensure human health and safety and not harm their agricultural resources. U.S. Government agricultural attachés, located in more than 26 countries, help retain, expand and open international markets for U.S. food and agricultural products. They accomplish this task by negotiating with host government regulatory officials. These officials discuss pest and disease issues affecting food and agricultural commodities. They routinely intercede with host government officials when U.S. agricultural shipments do not meet the importing country's requirements (e.g., certification errors, pest or disease detections, or other shipment irregularities).

In cooperation with its stakeholders, USDA's National Center for Import and Export (NCIE) develops scientifically based protocols and health-certification procedures for exporting U.S. livestock, wild or exotic zoological animals, poultry, other birds, germplasm and animal-derived products and byproducts. NCIE reviews import requirements and, where it finds unjustified requirements or restrictions, proposes changes to that country's requirements reflecting advances in scientific knowledge and incorporate technically sound risk-management procedures.

Exhibit 6: Increasing U.S. Marketing Opportunities

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.1.1 Estimated annual trade opportunities preserved through WTO trade negotiations and notification process (\$ Mil)	\$1,400	\$2,000 <sup>1</sup>	Exceeded
1.1.2 Estimated gross trade value of markets expanded/retained by market access activities other than WTO notification process (\$ Mil)	\$3,900	\$3,900 <sup>1</sup>	Met
1.1.3 Average tariff rate on agricultural imports worldwide (Percentage)	65%	65% <sup>1</sup>	Met
1.1.4 Increase the new export protocols that facilitate access to foreign markets (cumulative) <sup>2</sup>	46	60	Exceeded
1.1.5 Increase the international animal and plant health standards adopted	6	15 <sup>3</sup>	Exceeded

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

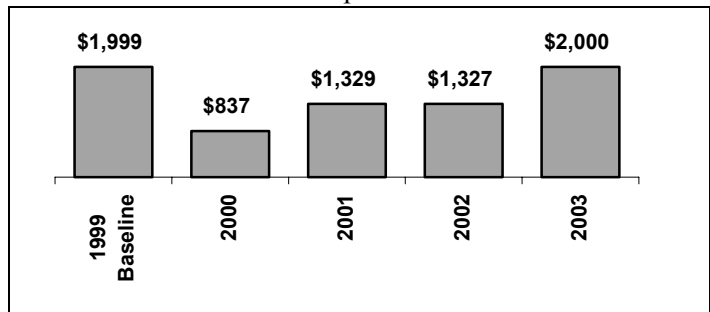
<sup>2</sup>Includes only protocols for live animals, poultry, hatching eggs, embryos and semen, not animal products or plants.

<sup>3</sup>In addition to 4 new plant health standards, 11 animal health standards were modified.

### Analysis of Results.

USDA exceeded its performance goal of \$1.4 billion in trade opportunities preserved through the WTO trade negotiations and notifications process by \$600 million, or 42 percent. Major contributing factors to this year's impressive performance were: 1) changes in Mexico's certification requirements for a number of U.S. livestock products and by-products, 2) an indefinite delay in implementation of China's new standards for imported cotton, and 3) Japan's agreement to review its tolerance level for a citrus pesticide used by U.S. exporters.

Exhibit 7: Trade Policy Successes In FY 2003 Preserve \$2 Billion Worth of U.S. Exports



2003 result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

The impressive showing in FY 2003 compares with FY 1999's baseline of \$1.99 billion. USDA projected only \$1.4 billion in trade opportunities preserved in FY 2003. This projection was due to Department estimates of what other countries had in the notification process and what USDA thought could be resolved during the fiscal year. The Department's performance also demonstrates the critical role of the WTO trade negotiations and notification process in preserving and expanding international market opportunities for American agriculture. As the U.S. Government continues to negotiate new bilateral, regional and multi-lateral trade agreements, the challenge will be to monitor enforcement effectively. This monitoring will assure that U.S. agriculture receives full benefits from negotiated reductions in tariff and non-tariff barriers.

Exhibit 8: Expand and Retain Market Access

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Estimated gross trade value of markets expanded/retained by market access activities other than WTO notification process (\$Mil) Baseline: 1989 = \$1,948	\$2,525	\$4,349	\$2,684	\$3,818	\$3,900 <sup>1</sup>

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

USDA met its performance goal for non-WTO, market-access activities. Through diligent monitoring and resolution of trade disputes with countries' notification processes, USDA has made remarkable progress in retaining sales of U.S. agricultural products that likely would have been lost without active market intervention. Sales retained in FY 2003 are estimated at \$3.9 billion, \$2 billion above the baseline. The hard work of USDA's domestic and overseas field offices and its working with other Federal and State agencies, and industry and international Government officials made this achievement possible. Major examples of market interventions include:

- China: USDA obtained interim certificates to allow U.S. biotech soybean sales to China continue. China is a \$1 billion-plus market for U.S. soybeans annually, with sales registrations already totaling \$1.14 billion.
- The European Union (EU): The U.S. won a countervailing duty case in the WTO with the EU, allowing shipments of U.S. wheat to continue with a market value of approximately \$400 million.
- Russia: Through focused negotiations, the Department resolved trade disputes involving U.S. poultry. The Russian market for U.S. poultry is estimated at \$600 million.
- Mexico: The January 1, 2003, elimination of import duties there and a worsening of the country's agricultural and political situation have resulted in an increased number of trade actions against U.S. agricultural products. These products include poultry, pork, beef, dry beans, stone fruit and apples. The Foreign Agricultural Service, the Animal and Plant Health Inspection Service, the Food Safety Inspection Service and USTR worked together to remove a number of these barriers and prevent other actions from impacting U.S. agricultural exports to Mexico. Through these efforts, America's \$7.3 billion market for agricultural products in Mexico, its third-largest export market, grew.

Future challenges include successful completion of the Doha Round multilateral trade agreements, and regional and bilateral agreements under negotiation or planned. Additional challenges include monitoring and enforcing the agreements.

The performance goal on average tariff rate on agricultural imports worldwide was met. The measure has been discontinued because the 65-percent annual rate will be used indefinitely. While negotiating worldwide reductions in average tariff rates is an important and laudable goal of international trade negotiations, it likely will take several years to achieve success in this arena.

USDA also exceeded its target of a cumulative total of 46 new export protocols for animals and animal semen and embryos that facilitate access to international markets. Fourteen new market protocols produced in FY 2003 plus the 46 markets from previous years produced a total of 60. These moves helped USDA open international markets for U.S. producers. USDA addressed export issues by meeting with many U.S. trading partners, including Argentina, Australia, Brazil, Canada, Chile, Colombia, EU, Honduras, Hungary, Mexico, Morocco, New Zealand, Peru, Poland and Russia.

Exhibit 9: Increasing U.S. Market Opportunity

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the new or modified export protocols that facilitate access to foreign markets (Cumulative)	N/A	N/A	N/A	46 Baseline	60
Increase the international animal and plant health standards adopted	N/A	N/A	N/A	7 Baseline	15

N/A = Not Applicable

USDA worked with these countries, China, Japan, Korea and Taiwan on export issues involving U.S. plant commodities.

Events that may impact future successful negotiations for the export of U.S. animals include: (1) the diagnosis of *bovine spongiform encephalopathy* in Canada; (2) amendments to international animal health standards; and (3) any future outbreaks of animal diseases in the U.S.

One of the most difficult challenges USDA faces is to negotiate the continuation of export markets when there is an outbreak of a contagious animal disease. In 2002, *Low Pathogenic Avian Influenza* struck U.S. poultry flocks. *Exotic Newcastle Disease* did the same in 2003.

Another challenge has been brought by recent Free Trade Agreements, which have increased the numbers of requests for imports into this country substantially. This increase requires USDA to continue ensuring scientific rigor in its assessment of potential health threats while, at the same time, not impeding trade. As the Department develops import regulations, U.S. agricultural stakeholders ask it to ensure that agricultural exports are unimpeded by the sanitary and phytosanitary regulations of international trading partners. This element has resulted in USDA trade personnel becoming increasingly involved in negotiations with other countries and in international arenas where sanitary and phytosanitary standards are being developed and applied. It also has resulted in USDA renewing its efforts to conduct trade-capacity building in underdeveloped nations that might be markets for U.S. exports. These nations also would like to export to the U.S.

USDA also exceeded its target for leading the adoption of six international animal and plant health standards. The international community adopted 4 new plant-health standards and modified 11 animal-health standards, making a total of 15 additions or changes. The Interim Commission on Phytosanitary Measures, established by the International Plant Protection Convention (IPPC) at its April 2003 annual meeting, adopted the phytosanitary standards. The standards cover evaluating the environmental risk and impact of quarantine pests, using irradiation for quarantine treatments and developing and using pest lists. This action brought the cumulative total of international plant health standards approved under the IPPC to 19.

On the animal-health side, the Organization of International Epizootics (OIE), in its 71<sup>st</sup> General Session in May 2003, voted to adopt 11 changes to existing standards into the 2003 International Animal Health Code. USDA played a lead role in developing and implementing a strategy for resolving technical issues related to a new EU regulation that threatens more than \$400 million in U.S. animal product exports.

Through complex negotiations with the Europeans, USDA secured clarifications and changes to the EU regulation that will help protect most of this trade.

WTO, IPPC and OIE have obligations and objectives related to providing technical assistance to less-developed members. Developing countries may delay further trade reform and cooperation in the development of international standards — priority activities to the U.S. — until these countries address their capacity-building needs in a meaningful way.

Finally, USDA faces an increasing number of situations where its intervention is necessary. The Department is working to assure national and international stakeholders and the global public that biotechnology-derived agricultural products are safe for release into the environment. This task is a new, growing and complex area of work, especially for the Department's Animal and Plant Health Inspection Service's overseas personnel.

#### **Program Evaluation.**

The compliance-review staff completed export-promotion and market-development program evaluations for performance reporting requirements. The evaluations are available within the Foreign Agricultural Service. Copies may be obtained by calling the compliance-review staff at (202) 720-6713. No evaluations on export protocols or international standards were performed during FY 2003.

### **Selected Results in Research, Extension and Statistics for Objective 1.1**

USDA provided the scientific basis for the U.S. Government's successful lawsuit against Japan. The lawsuit concerned import restrictions on U.S. apples grown in the Pacific Northwest. The Japanese government claimed that these apples might introduce the plant disease fire blight to its vegetation. In response, the country imposed trade barriers closing the market to U.S.-grown apples. While USDA found that mature, symptomless apples could not introduce fire blight into Japan, the Japanese Government continued the ban. The U.S. Government filed a lawsuit at the WTO. The Department presented its research, which helped USTR lawyers convert the scientific data into legal briefs. The WTO ruled in favor of the United States. This ruling should remove all or most of the restrictions limiting access to the Japanese market for U.S. apple growers.

Japan is one of the leading markets for U.S. agriculture, purchasing more than \$8 billion in 2002 despite barriers that constrain certain imports. In the context of WTO agricultural negotiations, USDA is reviewing Japan's government policies that support or protect that country's key commodity markets, and thereby bar imports. The studies find that Japan's border barriers impede imports and help keep domestic prices high. This research and analysis will benefit U.S. negotiators, exporters and others interested in Japan's agricultural markets.

USDA's Engineering Research Unit (ERU) also developed an automated low-cost, near-infrared system for detecting such attributes as internal insects and protein in single-grain kernels. ERU established a Cooperative Research and Development Agreement with Perten Instruments to develop a commercial version of the Department's prototype. The Unit received the first commercial prototype this spring. Commercial production should begin late this fall.

Additionally, ERU developed a signal-processing algorithm and software to detect live and dead internal insect infestations in wheat using the Single-Kernel Characterization System 4100. Customers impacted are wheat millers and handlers. This software is a no-cost addition to existing instrumentation already in use by the wheat industry. The software's creation addresses a high-priority industry need. This detection



technology will benefit producers by helping ensure the purity and identity of grains. It also will determine end quality and ensure the safety and marketability of the U.S. grain supply.

Special marketing initiatives through the Extension Service helped farmers earn extra income. The extra income was made up of \$350 to \$525 each for selected heifers in Missouri; \$1,780 per farmer in West Virginia; \$1,250 per producer annually through South Carolina State University efforts; and \$300,000 for 20,000 cattle in an Oklahoma State University program.

## **Objective 1.2: Support International Economic Development and Trade Capacity Building**

### Exhibit 10: Resources Dedicated to Support International Economic Development and Trade Capacity Building

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USDA Resources Dedicated to Objective 1.2	FY 2003	
	Actual	Percent of Goal 1
Program Obligations (\$ Mil)	\$4,600	10%
Staff Years	722	3%

#### **Overview**

To enhance economic development and trade-capacity building in developing and transitioning economies, USDA focuses on:

- Trade and investment liberalization;
- Research and education;
- Development of market information and mapping systems and processes; and
- Institution building to support sustainable agricultural development.

USDA also is working to strengthen linkages between U.S. agricultural communities and multilateral-development banks that will assist developing nations while also serving domestic agricultural interests.

#### **Serving the Public**

USDA launched the McGovern-Dole International Food for Education and Child Nutrition Program that was authorized by the Farm Security & Rural Investment Act of 2002. The program provides for the donation of U.S. agricultural commodities and associated financial and technical assistance to carry out preschool- and school-feeding programs in developing countries. The program also authorizes maternal-, infant- and child-nutrition programs. Its purpose is to improve food security, reduce the incidence of hunger and malnutrition, and improve literacy and primary education.

USDA published the final rule for the program in June and immediately solicited program proposals. McGovern-Dole marked the first U.S. Government food-aid program to comply with the Government Paperwork Elimination Act. USDA offered a Web-based application process to receive proposals. The Department received more than 50 funding applications from private voluntary organizations. Internet submissions accounted for 31 of the proposals.

### Challenges for the Future

USDA is helping developing countries participate more fully in the trade arena. The Department's trade capacity-building efforts are aimed at helping countries participate in negotiations, implement agreements and connect trade liberalization to a program for reform and growth. Helping these countries achieve sustainable economic development and capacity to trade is a step in building future growth markets for the U.S.

Unfortunately, significant food needs continue to hurt many in the world. USDA will be working closely with the World Food Program and private voluntary-relief organization partners. Their goal will be to ensure that the U.S. commitment to alleviating global hunger and malnutrition remains strong.

### Support International Economic Development and Trade Capacity Building

Many developing and transition countries receive U.S. funds and technical assistance for agricultural development and trade to help spur economic growth. USDA, working with the United States Agency for International Development (USAID), the U.S. Food and Drug Administration and other Federal agencies, supplies technical assistance in a number of different fields to improve and expand capacity to produce and trade agricultural products.

Exhibit 11: Promoting Assistance on International Economic Development

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.2.1 Increase the activities/projects completed in support of international economic development and trade capacity building in developing and transition countries (Cumulative)	1,020	1,020 <sup>1</sup>	Met

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

### Analysis of Results.

The performance goal was met. USDA's efforts were focused on providing technical assistance to developing and transitioning economies in:

- Bringing sanitary standards up to par with those of major import markets;
- Developing credible statistical systems needed to monitor agriculture sector performance; and
- Formulating agricultural policies and programs to achieve more trade avenues and ensure that the benefits are equitably realized.

Exhibit 12: Steadily Increasing Efforts To Assist Developing Countries Expand Economic Development and Trade Capacity

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the activities/projects completed in support of international economic development and trade capacity building in developing and transition countries (Cumulative)	789 Baseline	967	1,005	1,005 <sup>1</sup>	1,020 <sup>2</sup>

<sup>1</sup>Revised to reflect final data.

<sup>2</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

Technical assistance helping countries improve their sanitary standards results in improved food safety and health. Developing credible statistical systems to monitor agriculture sector performance is important because most of the countries assisted are agrarian-based. Formulating agricultural policies and programs to achieve freer trade are critical to sustainable economic development.

The number of technical-assistance projects has increased 29 percent during the past 5 years. Adding to the challenge of these efforts is USDA's involvement in reconstruction efforts in Iraq and Afghanistan.

USDA anticipates technical-assistance work will continue to be needed in transitioning economies of the Newly Independent States and developing countries in Asia, Latin America and Sub-Saharan Africa.

**Program Evaluation.**

No program evaluations were performed during FY 2003.

**Support Foreign Food Assistance**

More than 800 million people worldwide suffer from hunger and malnutrition—most of them children. The U.S is the world’s leader in international food aid, providing more than 50 percent of total worldwide food assistance to combat this challenge. Working with the USAID, non-profit organizations and American universities, USDA works continuously to meet immediate food-aid needs while seeking long-term solutions to alleviate global food insecurity. These activities foster economic growth and development. Development, in turn, increases the recipient countries’ ability to reduce their dependence on food aid, boosts domestic production and increases their reliance on commercial imports. The principle programs supporting these efforts are concessional food aid sales under Title I of P.L. 83-480, the Food for Progress Program and McGovern-Dole.

Exhibit 13: Increase Foreign Food Assistance

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.2.2 Share of countries' food import needs met through food aid programs (Percentage)	1.40%	1.40% <sup>1</sup>	Met
1.2.3 Improve food security and nutrition through the McGovern-Dole Food for Education Program by the number of daily meals and take-home rations for mothers, infants and schoolchildren (Mil.)	1.75	1.75 <sup>1</sup>	Met
1.2.4 Improve literacy and primary education through McGovern-Dole Food for Education Program:			Met
• Percent increase in enrollment for Girls/Boys	5%	5% <sup>1</sup>	
• Percent increase in the proportion of children who are promoted	10%	10% <sup>1</sup>	

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Analysis of Results.**

The performance goals were met. An important overall goal of USDA’s economic development and trade capacity-building objective is to help other countries reduce their dependence on food aid. This reduction helps these countries meet domestic consumption needs, increase the amount of basic staple food-commodity needs met through domestic production, and shift their abilities to meet food-import needs through commercial sources.

Exhibit 14: Food For Education Program

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Share of countries' food import needs met through food aid programs (Percentage)	1.99% Baseline	1.06%	1.70%	1.50%	1.40% <sup>1</sup>
Improve food security and nutrition through McGovern-Dole Food for Education Program by the number of daily meals and take-home rations for mothers, infants and schoolchildren (Mil.)	N/A	N/A	N/A	N/A	1.75 <sup>1</sup> Baseline
Percent increase in enrollment for Girls/Boys	N/A	N/A	N/A	N/A	5 <sup>1</sup> Baseline
Percent increase in the proportion of children who are promoted	N/A	N/A	N/A	N/A	10 <sup>1</sup> Baseline

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

N/A = Not Applicable

During 1999-2002, the share of countries' food-import needs met through food-aid programs ranged from 1-2 percent. While the target and projected estimate for the ratio is 1.4 percent in 2003, it may be difficult to reach because the large number of emergencies and relatively slow economic growth in many markets. Despite these challenges, USDA is expected to meet the long-term target of 0.8 percent by FY 2007. Because FY 2003 is McGovern-Dole's first year of operation, baselines currently are being established. USDA expects to meet its targeted performance measures in each of the three measures cited in exhibit above.

#### **Program Evaluation.**

The Office of Management and Budget's (OMB) Program Assessment Rating Tool (PART) recommended that new measures be developed for USDA's Food Aid Programs' (P.L. 480, Title I, Section 416(b) and Food for Progress). The new measures would link long-term outcome goals of food security. The Foreign Agricultural Service (FAS) is working to develop annual performance measures that link to long-term strategic goals and measurements. Additionally, FAS will determine if new performance measures are consistent with measures used by USAID and such other organizations as the World Food Program. A full copy of the assessment may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/foodaid.xls](http://www.whitehouse.gov/omb/budget/fy2004/pma/foodaid.xls).

#### **Selected Results in Research, Extension and Statistics for Objective 1.2**

To enhance and provide strategic impact to its long, productive history of cooperative research with Mexico, USDA met with that country's research and funding institutions. The two groups identified five areas for joint research and cooperation: 1) water and environmental impact; 2) phytosanitary issues; 3) biotechnology and biosafety; 4) animal health; and 5) food safety. These areas impact trade or address environmental concerns required by the North American Free Trade Agreement and are priorities in the U.S.-Mexico Binational Commission's Committee on Agriculture. These workshops identified almost 100 new or ongoing research activities to pursue cooperatively as part of a strategic approach under the five areas.

Specialty plant-based natural products are a basis for U.S. industrial development in areas such as biopharmaceuticals, bioveterinary products, food additives and biological control products. The plant sources can be developed agronomically as novel crops for U.S. agriculture. Through a carefully designed network of international research collaborations involving USDA scientists and those from EU member States in the Mediterranean region, USDA has succeeded in gaining access to natural products. This access will supplement U.S. technology developments and eventually provide expanded product portfolios for U.S. agriculture.

Purdue University agricultural faculty, supported in part by USDA funds, is redeveloping agricultural education at Kabul University in Afghanistan. Faculty members also are establishing a distance-learning pilot program. These outreach efforts promote greater stability in the region. They also open new avenues of economic opportunity for people in Afghanistan.

Dominican Republic farmers lost their entire tomato crop to disease. A Wisconsin scientist, supported in part by USDA funds, examined deoxyribonucleic acid (DNA) and identified *Tomato Yellow Leaf Curl Virus* from the eastern Mediterranean. The virus is spread by whiteflies. DNA is a group of complex compounds that controls cellular function and heredity. USDA worked with Dominican officials and the tomato industry to develop an integrated pest-management plan. The plan virtually eradicated the number of virus-carrying whiteflies. Researchers identified early-maturing hybrid tomatoes that produced good yields before the virus could grow again.

## Objective 1.3: Develop Alternative Markets for Agricultural Products and Activities

Exhibit 15: Resources Dedicated to Develop Alternative Markets for Agriculture Products and Activities

USDA Resources Dedicated to Objective 1.3	FY 2003	
	Actual	Percent of Goal 1
Program Obligations (\$ Mil)	\$499	1%
Staff Years	1,238	5%

### Overview

USDA's programs are designed to develop alternative markets for agricultural products; stimulate new sources of domestic and international demand that will benefit farmers; increase economic activity and job formation in rural America; create a portfolio of more environmentally friendly products, energy and power; and enhance the energy security of the U.S. by reducing dependence on imported energy.

### Serving the Public

These programs serve the agricultural sector, rural communities and their residents, and the broader U.S. economy. Farmers and ranchers benefit from increased demand for their products and from new crops used as feedstocks in renewable energy and biobased product production. Rural communities and their residents benefit from the new investment in handling and processing facilities used in the production of these commodities. New jobs in rural communities related to biobased handling and processing create new economic vigor and bring opportunities to the families living there. Renewable power production using animal waste as a feedstock can help solve difficult environmental problems for farmers, ranchers and their rural communities.

### Challenges for the Future

The challenges to future success are:

- The continued need for research and demonstration projects to develop and demonstrate more efficient technologies and processes to convert biobased feedstocks to biopower (electric power production from biomass) and other renewable power (solar, wind, geothermal), biofuels (ethanol and biodiesel), and biobased products (plastics, motor oils and lubricants, coatings, solvents, etc. made from biofeedstocks);
- The need for continued research into the science of carbon sequestration (storing of carbon in living matter, such as trees, grass, etc.) and technologies and systems to enhance this process' capacity and efficiency;
- The continued need for public policies supporting the development and use of renewable energy and biobased products;
- The need for public education about the environmental, performance and energy security benefits of using renewable energy and biobased products, and more effectively managing the carbon cycle;
- The development of an infrastructure to support the efficient and economically viable development of renewable energy and biobased products; and
- The development of sound measurement and accounting techniques for greenhouse gas (carbon dioxide, methane and nitrous oxide) activities and carbon sequestration.

In response, USDA is creating regulations and other operating procedures under which the programs will operate to increase the use of bioenergy and biobased products. These programs, if successful, will make an important contribution toward creating market-based opportunities to both produce and consume increased amounts of bioenergy and biobased products.

## Increase the Use of Bioenergy and Biobased Products

Broader use of renewable energy and biobased products will enhance environmental sustainability wherever these products are produced and used. Increased use of renewable energy and biobased products will enhance U.S. energy security by reducing the Nation's dependence on imported energy.

These programs, mostly created by the Farm Security & Rural Investment Act of 2002 (FSRIA), currently are being implemented and should be fully operational before the end of FY 2004. FSRIA also extended the biofuels program operational prior to its passing. Additionally, a program to develop accounting rules for greenhouse gas activities will create methodologies (methods used to estimate emissions) necessary for greenhouse gas reduction and carbon sequestration programs. Development of accounting rules for greenhouse gas activities will make the accurate measurement of the effect of greenhouse gas sequestration efforts and programs possible.

These programs help the U.S. economy move toward increased leadership in renewable energy and biobased products technology. This feature creates profitable and environmentally friendly penetration of domestic and international markets for both these products and the technologies used in their production.

Exhibit 16: Increase the Use of Bioenergy and Biobased Products

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.3.1 Increase the use of bioenergy and biobased products <sup>1</sup>			Met
<ul style="list-style-type: none"> <li>• Qualify the number of products in five or more categories of Biobased Products for preferred procurement by Federal agencies</li> <li>• Encourage a number of farmers to produce energy for their own use and sale (# farms, ranches, &amp; businesses assisted)</li> <li>• Develop a research, development and demonstration program to increase production of bioenergy, bioproducts and renewable energy (# projects funded)</li> <li>• Develop accounting rules and guidelines for greenhouse gas offset activities in agriculture (Percentage)</li> </ul>	N/A	N/A	
	140	148	
	5	50	
	50%	50%	

<sup>1</sup>FSA is developing measures to focus on the desired key outcomes of the CCC bioenergy program. The Agency is planning to provide new measures in time for the FY 2005 budget submission.

N/A = Not Applicable

### Analysis of Results.

The performance goal was met. USDA is reviewing draft regulations to create the framework for designating categories of products within the Biobased Products Preferred Procurement Program. The *Federal Register* is expected to publish the draft regulations for comments by December 2003. The next step is the designation of generic product categories, which are subject to preferred procurement by Federal agencies.

USDA met its target by receiving, reviewing and acting on 148 proposals from farmers, ranchers and small rural businesses. The proposals were for Federal assistance in producing renewable energy for their own use or sale, and providing energy-efficiency improvements. This number was based on all of the proposals submitted to Rural Business – Cooperative Service State offices. The proposals came in response to a Notice of Funds Availability published in the *Federal Register* for a grant-only program this fiscal year. The solicitation was for the Renewable Energy Systems and Energy Efficiency Improvements Program authorized under Title IX of FSRIA.

Exhibit 17: Bioenergy and Biobased Products Performance

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Qualify the number of products in five or more categories of Biobased Products for preferred procurement by Federal agencies	N/A	N/A	N/A	N/A	N/A
Encourage a number of farmers to produce energy for their own use and sale (# farms, ranches and businesses assisted)	N/A	N/A	N/A	N/A	148 Baseline
Develop a research, development and demonstration program to increase production of bioenergy, bioproducts and renewable energy (# projects funded)	N/A	N/A	N/A	2 Baseline	50
Develop accounting rules and guidelines for greenhouse gas offset activities in agriculture (Percentage)	N/A	N/A	N/A	N/A	50% Baseline

N/A = Not Applicable

As part of the solicitation, a Rural Development energy coordinator was designated to assist potential applicants in the application process. After USDA reviewed all 148 applications for programmatic and technical eligibility, the Department awarded 114 recipients (farmers, ranchers and rural small businesses) a total of \$21.7 million of grant funds to assist in the development of renewable energy systems and energy-efficiency improvements. Of the 114 awards, 90 were for renewable energy systems totaling \$20.2 million. The rest were for energy efficiency programs totaling \$1.5 million.

The development and demonstration program for researching the use of bioenergy, bioproducts and renewable energy combines two programs. One component is the funding for research, development and demonstration provided under the Biomass Research and Development Act of 2000 and funded under FSRIA. The other component is the Commodity Credit Corporation (CCC) Bioenergy Program extended under FSRIA. The Department intends to separate these two components in FY 2004.

USDA and the Department of Energy awarded \$23 million in grants for 19 proposals under the Biomass Research and Development Program. USDA allocated \$16 million for this activity to 15 proposals. The CCC Bioenergy Program component published a final rule implementing changes reflecting FSRIA provisions and conducted an enrollment for the program for FYs 2003 through 2006. CCC will approve and execute program agreements for 54 ethanol producers and 42 biodiesel producers this year. The 50 projects represent 10 grant projects awarded under the Biomass Research and Development component, 13 new ethanol producers and 27 new biodiesel producers submitting agreements to participate in the Bioenergy Program component. The future challenges for the farm-produced energy program are increased development of farm bioenergy and development of market opportunities for such energy. The project also pushes for increased investment in new research, development and demonstration projects to improve the efficiency and acceptance of bioenergy and biobased products on the part of consumers. The CCC Bioenergy Program looks to increase the number of firms producing ethanol and biodiesel for sale to vendors and consumers.

The above program also made way for the development of new accounting rules and guidelines for reporting greenhouse gas reduction and carbon sequestration activities.

**Program Evaluation.**

A joint evaluative effort that includes the Rural Business-Cooperative Service, the Department of Energy (DOE) and the DOE-affiliated National Renewable Energy Laboratory will be conducted in early FY 2004. The CCC Bioenergy Program currently monitors and evaluates critical aspects of its program. It matches increased production projections with year-end actual production of increased ethanol and biodiesel by program participants. Copies may be obtained from the Farm Service Agency's Warehouse Inventory Division at (202) 720-2121. USDA and DOE evaluate the Biomass Research and Development Act grant program. Additionally, a Federal Advisory Committee created by the Act provides an evaluation to the Secretaries of Agriculture and Energy. Copies may be obtained from the Under Secretary for Natural Resources and Environment at (202) 720-7173.

A Program Assessment Rating Tool (PART) assessment was initiated on the Bioenergy Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

**Selected Results in Research, Extension and Statistics for Objective 1.3**

Until recently, starch-based disposable plates, cups and food wraps manufactured and sold to restaurants and food-packaging companies were made strictly from potato starch, in part, because of an objectionable odor when using less-expensive wheat starch. Using knowledge of the structure and properties relationship of wheat starch and associated proteins, USDA developed a wheat-based, starch-packaging composite. This composite had no odor and was less expensive than the original commercial formulation. This technology was transferred to an industrial partner that manufactures the starch-based packaging as part of a Cooperative Research and Development Agreement. It is being introduced to the market via development of wheat-starch based biodegradable plates. This innovation improves the economics of using agriculturally derived packaging material. It also creates new markets for wheat starch.

Many universities, supported in part by USDA funds, are identifying new plant varieties to expand cropping options. Kentucky's work with seedless watermelons led a group of farmers to plant 10 trial acres. The watermelons grossed \$30,000. The growers expanded the planting in 2003. Florida A&M University is testing such alternative tropical crops as Habanero peppers. One hot-pepper grower who followed recommendations grossed more than \$15,000 in his first year of production. Alaska is examining peony cultivars for the international cut-flower market.

Supported in part with USDA funds, University of Nebraska research on chickpeas (garbanzo beans) helped establish it as a new high-value crop with export potential. More than 10,000 acres are produced in the State. The chickpeas provide twice the gross return on investment than the region's traditional millet and wheat crops. Vermont researchers developed whey protein-based wood varnishes. Natural and safe for homes, kids and pets, these products can become a new market for dairies.

Expanding ethnic markets are increasing the demand for goat meat in many States. Florida A&M University research, with USDA support, identified strategies that increase carcass yields by 15 percent. These strategies also improve weaning weights by 12 percent.



## Objective 1.4: Provide Risk Management and Financial Tools to Farmers and Ranchers

Exhibit 18: Resources Dedicated to Provide Risk Management and Financial Tools to Farmers and Ranchers

USDA Resources Dedicated to Objective 1.4	FY 2003	
	Actual	Percent of Goal 1
Program Obligations (\$ Mil)	\$34,763	76%
Staff Years	17,587	69%

### Overview

USDA has reduced program costs including preventing payments on potential fraudulent insurance claims, and developed new technology including data-mining efforts, Geographic Information Systems, infrared, the Common Computing Environment for county offices, and other information technologies. New specialty crop and livestock pilot programs currently are underway. Education and outreach programs have been enhanced and expanded to help more producers learn how to better mitigate their risks.

The Department also continued to establish and implement the framework for farm and commodity programs under FSRIA and the Agricultural Risk Protection Act. The acts provided America's farmers and ranchers with a variety of risk-management and financial tools. These tools included crop insurance, direct and counter-cyclical payments, marketing-assistance loan benefits and farm operating and ownership loans to promote stability in the agricultural sector. Additionally, USDA continued its efforts to streamline and modernize its program delivery structure to provide more efficient service for its customers.

### Serving the Public

USDA promotes, supports and regulates sound risk-management solutions to preserve and strengthen the economic stability of U.S. agricultural producers. This effort is conducted predominately through the Federal Crop Insurance Program. The program consists of many public and private risk-management alternatives designed to improve the economic stability of agriculture. The long-term agricultural producers' capability to supply U.S. and global food-related markets depends on their ability to manage financial and natural risks associated with production.

USDA also offers direct and guaranteed farm ownership and operating loans to farmers and ranchers who are temporarily unable to obtain private, commercial credit. These loans are particularly important to beginning and socially disadvantaged farmers and ranchers whose limited cash flow may preclude them from qualifying for a commercial loan.

Operating loans may be used to purchase or lease such items as livestock, equipment, feed or seed or to cover operating expenses. Farm ownership loans are used to purchase farmland and build or repair buildings. Together, the producer and the Agency outline goals and objectives to steer the operation towards profitability. The Youth Loan Program is designed for those between the ages of 10 and 20 to borrow up to \$5,000 to establish and operate income-producing projects. The money can be used to purchase animals, equipment or supplies, and to pay operating expenses.

USDA's commodity, price and income-support programs continue to be a testament to the country's commitment to maintaining a balanced food and fiber industry for its consumers. Commodity, price and income support helps stabilize American farming and ranching operations. This assistance enables farm-

ers and ranchers to reduce their risk of financial loss due to inclement weather or unfavorable global market conditions.

Direct and counter-cyclical payments reduce financial risks and help producers meet their cash flow needs. Marketing-assistance loans provide producers interim financing at harvest time to meet cash flow needs without having to sell their commodities when market prices are at harvest-time lows. Enabling producers to store production at harvest facilitates more effective marketing of commodities throughout the year.

Although society has become increasingly dependent on technological advancement, four very basic human needs remain constant: food, water, clothing and shelter. USDA will continue working with American farmers, ranchers and producers to satisfy those basic needs with abundant, safe and affordable supplies of food and fiber by promoting responsible land and natural resource management.

### **Challenges for the Future**

Today, about 80 percent of the acreage planted to major crops is at least minimally insured. Additionally, coverage is expanding by encouraging producers to purchase higher coverage levels and the development of products for new crops, livestock and revenue. These programs, along with diversified production, marketing and use of futures and options, allow each producer to customize their risk management strategy. USDA's challenge is to continue to expand and improve these programs, and educate producers so that they can identify, quantify and manage their natural and economic risks.

USDA will be reviewing its farm-loan program activities to assess the effectiveness and impact of its programs. Ensuring an efficient delivery of services is not necessarily dependent on funding increases. It also depends on training, human-capital planning and organizational efficiencies. Farm-loan program challenges include ensuring a highly trained staff, assisting farmers during economic distress and natural disasters, and offering credit to eligible borrowers unable to obtain it from other sources.

### **Provide Risk-Management Tools to Farmers and Ranchers**

USDA provides and supports cost-effective means of managing risk for agricultural producers to improve the economic stability of agriculture. Agricultural producers face severe economic losses each year due to such unavoidable causes as drought, excessive moisture, severe weather, insects, reduced prices, reduced yields or any combination of these factors. USDA develops a variety of risk-management tools for use by agricultural producers. The Department continues to assess producers' needs and private risk-management tools to ensure the availability of new and innovative risk-management alternatives. The increased percentages in insurance liability covered, participation and the number of commodities eligible indicate the acceptance of these products by producers, and a broadening of economic stability across the agricultural spectrum.

Exhibit 19: Expand Use of Risk Management Tools

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.4.1 Expand USDA risk-management tools available for agricultural producers to use in managing production and price risks <sup>1</sup> :			Deferred
<ul style="list-style-type: none"> <li>Increase crop insurance coverage as measured by potential liabilities covered by crop insurance (\$ Bil)</li> </ul>	40.6	Available Spring 2004	
<ul style="list-style-type: none"> <li>Increase crop insurance participation as measured by planted acres having crop insurance coverage (Percentage)</li> </ul>	81.1%	Available Spring 2004	
<ul style="list-style-type: none"> <li>Increase the number of commodities eligible for crop insurance</li> </ul>	366	362	

<sup>1</sup>For most crops, crop year is defined as the period within which the insured crop is grown and it is designated by the calendar year in which the insured crop is harvested.

**Analysis of Results.**

This performance goal is deferred. Actual performance data pertaining to crop-year liability and acres covered are gathered from information USDA receives from insurance companies. These companies, in turn, receive data from the producers. The actual 2003 data will become available at the end of the second quarter of FY 2004. The data will be published in next year's report. While the measures may be revised later, based on prior history, this performance goal is expected to be met.

Exhibit 20: Trends in the Use of Risk Management Tools

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase crop insurance coverage as measured by potential liabilities covered by crop insurance (\$ Bil)	30.9 Baseline	34.5	36.7	37.3	Available Spring 2004
Increase crop insurance participation as measured by planted acres having crop insurance coverage (Percentage)	72.5% Baseline	76.9%	78.5%	81.1% <sup>1</sup>	Available Spring 2004
Increase the number of commodities eligible for crop insurance	328 Baseline	343	343	358	362

<sup>1</sup>Revised to reflect final data.

The Department measured the number of commodities eligible for crop insurance and participation in the Federal Crop Insurance Program. Expanding the number of eligible commodities is one way to provide economic opportunities for agricultural producers who have not had access to risk-management tools.

Since 1999, an additional 34 commodities have become eligible for crop insurance. While USDA had projected that this number would increase by eight rather than four for the 2003 Crop Year, the Federal Crop Insurance Act requires that submissions of insurance policies and plans and related materials be developed by third parties and approved by the Federal Crop Insurance Corporation (FCIC) Board of Directors. These submissions, including all new and substantial product modifications, are subject to review by not less than five independent expert actuarial and underwriting reviewers. While several dozen of these comprehensive reviews are considered by the FCIC Board each year, not all are approved for implementation. These new FCIC product-development procedures, while causing some program development and implementation delays, will improve program integrity and reliability.

USDA also announced pilot programs for fed and feeder cattle to protect producers from declining cattle prices. The Department also entered its second pilot year for two products for slaughter hogs in Iowa, subsequently approved expansion of the pilot in additional States and continued to test several specialty crops and pasture and forage products. These moves were designed to fulfill the requirements of the Agricultural Risk Protection Act of 2000. The act requires USDA to establish a competitive-grants program to

educate agricultural producers about the full range of risk-management activities. Additionally, USDA announced an effort to better serve and increase crop-insurance participation in the 15 historically underserved States (CT, DE, MA, MD, ME, NH, NJ, NV, NY, PA, RI, UT, VT, WV and WY) targeted under the Agricultural Management Assistance Program. USDA provided additional subsidy for higher levels of insurance coverage to producers in these States for the 2003 Crop Year through the Targeted States Financial Assistance Program.

### **Program Evaluation.**

A team of expert actuarial and underwriting reviewers from academia and the private sector conducted an inventory and analysis of the FCIC portfolio of crop insurance and risk-management products. The analysis, which currently is underway, is designed to provide background and guidance to the FCIC Board of Directors in its product-development strategy for the next several years.

Another team conducted an inventory and analysis of existing FCIC policies, procedures, handbooks and other related material. The team's work focused on the analysis of overlapping documentation and guidance, and procedural gaps. Team members submitted the evaluation to the FCIC Board. The board then directed the Risk Management Agency to take action on the findings. A review of the findings currently is underway.

USDA also conducted program evaluations on the Quality Adjustment Program and the Use of Pack Factors in Stored Grains. Pack factors may be used in the loss-adjustment process to estimate the amount of settling or "packing" that occurs in stored grain. The Department used both internal staff and contractors to complete the evaluations. An additional eight evaluations currently are underway.

USDA completed Pilot Program evaluations for pecans, blueberries and millet. Seventeen additional pilot crop evaluations currently are underway. As these evaluations are completed, the FCIC Board uses them during the approval process for new insurance plans. Copies of the completed evaluations are available at [www.rma.usda.gov](http://www.rma.usda.gov).

OMB's PART showed the Crop Insurance Program to be clear and its management relatively good. The PART stated that additional planning and performance measurement is needed because the program has yet to demonstrate the extent of its impact on farm income or reducing dependence on other government-support programs. The Risk Management Agency will identify improvements in the program that will move it closer to becoming a complete risk-management tool for the agriculture sector. A full copy of the PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/cropinsurance.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/cropinsurance.pdf).

### **Provide Credit to Agricultural Producers**

Farmers and ranchers who temporarily are unable to obtain sufficient credit may obtain credit assistance through USDA. They can use the assistance to finance their needs at reasonable rates and terms. Some are beginning or socially disadvantaged farmers who have suffered financial setbacks from natural disasters. These farmers also have limited resources with which to establish and maintain a profitable farm operation. Thus, the farm-loan program provides support to family farmers and ranchers who otherwise would be unable to contribute to the farm sector.

To help ensure the effectiveness of these programs, it is important to provide timely financial resources and other assistance to borrowers when a need arises. Thus, USDA will continue to reduce processing times for loan requests each year. Borrower ability to pay installment debt on time is obviously a key indicator of financial strength and viability. Reduced losses in the program indicate that borrowers are

experiencing greater success in meeting their financial obligations. The Department will continue to monitor the delinquency and loss rates of the direct loan portfolio closely.

**Exhibit 21: Improve Loan Processing Efficiency and Fiscal Soundness of the Direct Loan Portfolio**

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.4.2 Improve customer service by increasing the efficiency of loan processing: <ul style="list-style-type: none"> <li>Reduce the average direct loan processing time (Days)</li> <li>Reduce the average guaranteed loan processing time (Days)</li> </ul>	40 15	40 <sup>1</sup> 14 <sup>1</sup>	Met
1.4.3 Improve fiscal soundness of the direct loan portfolio: <ul style="list-style-type: none"> <li>Maintain the direct loan delinquency rate at or below 15 percent (Percentage)</li> <li>Maintain the direct loan loss rate at or below 5 percent (Percentage)</li> </ul>	15% 5%	12.5% <sup>1</sup> 4.5% <sup>1</sup>	Met

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Analysis of Results.**

These performance goals were met. The average processing time for direct loans has decreased from 46 days in FY 2000 to 40 days. This 13-percent decrease can be attributed to the ongoing streamlining process, improved monitoring through automation and a renewed focus on customer service through personnel hiring and training. USDA completed and implemented the direct emergency loan portion of the streamlining project during FY 2002.

**Exhibit 22: Farm Loan Trends**

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Reduce the average direct loan processing time (Days)	N/A	46 Baseline	44	42	40 <sup>1</sup>
Reduce the average guaranteed loan processing time (Days)	N/A	20 Baseline	17	16	14 <sup>1</sup>
Maintain the direct loan delinquency rate at or below 15 percent (Percentage)	14.2%	12.4% Baseline	11.3%	10.4%	12.5% <sup>1</sup>
Maintain the direct loan loss rate at or below 5 percent (Percentage)	3.5%	4.2% Baseline	3.3%	7.3%	4.5% <sup>1</sup>

N/A = Not Applicable

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

Similar results have been achieved for guaranteed loan processing. USDA revised its guaranteed loan regulations in FY 1999 to streamline all loan processes, including application processing. As a result, USDA's guaranteed loan-processing time continued to decline during the 2003 loan season. The average guaranteed loan-processing time has dropped 30 percent, from 20 days in FY 2000 to 14 days.

USDA's direct operating and ownership loan programs target farm borrowers with less wealth, higher indebtedness, less capacity for further debt and lower income levels. Thus, USDA's farm-loan programs carry a high degree of risk. Despite the risk, the Department surpassed its performance targets for both delinquencies and losses. Delinquency and loss rates in FY 2003 essentially are unchanged from the FY 2000 baseline. They also remain well below the average loss (5.9 percent) and delinquency (17.6 percent) rates for the period 1993-2002. These performance measures help USDA assess the economic viability of borrowers. A low delinquency rate means more producers are on schedule with their loan payments and less likely to cease farming. Loss rates are an indicator of prior-year loan decisions and the overall farm economy. Additionally, low rates translate into reduced program costs. Government program payments, improved monitoring and loan officer training contributed to meeting the performance goal. State Office and Service Center staff also prioritized resolving a number of older delinquency cases.

USDA intends to continue using prudent underwriting practices, borrower supervision and training classes to maintain the direct-loan delinquency and loan-loss rates at or below target levels. A recently purchased Web-based, farm-planning tool will enhance the underwriting process and loan decision-making. This information system will allow USDA to manage the farm-loan programs more efficiently. Additionally, data gathered in the system will enable USDA to evaluate alternative performance measures for the farm-loan programs that are more outcome-oriented. These measures would indicate whether or not programs are in fact improving the economic viability of the Department's customers. The challenge of maintaining low delinquency rates and targeted levels in FY 2004 will be influenced by commodity prices and weather-related disasters.

**Program Evaluation.**

A PART assessment was initiated on the Guaranteed Loans Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

**Provide Income Support to Agricultural Producers**

Economic stability is provided to producers through multiple farm income-support programs. These programs include the marketing assistance loan and loan deficiency payment (LDP) program. Marketing-assistance loans are provided to producers on a nine-month basis on their eligible crop stored either on the farm or in approved storage space. The heaviest loan activity is usually at harvest time when commodity prices generally are lower. To market their commodity effectively, producers obtain the loan and store the crop in anticipation of commodity prices increasing later after harvest time. Producers who choose not to obtain a marketing-assistance loan can obtain a loan-deficiency payment by agreeing to forgo the marketing-assistance loan. The LDP is a direct payment to the producer in an amount equal to the difference between the established loan rate for the eligible commodity and the announced alternative repayment rate.

Eligible commodities for marketing-assistance loan and LDPs are wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds, upland cotton, peanuts, wool, mohair, pelts, pulse crops, honey and rice. It is anticipated that the level of marketing-assistance loans and LDPs will remain about the same for 2004 as for 2003.

Exhibit 23: Provide Income Assistance

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.4.4 Eligible commodity production placed under marketing assistance loan or loan deficiency payment (Percentage) <sup>1</sup> :			Unmet
<ul style="list-style-type: none"> <li>• Wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds, peanuts, wool, mohair, pulse crops and rice</li> <li>• Upland cotton</li> </ul>	82%	13%	
	97%	99%	

<sup>1</sup>Performance data for marketing-assistance loans and LDPs are reported on crop year rather than fiscal-year basis. A crop year is defined as the year in which a crop is harvested. The final loan and LDP availability date for CY 2002 was May 30, 2003.

**Analysis of Results.**

USDA's performance goal for the amount of eligible commodity production placed under marketing-assistance loan or LDP was not met. While government payments continued to be an important factor in stabilizing farm income, USDA issued significantly fewer LDPs in 2003 than it had in recent years. The Department made approximately 220,000 LDPs valued at nearly \$550 million in 2003. This figure is a

significant drop from the nearly three million LDPs (\$6.25 billion) issued in 2001 (baseline). Demand for marketing-assistance loans increased in 2003, continuing the trend of recent years. USDA issued 193,000 marketing-assistance loans worth more than \$10 billion. This number compares with 160,000 loans (\$6.5 billion) issued in 2001 (baseline). In 2003, 13 percent of the eligible production of major commodities received an LDP or marketing-assistance loan. Ninety-nine percent of the eligible production of upland cotton received an LDP or marketing-assistance loan.

While the performance goal was not met, the program worked as intended. Eligible producers may choose to receive marketing loan-gain benefits by receiving an LDP when the alternative repayment rate, which is based on terminal market rates, is lower than the established commodity-loan rate. Because market prices remained higher than the established loan rate for most of the eligible loan commodities (cotton and rice market prices were below the established loan rate the entire crop year) throughout the crop year, the LDP option had limited availability. Lower market gain activity and LDP program activity indicates that the market is getting stronger. As market prices increase, the amount of government assistance needed to stabilize the farm economy is reduced.

#### **Description of Actions and Schedules.**

No specific actions are planned to reach the unmet goal because the program is working as designed. USDA, in consultation with OMB, is developing new outcome-oriented performance indicators for its income-support programs. The current performance goal and indicators for marketing-assistance loans and LDPs will be discontinued. New indicators will be included in the FY 2005 performance budget.

#### **Program Evaluation.**

The Direct Payment Program PART assessment completed for the FY 2004 budget may be obtained at [www.whitehouse.gov/omb/budget/fy2004/pma/directcrop.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/directcrop.pdf). The FY 2004 PART stated that the Direct Payment Program is well managed and has a clear purpose. The PART also stated that its design could be improved and performance measures are needed to address program goals and delivery. As indicated above, the Farm Service Agency will be developing more outcome-oriented performance measures in FY 2004 that will address this deficiency. A reassessment of this program was initiated as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

A PART assessment was initiated on the Marketing Assistance Loan Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

### **Improve Electronic Delivery of Information and Services**

Producers receive farm loans, commodity loans, direct payments and emergency assistance, and participate in conservation programs to help ensure their economic viability. These programs help farmers and ranchers produce an adequate food supply, maintain viable operations, compete for export sales of commodities in the world marketplace and contribute to the year-round availability of a variety of low-cost, safe and nutritious foods.

To meet the needs of its customers more effectively, USDA is improving access to services and program information, and increasing the efficiency and ease of use of the number of farm commodity and farm-loan programs that can be accessed, completed and accepted electronically. Transaction needs of USDA's business and industry customers who purchase, export, warehouse and transport commodities are targeted for FY 2004.

**Exhibit 24: Expand Customer Access to Services**

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
1.4.5 Increase farm commodity and loan programs that can be accessed, completed and accepted electronically (Percentage)	68%	74% <sup>1</sup>	Exceeded

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Analysis of Results.**

The performance goal was exceeded. USDA increased the number of forms available electronically to USDA customers through the public eForms Web site from 143 to 208 forms. This action resulted in 74 percent of the accessible forms being transmitted electronically to USDA Service

Centers for processing. This is a 17-percent increase from the 2002 baseline. To meet the future challenge of further improving the electronic delivery of information and services, USDA must enhance customer access to farm historical data for current and previous years. The Department also must enhance automatic data fill-in forms and calculations, and multiple-signature capabilities.

**Program Evaluation.**

No evaluations were performed during FY 2003.

**Selected Results in Research, Extension and Statistics for Objective 1.4**

While the Federal Agriculture Improvement and Reform Act of 1996 and the Farm Security and Rural Investment Act of 2002 (FSRIA) introduced new programs that support farmers' incomes, some of which do not depend on current production, factor use or commodity prices. USDA analysis of these decoupled payments finds little evidence that they distort markets. Department analysis of the effects of FSRIA's provisions allowing base and yield updating and introducing counter-cyclical payments indicate that two-thirds of farmers decline to update their payment base and yields.

Recent USDA research has identified three broad demographic trends that will shape future U.S. food markets. These trends are more mature consumers, increased diversity and more people to feed. After further review, USDA translated these trends into projections of growth in food expenditures and demand for specific commodities between 2000 and 2020. This research examined whether the character of America's farmlands and farm businesses will change as much as the profile of the U.S. population 20 years from now.

USDA's Agricultural Resource Management Survey (ARMS) is the primary source of information on the financial condition, production practices, resource use and economic well-being of America's farm households. The survey data have provided the foundation for some of the most insightful research on farm households and farm business practices. In recent years, ARMS funding has lagged behind survey costs, affecting survey coverage and data quality adversely. With new funding, USDA is improving statistical accuracy and expanding the survey's coverage. The Department also plans to make the ARMS data more accessible and user-friendly through Web-based dissemination.

**Exhibit 25: Trends in Customer Access to Services**

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase farm commodity and loan programs that can be accessed, completed and accepted electronically (Percentage)	N/A	N/A	N/A	63% Baseline	74% <sup>1</sup>

N/A = Not Applicable

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.



Developed in part with USDA funds, global-positioning systems, geographic-information systems and remote sensing are helping decision-makers map and manage a wide variety of crops and natural resources nationwide. This technology gives them clear, detailed information. New low-cost field-environmental sensors developed at the University of Kentucky, Ohio State University and the University of Tennessee help farmers maximize economic return and environmental stability.

## STRATEGIC GOAL 2: SUPPORT INCREASED ECONOMIC OPPORTUNITIES AND IMPROVED QUALITY OF LIFE IN RURAL AMERICA

Exhibit 26: Resources Dedicated to Support and Improve Rural America

USDA Resources Dedicated to Strategic Goal 2	FY 2003	
	Actual	Percent of Total USDA
Program Obligations (\$ Mil)	\$15,920	13%
Staff Years	9,001	8%

USDA focuses on expanding economic opportunities in rural areas. Many rural communities lag behind Americans' expectations of what the U.S. standard of living should be because of their remoteness, overall lower educational levels and their tendency to depend on narrowly defined economies, among other reasons.

USDA's Business and Industry Guaranteed Loan Program (B&I) supports loans to individuals, partnerships, corporations, cooperatives and other legal entities. B&I is designed to improve, develop or finance business and industry, create employment opportunities and improve the economic and environmental climate in rural areas.

Biobased energy investments over the next few years will prevent tons of carbon dioxide from being released into the atmosphere. These investments also will save millions of kilowatt hours now wasted in low-efficiency energy production. Additionally, for rural communities to establish new economic gains, they must utilize such new and enabling technology as broadband.

### Objective 2.1: Expand Economic Opportunities through USDA Financing of Businesses

Exhibit 27: Resources Dedicated to Expand Economic Opportunities through USDA Financing of Businesses

USDA Resources Dedicated to Objective 2.1	FY 2003	
	Actual	Percent of Goal 2
Program Obligations (\$ Mil)	\$6,984	44%
Staff Years	3,436	38%

#### Overview

USDA focuses on expanding economic opportunities in rural areas. Many rural communities are challenged by declining economies as they transition away from traditional economic bases, their distance from input or product markets, poor labor-force skills and rising international competition. The Department makes a variety of investments in rural communities, including:

- Guarantees of bank loans to businesses;
- Capitalizing local revolving loan funds that assist small businesses;
- Grants to develop business infrastructure such as incubators or to undertake feasibility studies;

- Business-planning grants;
- Technical assistance to help communities develop strategic plans for economic development;
- Loans and technical assistance to agricultural cooperatives;
- Grants to foster energy savings and alternative energy sources; and
- Grants to stimulate the development of new enterprises based on value-added products.

USDA also invests in critically needed infrastructure, such as broadband technology, that provides rural businesses access to emerging competitive opportunities. Today's advanced telecommunications networks allow rural communities to provide businesses with opportunities to compete locally, nationally and globally. These networks also will ensure that rural residents are equipped to compete in an increasingly information-oriented economy.

### **Serving the Public**

B&I helps create and save jobs in rural America. This program guarantees up to 90 percent of a loan made by a commercial lender. Loan proceeds may be used for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing. B&I expands the lending capacity of private lenders in rural communities. Participating lenders can make and service quality loans that provide lasting community benefits. B&I represents a true private-public partnership.

USDA's Broadband Telecommunications Program provides loans and loan guarantees for broadband services in rural communities. These loans facilitate deployment of new and innovative technologies to provide two-way data transmission of at least 200 kilobytes-per-second in communities with populations up to 20,000. These important investments in rural areas make high-speed data transmission available in low-density, remote areas that often have been ignored by the private sector. Since its inception in 2001, the program has grown quickly, reaching more than twice as many rural counties as in the initial year, or 6 percent of all rural counties in 2003 alone. These investments in critical telecommunications infrastructure are essential to enabling rural businesses and communities to keep pace with rapid developments in the rest of America and the world.

### **Challenges for the Future**

The rural economy faces different challenges than urban and suburban areas. These challenges include historic dependence on natural resources subject to cyclical trends, large-scale changes in technology and resulting efficiency gains in these industries, and the remoteness and low-density settlement of rural communities. The private sector often avoids investments in high-cost developments because of lack of profitability potential or information on which to base decisions. While USDA can foster rural economic development, success depends on sufficient numbers of highly trained staff in local offices.

Because of a lack of biobased energy investments in technology and human capital, rural communities depend on low-efficiency energy production. This production releases tons of carbon dioxide into the atmosphere. It also wastes money and kilowatt hours.

The effectiveness of USDA's investments depends on its programs' successes and national economic trends. The Department is working to improve its ability to provide services.

### **Improve Rural Economic Opportunities**

Typically, business amenities, physical conditions and credit terms are inferior to those in urban areas. For example, rural banks are smaller and have more restrictive lending limits and standards than large urban institutions. Availability of Internet and Web services is inconsistent in rural areas, a distinct disad-

vantage to business growth. The rare publicly financed rural industrial park is smaller and has fewer amenities than those in suburban and urban areas. Even during high-growth economic periods, rural communities' economic environments are less vigorous and infrastructures less developed than urban areas. Rural communities have neither the size nor depth of tax bases to publicly finance amenities that businesses need, such as transportation links, rehabilitated or expanded infrastructure and full-service industrial parks.

B&I can guarantee loans for satisfactory credit risks. This program allows lenders to offer competitive terms and make loans of up to \$25 million<sup>1</sup> in eligible areas. USDA also provides technical assistance and modest grants (frequently as a catalyst for attracting local private funds) for communities to launch the infrastructure necessary for businesses. Funding of small revolving-loan funds can help new borrowers and emerging local entrepreneurs.

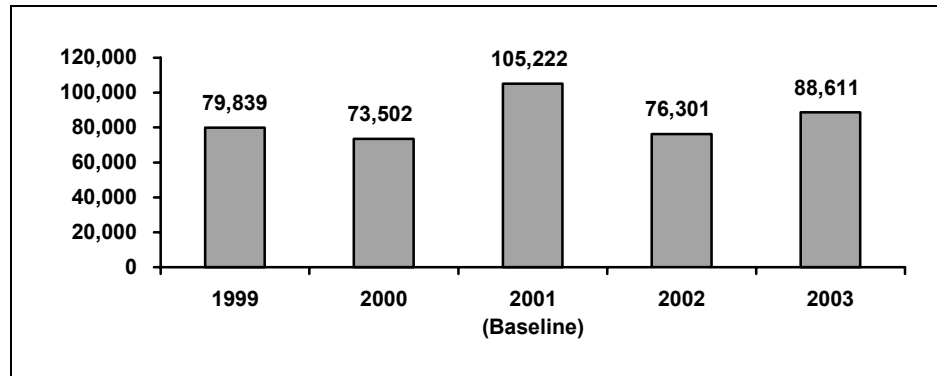
Exhibit 28: Strengthen Rural Businesses

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
2.1.1 Create or save additional jobs through USDA financing of businesses	73,944	88,611	Exceeded
2.1.2 Reduce the Business and Industry Portfolio delinquency rate, excluding bankruptcy cases (Percentage)	9.5%	8.5%	Exceeded

**Analysis of Results.**

The performance goal was exceeded for the number of jobs computed to be created or saved. The figure was above 2002 achievements. The number of jobs created or saved is related to the funding levels for business programs and general conditions in regional and national economies. These factors are external to USDA's control.

Exhibit 29: Estimated Jobs Created or Saved



The number of jobs resulting from the Rural Business – Cooperative Service (RBS) in FY 2003 exceeded the target level. This level is attributed to Rural Business Enterprise Grants receiving \$5 million more in funding from prior-year deobligations than was provided by the President's budget. B&I also used carryover funds from FY 2002. Additionally, in FY 2003, Rural Development State offices substantially improved their ability to gather, record and report job information on all RBS programs consistently.

The delinquency-rate goal was exceeded. The improvement is the result of: 1) improved underwriting and monitoring policies implemented by USDA, 2) some delinquent borrowers reorganizing under bankruptcy

<sup>1</sup>Up to \$40 million may be guaranteed for certain value-added cooperative enterprises.

law, 3) lower interest rates helping borrowers maintain adequate cash flows even with depressed revenues, and 4) USDA State staffs working closely with borrowers and lenders, encouraging lenders to be proactive in assisting borrowers to improve marketing and operations. These actions allow borrowers' gross revenues to support debt service and maintain employment.

Exhibit 30: Trends in Expanding Economic Opportunities

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Reduce the Business and Industry Portfolio delinquency rate, excluding bankruptcy cases (Percentage) <sup>1</sup>	4.8%	4.2%	4%	10.3% Baseline	8.5%

<sup>1</sup>Delinquency data for years 2002 forward reflect reconciliation of delinquency accounts at the time of conversion to a new Rural Business – Cooperative Service reporting system.

Current levels have not been utilized fully mainly because of economic weakness and the continuing downward trend in commercial credit costs. Business credit costs rose slightly at the end of the year.

USDA's challenges to overcoming general economic conditions include increased programs and reporting responsibilities, and the retirement of numerous seasoned loan and grant officers. These conditions reverberate the hardest in rural areas. Intractable high-poverty areas also require a scope and depth of technical support beyond USDA's current financial and human resources.

**Program Evaluation.**

In a continuing effort to improve and track program results, USDA launched a mission-area-wide effort to review current performance measures and tracking systems, and develop new ones as needed. The Budget & Performance Integration team of USDA's Rural Development staff meets regularly to develop and refine measures and tools to plan and track progress.

It has been estimated that the economic benefit to the rural community, in addition to direct jobs created or saved, is \$2.50 for every dollar in guaranteed loans closed. These investments make a continuing difference in rural communities, though only measured by the jobs computed in the initial year of the loan. The B&I delinquency rate represents myriad conditions. These conditions include national economic trends, local business events and the quality of Agency loan underwriting. While the Agency has no control over the first two external factors, it has begun strengthening loan underwriting. Additionally, the results have started to appear in the delinquency rates for the current year.

A Program Assessment Rating Tool (PART) assessment was initiated on B&I as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

**Improve Telecommunication for Rural Residents**

USDA finances the deployment of a nationwide, rural broadband network. Since private capital for the deployment of broadband services in rural areas is insufficient, USDA incentives are that much more important. Providing rural residents and businesses with barrier-free access to today's technological benefits will bolster the economy and improve the quality of life for rural residents.

Building and delivering an advanced telecommunications network is affecting the Nation's economy, strength and growth significantly. Broadband networks in small, rural towns facilitate economic growth and provide the backbone for the delivery of increased educational opportunities over state-of-the-art telecommunications networks. While rural America can be defined by various statistics, the most important is that it is home to 65 million people. Just as the citizens in U.S. cities and suburbs benefit from

access to broadband services, so should rural residents. In rural America, access to broadband plays a vital role in solving the problems created by time, distance, location and lack of resources. The promise of broadband is not just "faster access." It means:

- New educational opportunities through distance learning, enabling rural students to take virtual field trips around the world;
- Life-saving medical treatment via telemedicine networks, allowing specialists to guide surgeries hundreds of miles away; and
- Economic growth and new markets, where businesses prosper and grow locally, while competing nationally and globally via high-speed networks.

FSRIA established the new loan and loan-guarantee program "Access to Broadband Telecommunications Services in Rural Areas." This program is designed to provide funding for the cost of constructing, improving and acquiring facilities and equipment for broadband service in rural communities of 20,000 people or less. Direct loans are made from the Treasury for the life of the facilities financed. Loans may be made at 4 percent to rural communities, where broadband service currently does not exist. Loan guarantees bear an interest rate set by the private lender consistent with the current applicable market rate for a loan of comparable maturity. The guarantees are made for no more than 80 percent of the principal amount. The number of counties receiving new service will measure the extent to which the deployment of broadband service is achieved.

Exhibit 31: Improve Telecommunication Services in Rural America

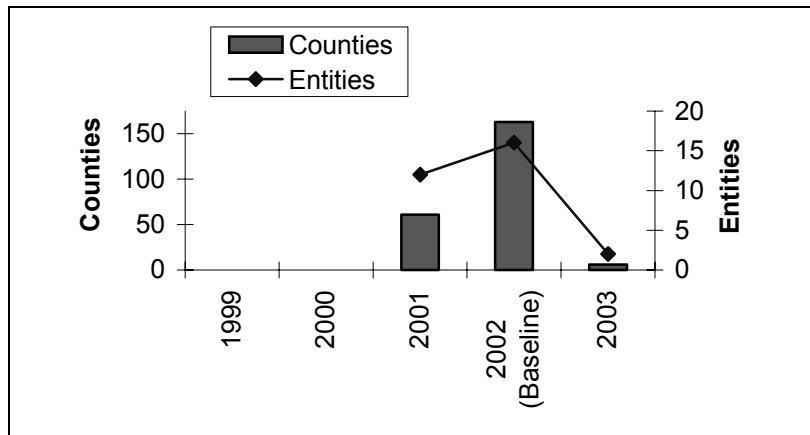
Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
2.1.3 Improve the ability of small, rural towns to enjoy economic growth through provision of financing to support high-speed telecommunications services (broadband):			Unmet
• Number of entities	23	2	
• Number of counties	184	6	

**Analysis of Results.**

The performance goal was not met. The indicators assume an average of 8 counties per loan, an average loan size of \$15 million per applicant and an annual lending level of approximately \$350 million. Since this target's development, the available funding increased fourfold to approximately \$1.5 billion. Additionally, USDA has refined the factors used to determine the number of entities to receive financing and the number of

counties to be served. Using a larger base of historical data from its other programs, USDA now estimates the average loan size to be approximately \$10 million per applicant and the average number of counties served to be 9 per loan. The program did not start accepting applications until January 30, 2003, since regulations had not been published until that time. Due to the delay in publishing regulations and inviting

Exhibit 32: Improving Broadband Communications



applications, only 2 applications for \$5.5 million were approved. This resulted in six counties being served in FY 2003.

#### **Description of Actions and Schedules.**

The Broadband Program did not meet its goal because it did not start accepting applications until nearly the middle of the fiscal year. The delay is attributed to a longer-than-expected regulatory review process.

The Rural Broadband Access Loans and Loan Guarantees Program was implemented January 30, 2003. Because this is a new program with significantly different regulatory and statutory requirements from its predecessor "pilot program," eligible applicants need sufficient time to prepare and submit applications in accordance with the new rules and regulations. Initially, many of the applications received were declared incomplete because the applicants did not follow the new procedures. The application deadline for this year's funding was July 31, 2003. The majority of the applications were not received until late July, resulting in processing delays. The review of these applications is ongoing and expected to result in additional projects being funded.

Next year, the program will enter its first "full-year" of application processing. It will utilize the "State reserve" of funding allocations. These allocations could not be used this year due to regulations' publication date. Using the allocations will entail the quarterly prioritization and approval of applications until April 1, 2004. On that date, the remaining State allocation funds will be combined in a national pool. This plan creates a more uniform, year-long process.

#### **Program Evaluation.**

A PART assessment was initiated on the Telecommunications Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

### **Selected Results in Research, Extension and Statistics for Objective 2.1**

The economies of individual rural areas differ. So do their resources and the opportunities and challenges they face. An interactive, Web-based, geographic-information system and an analytical study tool launched by USDA's Economic Research Service (ERS) help users assess the causes and effects of diversity in rural America. The Web site provides a visualization of indicators for rural areas available from ERS and other Government agencies. These indicators include population change, the unemployment rate and median household income.

USDA's National Agricultural Statistics Service completed data collection for the 2002 Census of Agriculture with a response rate of 87.8 percent. This figure exceeds the previous census response of 86.2 percent. Data analysis and review are continuing. Publication is scheduled for FY 2004.

Missouri Cooperative Extension developed the *Missouri Business Development Network* to address small business owners' marketing and economic concerns. The network allowed small business owners to receive individual counseling in marketing. Thanks to the network, sales increased by \$73.1 million and 369 jobs were created.

## Objective 2.2: Improve the Quality of Life through USDA Financing of Quality Housing, Modern Utilities and Needed Community Facilities

Exhibit 33: Resources Dedicated to Improving the Quality of Life

USDA Resources Dedicated to Objective 2.2	FY 2003	
	Actual	Percent of Goal 2
Program Obligations (\$ Mil)	\$8,936	56%
Staff Years	5,565	62%

### Overview

A major focus of USDA is improving the availability and affordability of good housing. The Department is doing this through loan and grant programs to help families achieve homeownership. These programs also are designed to develop multi-family housing and provide assistance to make homes affordable. Special emphasis is placed on improving home affordability for minorities. USDA also makes grants and loans to provide facilities that ensure safe drinking water and the proper treatment of wastewater and solid wastes. Other grants and loans are used to develop a broad range of other facilities, such as schools, libraries, fire and rescue equipment, and public buildings that enable communities to improve the quality and scope of community services. These services help rural residents achieve a quality of life more comparable with urbanites and suburbanites.

### Serving the Public

USDA's assistance reaches large numbers of rural Americans with services crucial to achieving a satisfactory quality of life. The Department provides direct and guaranteed loans to help rural citizens achieve homeownership. These loans served 44,130 households in 2003. USDA has made a special effort to increase the number of minority homeowners, reaching 8,442 households. The percentage of all loans to minority households rose from 14 percent in 2001 to 19 percent in 2003. USDA's grants and loans to help rural communities obtain essential community facilities reached 10.3 million residents in 2003, a 53-percent increase over the 2001 level. Additionally, the rural water and waste programs provided access to safe drinking water or sanitary wastewater disposal to 650,000 subscribers. Taken together, these investments bring important benefits to a large number of rural communities and citizens by increasing the availability of essential services and raising the quality of life.

### Challenges for the Future

Special challenges to this objective continue to be funding levels, the increased cost of housing and delays in a budget enactment. As housing costs continue to rise, fewer homes ultimately can be financed with available funding levels.

### Improve the Standard of Living in Rural America

USDA implements a wide variety of housing programs. Through its single-family housing direct- and guaranteed-loan programs, USDA helps families achieve homeownership. Other programs focus on assisting dwellers in rental housing, farm-worker housing, home rehabilitation and self-help new home construction. Supplementing these programs is a series of grants and loans to finance the development of facilities that are essential to a modern standard of living in rural communities. A wide range of public services can be assisted by these programs, including education, health, justice and public safety. USDA's programs leverage federal funds with private capital to invest in rural infrastructure, technology and human-resource development.



Exhibit 34: Improving Rural Quality of Life

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
2.2.1 Improve the quality of life in rural America:			Met
<ul style="list-style-type: none"> <li>Increase financial assistance to rural households to buy a home</li> </ul>	45,700	44,130	
<ul style="list-style-type: none"> <li>Increase the number of minority homeowners</li> </ul>	8,400	8,442	
<ul style="list-style-type: none"> <li>Provide access for residents to new and/or improved essential community facilities (Mil. residents)</li> </ul>	7.2	10.3	
<ul style="list-style-type: none"> <li>Number of subscribers receiving new and/or improved water and/or waste disposal service (Mil.)<sup>1</sup></li> </ul>	0.65	0.65 <sup>2</sup>	

<sup>1</sup>Measure has been modified to reflect more accurately the program's impact by capturing the benefits of drinking water and sanitary waste disposal improvements. The original measure (i.e., provide access for residents to clean drinking water; \$2.06 million target) was limited to drinking water and calculated using the average number of persons per subscriber. That number varies widely and is not as accurate.

<sup>2</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Analysis of Results.**

The performance goal was met. Overall, USDA demonstrated steady improvement in its performance level for improving the quality of life for rural citizens.

USDA did not meet its homeownership target due to the increased cost of purchasing a home. With historically low interest rates, the housing industry represents the Nation's leading economic force during the past year. Unfortunately, the increased demand for housing, particularly for entry-level starter homes, increased costs substantially above projections. Despite increased success in leveraging non-Federal funds to reduce loan costs, the average loan still increased more than 8 percent in FY 2003 from FY 2002 levels. Because of this increase, USDA only could achieve 95 percent of its target despite all funds being utilized. The future challenge is promoting further leveraging to ensure that the maximum numbers of families are served within available resources.

Exhibit 35: Trends in Homeownership and Community Facilities

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase financial assistance to rural households to buy a home	55,941 Baseline	45,420	44,073	42,069	44,130
Provide access for residents to new and/or improved essential community facilities (Mil.)	N/A	N/A	N/A	6.8 Base-line	10.3
Number of subscribers receiving new and/or improved water and/or waste-disposal service (Mil.)	N/A	0.67 Baseline	1.01	0.79	0.65 <sup>1</sup>

N/A = Not Applicable

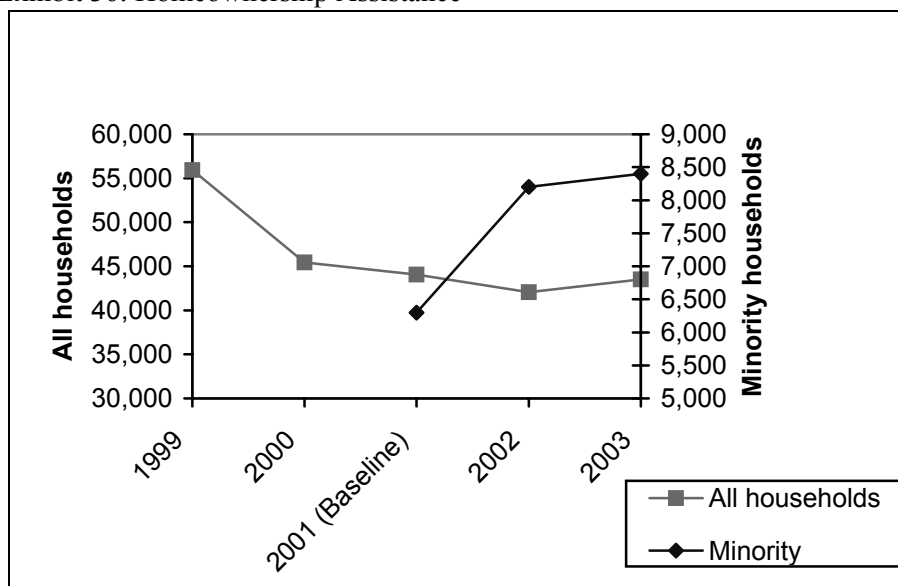
<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

The Department aggressively responded to the President's goal of increasing minority homeownership by 5.5 million families by the end of the decade. USDA's "5-Star Commitment" to increase minority homeownership includes:

- Lowering fees to reduce barriers to minority homeownership;
- Doubling the number of self-help participants by 2010;
- Increasing participation by minority lenders through outreach;
- Promoting credit counseling and homeownership education; and
- Monitoring lending activities to ensure a 10-percent increase in minority homeownership.

USDA immediately reduced the fees on its guaranteed single-family housing program from 2 percent (of the loan amount) to 1.5 percent for new loans and .5 percent for refinanced loans. These fees now are consistent with such other Federal lenders as the Department of Housing and Urban Development and the Veteran's Administration.

Exhibit 36: Homeownership Assistance



Additionally, each State was provided benchmarks and goals through

2010. The States also have developed their own plans to meet the Secretary's 5-Star Commitment. While 13 percent of rural America is comprised of minorities, more than 19 percent of USDA loans reached minorities. In FY 2003, USDA helped 8,442 minorities achieve their dreams of homeownership. One of the major contributors to this success is USDA's Mutual Self-Help Housing program, which serves more than 50 percent of minority families. Through this program, groups of 6 to 12 families mutually build each other's homes. This program has reduced the barriers experienced by many minorities in achieving homeownership significantly. Additionally, the default rate on loans made through this program generally is 400 basis points lower than other loans in the single-family housing portfolio. A basis point is an index that measures differences in yields on various financial instruments, such as mortgage default rates or rates of return on securities. A basis point equals one hundredth of a percentage point (0.01 percent).

USDA exceeded its target for increased access for residents to new or improved essential-community facilities. Many rural communities are facing increased financial stress due to agricultural conditions (including drought, flooding and forest fires), the slowed economy and other factors. Additionally, many sectors, such as health care, are experiencing increased financial pressures. Working with its partners, USDA has been able to help meet many of these vital needs.

Water and Waste Disposal loans and grants are provided to rural communities for the development, replacement or upgrading of such facilities. This effort includes poverty-stricken rural communities and those facing distress because of out-migration, natural disasters or economic distress due to Federal actions. Direct loans are repayable for a maximum term of 40 years. Since the program's inception in 1937, Water and Waste Disposal borrowers have received \$28 billion in direct loans, loan guarantees and grants as of September 30, 2002. FY 2003 saw \$727 million in direct loans approved, \$12 million in loans guaranteed and \$650 million in grants awarded.

Failing infrastructure is a common problem both in large cities and small rural systems. Additionally, investments in repairs and replacements usually do not generate more revenue. Smaller systems with a smaller user base cannot absorb these added expenses without significant rate increases.

Some of these issues can be mitigated through better asset management, full-cost pricing and technology advances. Proper care of assets can extend their useful life and improve their productivity. Keeping the

public aware of the benefits of safe drinking water can improve its willingness to pay the cost of unsubsidized service. Additionally, technology advances can provide lower cost solutions.

A future challenge USDA faces is assisting rural communities most in need of the Department's financial and technical services. These communities usually have the least resources for such services. This condition is exacerbated by droughts, limited water resources and other environmental maladies. Since solutions to difficult conditions often are expensive and with limited grant funds, it is unlikely that feasible projects can be developed.

#### **Program Evaluation.**

The results from OMB's PART showed the Water and Waste Loan and Grant Program to be well-designed and managed. It also found that USDA succeeded in targeting assistance for water and wastewater infrastructure to poor rural areas. Additionally, the Department effectively collects and uses program data to manage the program. Accordingly, over the life of the program, fewer people in rural areas are experiencing barriers to accessing safe, affordable drinking water and wastewater disposal. The PART results produced an improved measure, which is included under performance goal 2.2.1. This PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/ruralwater.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/ruralwater.pdf).

In another study, OMB's Common Measures Assessment concluded that USDA's Rural Development Water and Environmental Programs compared favorably to similar programs in EPA, the Indian Health Service and Bureau of Reclamation. For more information, visit [www.whitehouse.gov/omb/budintegration/common.html](http://www.whitehouse.gov/omb/budintegration/common.html).

OMB's PART showed the Electric Program to be well-designed and effectively managed with a clear purpose. The PART awarded Rural Utilities Service (RUS) with a high management rating and found a disconnect between USDA's strategic goals and the RUS electric program's goals and measures. RUS targets its electric-hardship loans to high-poverty areas. To date, the RUS Electric Program has approved 21 hardship loans worth \$230 million. These hardship loans were approved for applicants who met rate-disparity thresholds, and consumers who fell below average per capita and household-income thresholds. Additionally, RUS received an actual FY 2003 hardship loan budget of \$120 million. These loans will be targeted to high-poverty rates. A full copy of the PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma.html](http://www.whitehouse.gov/omb/budget/fy2004/pma.html).

OMB's PART showed the Multifamily Housing Program to be managed effectively. The program centers on the Rural Housing Service's (RHS) Housing Act of 1949 Section 515 Rural Rental Housing and Section 521 Assistance. It makes loans to eligible entities to provide rental housing for low- or moderate-income families and the elderly in rural areas. The PART also found that while, over the life of the program, more decent and sanitary affordable rental housing has been provided in rural America, RHS cannot demonstrate whether this is related to its program or the economy. Rural Development has developed as part of USDA's *FY 2004 Annual Performance Plan* a new set of performance measures that quantify success and identify solutions to better serve rural residents. Meantime, Section 521 makes assistance payments available to section 515 housing occupants. A full copy of the PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/rentassistance.xls](http://www.whitehouse.gov/omb/budget/fy2004/pma/rentassistance.xls).

A PART assessment was initiated on the Community Facilities Direct Loan Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

## **Selected Results in Research, Extension and Statistics for Objective 2.2**

Arizona's Extension Connection program helps welfare recipients transition into the work force. More than 300 high-risk adults graduated from the program. More than half of those same adults have been employed for more than a year. Nebraska Cooperative Extension's *Building Nebraska Families* program helped former welfare recipients raise their average income from \$452 to \$786 a month.

As the number of Spanish-speaking people increases nationwide, Land-Grant universities bridge the language gap between farmers and employees with classes and publications. Ohio State Cooperative Extension produces an English/Spanish newsletter for Latinos working in horticulture. It also publishes *Spanish for Greenhouse Supervisors*, a collection of words used in floriculture. Idaho Extension arranged for-credit Spanish classes for Government employees and others. After the classes, 75 percent of the participants said that they were able to communicate better with Spanish-speaking clients. Purdue Cooperative Extension offered *Workplace Spanish*, a two-day course in language skills and cultural awareness. Attendees said that the course increased their understanding of Latino culture and their ability to serve their clients.

## STRATEGIC GOAL 3: ENHANCE PROTECTION AND SAFETY OF THE NATION'S AGRICULTURE AND FOOD SUPPLY

Exhibit 37: Resources Dedicated to Protect and Secure the Nation's Food Supply

USDA Resources Dedicated to Strategic Goal 3	FY 2003	
	Actual	Percent of Total USDA
Program Obligations (\$ Mil)	\$3,350	3%
Staff Years	23,056	20%

USDA remains committed to ensuring that consumers in America have the safest possible food supply. The Department is using science-based practices to diminish the incidence of foodborne illness associated with meat, poultry and egg products. These practices include recruiting scientifically trained employees and educating its current employees on scientific and technical principles.

USDA continued to see results in its fight against *Exotic Newcastle Disease*, one of the world's most infectious poultry diseases. In September, the Department eliminated the last remaining areas quarantined for the disease in Arizona, California, Nevada and Texas. The actions removed restrictions on the movement of birds, poultry and certain other articles from those areas.

USDA also visited communities to deliver the message of safe food handling. The Department conducted a nationwide tour to educate and reinforce to consumers the importance of handling food safely. The USDA Food Safety Mobile traveled across the country. Mobile officials hosted almost 60 events in 40 cities. They also worked with the media to stage more than 60 million viewings of food-safety messages. The Mobile depicted BAC!<sup>®</sup> – the notorious foodborne bacterium character that provides consumers with a memorable message about the four critical steps they must take to keep their food safe: Clean, Separate, Cook and Chill.

### Objective 3.1: Enhance the Protection of Meat, Poultry and Egg Products from Foodborne Hazards in the United States

Exhibit 38: Resources Dedicated to Reduce Pest and Disease Outbreaks

USDA Resources Dedicated to Objective 3.1	FY 2003	
	Actual	Percent of Goal 3
Program Obligations (\$ Mil)	\$1,142	34%
Staff Years	10,674	46%

#### Overview

Since 1998, USDA has used a science-based framework—the Pathogen Reduction/Hazard Analysis and Critical Control Points (PR/HACCP) system—to verify that plants identify and prevent food-safety problems. Under HACCP, meat and poultry plants must prove through operating under HACCP plans that they are addressing all biological, chemical and physical hazards most likely to occur. USDA verifies that plant practices are effective and result in the production of safe, unadulterated products.

Risk assessment provides the framework for developing the scientific basis for USDA's food-safety policies and programs. Through risk assessment, USDA identifies methods by which pathogens can be controlled by slaughter and/or processing plants. This information is used to enhance public health. For example, using information developed through risk assessment, the Department has identified methods to control such pathogens as *Listeria monocytogenes*. *Listeria* can cause severe illness and even death, particularly in at-risk populations.

Another key to enhancing public health is ensuring that employees executing USDA's food safety responsibilities are scientifically and technically skilled. USDA is addressing the training and education of its workforce aggressively. In order to ensure consistent and accurate inspection, the Department has made a strong commitment to recruiting scientifically-educated employees and retooling its entire training and education program for all employees. These employees will be better able to identify and focus on activities that enhance public health.

USDA also implemented policies and verified plants' compliance to control *E. coli* O157:H7 and effectuate more rapid recall procedures. USDA is strengthening its outreach programs and partnerships to educate food handlers and others about food safety and help enhance public health.

Additionally, USDA is identifying the *Enterococci* bacteria and testing its presence in retail food items. The Department's work allowed it to obtain EPA approval for a product to prevent aflatoxin, which occurs in cottonseed. Cottonseed is an important feed for dairy cattle. USDA also has developed a method for classifying *Listeria* and detecting pathogens in sprouted food products from contaminated water.

### **Serving the Public**

Science-based risk assessments drive USDA food-safety policies and programs to enhance public health. Risk assessment provides the framework for developing the scientific basis for USDA meat, poultry and egg product policies and programs. HACCP is the system that plants use to address the hazards identified in risk assessments. Through risk assessment, USDA has been able to identify methods by which plants can control pathogens. USDA recognizes that enhancing the public's health in terms of safe meat, poultry and egg products is not a lone venture. It has formed many partnerships to provide food-safety information to the industry, the public and Federal, State and local agencies. The Department also works closely with academia to help provide guidance and assistance.

Another important part of USDA's responsibility is protecting meat, poultry and egg products from intentional contamination and bioterrorism. Information gained from risk assessments will help USDA continue its efforts to protect these products.

While the results of risk assessments shape inspection policy, they also help USDA design food-safety education programs to increase consumer knowledge, and change behaviors to prevent foodborne illness. The program targets the general public and at-risk groups for foodborne illness – the very young, the elderly, pregnant women and people with chronic diseases or compromised immune systems.

The Department also conducted 12 public meetings and scientific symposia to share information with and gather input from the public on food-safety topics that affect public health in FY 2003. Part of this initiative included the launch of a nationwide tour of the Food Safety Mobile. The Mobile offered food-safety demonstrations and discussions with consumers about the importance of safe food handling and steps they can take to reduce the risk of foodborne illness.

USDA scientists developed a cost-effective, rapid and accurate procedure to identify genus and species of *Enterococci* in food products. *Enterococci* can harbor antibiotic resistance genes and transfer them to

harmful foodborne pathogens. The multiplex Polymerase Chain Reaction procedure detects the presence of the genes responsible for encoding antibiotic resistance. Results indicated that, although *Enterococci* are prevalent among food items, the chances of transmitting antibiotic resistance from animal food products to humans are very low. This procedure is useful to producers, regulatory agencies and researchers in tracing and preventing both pathogens and antimicrobial resistance in food products.

These accomplishments help ensure the continued safety of the U.S. food supply for both domestic and international consumers.

### **Challenges for the Future**

USDA's greatest challenge in food safety is emerging and existing pathogens. The Department will continue to develop new science- and risk-based strategies to enhance the public health status as new pathogens are identified. Each year, USDA will examine organisms of concern and address these pathogens to raise industry awareness and the Department's preparedness to develop new programs and policies to address these challenges.

Reducing, controlling or eliminating pathogen and chemical contamination from food products requires a steady stream of new technologies and processes. The multifaceted food-safety research program produces the solutions to address specific problems confronting the U.S. agricultural/food industries.

### **Strengthen Food Safety**

Over the past two years, USDA has been implementing a five-point strategy to reduce the incidences of foodborne illness further. The Department used HACCP as the foundation. This strategy includes improved management of inspectors, application of science in crafting regulations, better coordination with other agencies, an aggressive education campaign for food handlers and protection of the food supply against terrorist attack. USDA seeks to ensure that its food-safety policies and decisions are based on science. Scientific studies provide critical information to make the best decisions.

Risk assessments help provide a better picture of the nature and reason microorganisms occur in the Nation's supply of meat, poultry and egg products. Risk assessments are scientifically-based processes estimating the likelihood of exposure to a hazard and the resulting public health impact. Risk assessments provide a scientific framework for understanding the impact of a wide variety of variables by considering such key questions as:

- What processes contribute to risk?
- How much harm could occur?
- How much can that potential harm be reduced by various intervention strategies?

This ongoing scientific process has provided a growing body of knowledge that allows USDA to execute better methods for inspection and policy development based on food safety hazards.

USDA uses risk communication to inform the public of foodborne hazards and what can be done to prevent or control them.

During the last several years USDA has made significant improvements in its food-safety program. In May 2002, the Centers for Disease Control and Prevention reported a 21-percent decrease in all foodborne illnesses.

Exhibit 39: Conduct Risk Assessments

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.1.1 Conduct risk assessments of microbial, chemical and physical hazards to meat, poultry and egg products:			Met
<ul style="list-style-type: none"> <li>Number of risk assessments initiated</li> </ul>	4	4	
<ul style="list-style-type: none"> <li>Number of risk assessments completed</li> </ul>	N/A	5	

N/A = Not Applicable

**Analysis of Results.**

The performance goal was met. The time between initiation and completion of a risk assessment can range from a few months to several years. Risk assessments vary greatly in complexity. The findings from one risk assessment may generate topics for additional ones. Such an occurrence could make it difficult to project targets for new studies in a given year. Or, as new pathogens emerge to pose a risk to public health, risk-assessment priorities may change.

Exhibit 40: Number of Risk Assessments Initiated and Completed

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Number of risk assessments initiated	0	1 <sup>1</sup>	3 <sup>1</sup> Baseline	3 <sup>1</sup>	4
Number of risk assessments completed	2	0	2 Baseline	7	5

<sup>1</sup>Initiated assessments adjusted to match completed assessments.

In FY 2003, USDA initiated four risk assessments. The risk assessment for *Clostridium perfringens* in Ready-to-Eat (RTE) foods provided USDA with information to set a risk-based performance standard for cooling RTE foods by assessing the risk of human illness associated with different cooking-performance standards. *Clostridium perfringens* is a bacterium that can cause foodborne illness. The vulnerability assessment of bioterrorism on imports looked at deliberate contamination. The risk assessment for *Bovine spongiform encephalopathy* (BSE) – Mitigation Scenarios considers various steps to limit human exposure to this disease. BSE, or mad cow disease, is a degenerative disorder affecting the nervous system of cattle.

The baseline for risk assessments initiated was three. The baseline year of FY 2001 was chosen because it was the first year of full HACCP implementation. The number of risk assessments initiated may not increase each year. USDA determines when to initiate a new risk assessment. This decision normally is based on the emergence of a new pathogen or risk, outbreaks of foodborne illness or the development of new information or technologies. The results of a risk assessment can form the basis for policy, regulation and program development for a number of years.

In FY 2003, USDA completed five risk assessments. The baseline was two. Four of the five are vulnerability assessments of bioterrorism relating to the production, processing and distribution of various Food Safety and Inspection Service-regulated products. Also completed was the risk assessment for *Listeria monocytogenes* in RTE deli meats, which began in 2002. The results of this risk assessment are being used so that food-safety policies and programs are based on risk and science.

Future challenges include strengthening the application of risk assessment to regulatory and enforcement activities. Microbial risk assessment is a fairly new discipline that came into existence in the late 1980s. USDA is committed to improving the science of microbial risk assessments continuously. The Department also looks to enhance and expand the application of completed risk assessments to food-safety policy development.



**Program Evaluation.**

The results from the Office of Management and Budget’s Program Assessment and Rating Tool (PART) on food safety showed the Food Safety and Inspection Service (FSIS) has a clear and significant role in protecting the Nation’s food supply. However, FSIS received lower scores in management and accountability. FSIS does not have procedures in place to measure cost effectiveness. While FSIS has been reducing incidences of foodborne illness, the program is not optimally designed to address food safety. Implementation of a new risk-based inspection system should be evaluated further to determine whether it would help FSIS meet its strategic and performance goals, and improve efficiencies and cost effectiveness.

To address these findings, FSIS is evaluating the impact of implementing a risk-based inspection system. A full copy of the PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/foodsafety.xls](http://www.whitehouse.gov/omb/budget/fy2004/pma/foodsafety.xls).

Risk assessments that will form the basis for regulations are peer-reviewed. Additionally, USDA held public meetings and other open forums on public health issues. Public comments are significant inputs into decision making.

Interested parties may view pertinent documents or find a list of upcoming public meetings at [www.fsis.usda.gov](http://www.fsis.usda.gov).

**Enhance Protection from *Salmonella***

Recent initiatives to enhance protection from *Salmonella* include the adoption of a new system to screen for the bacterium in RTE meat, poultry and pasteurized egg products. While it is as sensitive as the previously used system in detecting *Salmonella*, the new system reduces reporting time for negative samples by one to two days. *Salmonella* can cause salmonellosis, one of the most-common bacterial foodborne illnesses. Salmonellosis can be life-threatening, especially for at-risk populations.

USDA inspectors continue to sample *Salmonella* in processing plants. These tests are used to trigger more intensive in-plant scrutiny and food-safety assessments.

The Department has reduced the incidence of *Salmonella* on products prior to release into commerce by using its existing regulatory authorities for regulating meat, poultry and egg products.

Exhibit 41: Enhance Industry Compliance for *Salmonella*

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.1.2 Enhance industry compliance with regulatory requirements:			Met
<ul style="list-style-type: none"> <li>• Incidence of <i>Salmonella</i> on broiler chickens (Percentage)</li> <li>• Incidence of <i>Salmonella</i> on market hogs (Percentage)</li> <li>• Incidence of <i>Salmonella</i> on ground beef (Percentage)</li> </ul>	11.6%	11.7%	
	4.3%	2.7%	
	2.8%	1.7%	

**Analysis of Results.**

The performance goal was met. USDA made substantial progress in enhancing *Salmonella* protection. Overall, the incidence of *Salmonella* on raw products fell dramatically since full implementation of the PR/HACCP rule in FY 2000. It also exceeded the performance standards set by USDA for plants.

While the incidence of *Salmonella* on broiler chickens was 11.7 percent for FY 2003, just slightly higher than the FY 2002 baseline of 11.6 percent, this figure still is well below the upper limit set by USDA performance standards.

Exhibit 42: Trends in Industry Compliance for *Salmonella*

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Incidence of <i>Salmonella</i> on broiler chickens (Percentage)	11.3%	8.7%	11.9%	11.6% Baseline	11.7%
Incidence of <i>Salmonella</i> on market hogs (Percentage)	6.6%	7.6%	4.5%	4.3% Baseline	2.7%
Incidence of <i>Salmonella</i> on ground beef (Percentage)	4.4%	3.6%	2.6%	2.8% Baseline	1.7%

The incidence of *Salmonella* on market hogs was 2.7 percent for FY 2003. This figure is lower than the FY 2002 baseline of 4.3 percent and well below the upper limit set by USDA performance standards.

The incidence of *Salmonella* on ground beef was 1.7 percent for FY 2003. This figure is lower than the FY 2002 baseline of 2.8 percent and well below the upper limit set by USDA performance standards.

The benefits to the American public are raw meat and poultry products with lower incidences of microbiological hazards. This hazard reduction should lower the risk of foodborne illness.

USDA issued new procedures emphasizing the use of *Salmonella* testing results to trigger more intensive scrutiny and in-depth reviews of processing plants. The procedures focus on the need for a more scientific and systematic approach to food safety and enforcement of current regulations.

Future challenges will be to conduct risk assessments and scientific-baseline studies for other pathogens of interest and emerging pathogens. The Department also will have to develop regulatory-performance standards to gain industry compliance.

#### Program Evaluation.

USDA reviewed the *Salmonella* testing program policies and practices. The Department conducted an internal evaluation of the *Salmonella* testing program with recommendations for improving it. The evaluation was designed to synthesize disparate aspects of policy and practice to provide a systems view of program components and their relation to one another. Most of the recommendations either have been incorporated into Agency programs or are in the process of being incorporated into new procedures.

The Department is keeping the public and industry informed of these improvements at [www.fsis.usda.gov](http://www.fsis.usda.gov) and through other communications opportunities.

#### Enhance Protection from *Listeria monocytogenes*

When *Listeria monocytogenes* is found in RTE products, USDA takes action to prevent it from entering commerce. The Department also verifies the effectiveness of its recall procedures.

USDA made significant progress developing science-based policies to enhance public health through more-effective control of *Listeria monocytogenes*. USDA released a directive to inspection program personnel on methods to verify that processing plants producing RTE products are preventing *Listeria monocytogenes* contamination. USDA published an interim final rule requiring establishments producing certain RTE meat and poultry products to take steps to reduce further *Listeria monocytogenes* incidence. The rule is based on information gathered while developing the risk assessment. The interim final rule took effect October 2003. USDA is seeking comments through December 8, 2003. The Agency is acquainting industry with rule requirements by, among other ways, holding a series of workshops for smaller plants.

Exhibit 43: Enhance Industry Compliance for *Listeria Monocytogenes*

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.1.3 Enhance industry compliance with regulatory requirements on the incidence of <i>Listeria monocytogenes</i> on Ready-to-Eat meat and poultry products (Percentage)	1.03% <sup>1</sup>	.9%	Met

<sup>1</sup>In conducting an audit of *Listeria monocytogenes* data for the past three years, FSIS found a data-entry error for one sample.

**Analysis of Results.**

The performance goal was met. The incidence of *Listeria monocytogenes* was below the maximum target for FY 2003. There has been a consistent decline in *Listeria* incidence over the years. Although 1.03 percent in FY 2002 was the baseline, USDA's goal is to continue to reduce the inci-

dence of *Listeria monocytogenes*. *Listeria* can cause severe illness and even death, particularly for at-risk populations. Any incidence of *Listeria monocytogenes* on RTE products constitutes adulteration under meat and poultry laws. Thus, USDA will stress the need to find new ways to improve the program and the oversight of meat and poultry plants' HACCP operations.

**Program Evaluation.**

Following outbreaks of *listeriosis*, USDA reevaluated its policies and requirements for controlling *Listeria monocytogenes* on RTE meat and poultry products. This included hosting public meetings at which academia, industry, consumer and other constituencies provided scientific and anecdotal information about the pathogen. Based on this information and the risk assessment, USDA developed a directive and an interim final rule for *Listeria monocytogenes*. That information is available at [www.fsis.usda.gov](http://www.fsis.usda.gov).

**Improve Detection of Foodborne Hazards**

With European Union financial support, USDA is partnering with the United Kingdom, Ireland, Denmark, Italy and South Africa to evaluate and develop "gold-standard" methods for the detection and enumeration of *Campylobacter* -- the world's leading cause of bacterial-associated foodborne illness. Having these internationally defined methods increases the acceptability of products, particularly poultry, between trading partners. This study on *Campylobacter* is the first in a number of projects to develop unified methods for the detection of foodborne pathogens. Other pathogens under consideration include *Listeria*, *Salmonella* and *E. coli* 0157:H7.

Exhibit 45: Develop Systems for Detecting Foodborne Pathogens and Chemical Contaminants

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.1.4 Develop new systems for detecting foodborne hazards	3	4	Exceeded

**Analysis of Results.**

The performance goal was exceeded. Food-safety research is an ongoing process that investigates many dangerous pathogens and contaminants simultaneously. This creates

Exhibit 46: Expand Approaches for Detecting Foodborne Pathogens and Chemical Contaminants

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Develop new systems for detecting foodborne hazards	1 Baseline	2	3	2	4

numerous approaches to detecting, controlling, reducing or eliminating each threat. USDA transferred these four significant new technologies to regulatory agencies and the private sector for use in ensuring the safety of the U.S. food supply. These new processes will identify the *Enterococci* bacteria in retail food items, prevent aflatoxin in cottonseed used to feed dairy cattle, classify *Listeria* and detect pathogens in sprouted food products. In FY 1999, the base year for this report, USDA identified one accomplishment. This year's report identifies four aforementioned new technologies, thereby exceeding the target.

The future challenge for food-safety research is to expand the core capacity (basic, applied and developmental) needed to address current threats to the food supply. Another challenge is ensuring USDA promptly and effectively responds to meet all future needs.

**Program Evaluation.**

The Office of Scientific Quality Review peer reviewed relevant projects in the Food Safety National Program. Summary information on these reviews may be obtained from USDA/ARS National Program Staff at (301) 504-4674.

A Program Assessment and Rating Tool assessment was initiated on the Food Safety Research Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

**Selected Results in Research, Extension and Statistics for Objective 3.1**

Rapid, easy, cost-effective and correct classification of bacterial pathogens is critical for regulatory-action agencies and industry. USDA scientists at the Animal Disease Research Unit, in collaboration with scientists at Washington State University, developed a new tool for "subtyping" strains of *Listeria monocytogenes*. Subtyping determines the strain affiliation of *Listeria* specimens isolated in the lab. This new tool will help epidemiologists trace outbreaks back to their source. It also will enhance Government and industry efforts to safeguard food supplies through environmental monitoring, disinfection, sanitation and other measures.

Contaminated sprouts for human consumption are a critical concern for The Food and Drug Administration (FDA) and the sprout-growing industry. Irrigation water is the most critical control point in sprout growing since contaminated water may transfer pathogens to uncontaminated lots. USDA scientists have developed a method using immunomagnetic capture combined with time-resolved fluorescence. This method enables scientists to detect very low levels of pathogens within 6 to 8 hours. Although the technology was developed for spent irrigation water, it also can be used for whole growing sprouts. This new method will have a significant impact on industry and the FDA in allowing the high throughput, cost-effective screening of sprouted food products.

In 2003, USDA and collaborators from Washington State University completed the collection of nationally representative plant-level data. The data described the costs of implementing HACCP requirements and making investments in food-safety technologies for meat- and poultry-slaughter and processing plants. USDA research showed that sanitation and process controls raised the costs of producing meat and

poultry by about 0.5 percent under food-safety standards prior to PR/HACCP. Estimates also suggest that, while PR/HACCP raised production costs by about 1 percent, its benefits still outweigh costs.

USDA also developed an interactive, Web-based data product called the foodborne illness calculator. The calculator is an interactive, Web-based data product released on USDA's Economic Research Service Web site in FY 2003. It is designed to assist public and private policymakers estimate the health-protection benefits of their control efforts. Policymakers can use the calculator to estimate the change in societal costs of foodborne illness under different public and private control options for pathogens. The calculator allows users to choose a pathogen of interest, the number and severity of illnesses, and from several alternative methodologies employed by economists for calculating societal costs.

Many universities, supported in part by USDA funds, are developing new knowledge technologies to enhance the Nation's food-safety system. Dangerous strains of *Campylobacter*, *Salmonella*, *E. coli* and *Listeria monocytogenes* are among the leading pathogens plaguing the food industry. Arkansas scientists developed a single test that can detect all four, eliminating the need for time-consuming, individual tests. Using the same four bacteria, Tennessee scientists developed a geographic-information system to analyze where these illness-causing organisms appear in animal and human populations at 16 locations nationwide. After a *listeriosis* outbreak in 2002 killed 50 goats, Cornell University researchers used genetic fingerprinting techniques to help eliminate the outbreak's source and control the disease. No deaths were reported during subsequent breeding cycles. A Georgia poultry scientist found the causes of fecal contamination in seven poultry plants. This discovery helped produce a safer product for consumers. It also saved the companies about \$500,000 per day, the cost of shutting down each plant.

Georgia scientists, supported with USDA funds, discovered that electrolyzed water eliminates foodborne pathogens on lettuce, apples, eggs and poultry in less than 30 seconds. This element, which is produced by passing electricity through a diluted salt-water solution, replaces the use of harsh chemicals. Another Georgia innovation accurately detects aflatoxin in peanuts. This discovery reduced sampling costs from \$5 to 50 cents. Iowa State University scientists developed a hand-held detection system that reveals invisible fecal contamination. It can be used before and after meat is trimmed. California researchers developed a test to confirm and quantify seven common antibiotics in milk samples. The test was designed to protect the quality of the milk supply and the health of people allergic to certain antibiotics. Nebraska food scientists devised a simple, fast and accurate test that uses light instead of chloroform to detect cooking-oil freshness.

As part of the Northern New England Seafood Alliance, the Maine Cooperative Extension Service offered courses certifying 600 seafood processors in Hazard Analysis of Critical Control Points (HACCP) principles. Post-training samples showed that implementing HACCP reduced *Listeria monocytogenes* contamination in Ready-to-Eat crabmeat from 18 percent to zero.

### **Objective 3.2: Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks**

Exhibit 47: Resources Dedicated to Reduce Pest and Disease Outbreaks

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USDA Resources Dedicated to Objective 3.2	FY 2003	
	Actual	Percent of Goal 3
Program Obligations (\$ Mil)	\$2,208	66%
Staff Years	12,382	54%

## Overview

USDA protects the Nation's animal and plant natural resources through such activities as:

- Conducting offshore threat assessment and risk-reduction activities;
- Regulating and monitoring conditions to reduce the risk of introduction of invasive species;
- Ensuring the safe research, release and movement of agricultural biotechnology events, veterinary biologics and other organisms;
- Managing issues related to the health of U.S. animal and plant resources and conflicts with wildlife;
- Surveying for and detecting exotic pests and diseases in the U.S.; and
- Preparing for emergencies with containment, management and eradication.

The Department's protection strategy has changed because of the transfer of 2,655 agricultural positions, made up of USDA inspectors and support personnel, to the Department of Homeland Security's (DHS) Bureau of Customs and Border Protection. The Homeland Security Act of 2002 authorized this move. Thus, the strategic emphasis has shifted away from safeguarding agriculture by excluding pests and diseases at ports of entry to safeguarding through surveillance activities both abroad and domestically. The measure of passenger compliance with agricultural quarantine inspection regulations, which appeared in this section formerly, was transferred to DHS. The strategy also has changed because of the increased risk associated with accelerating travel and trade. In the past, USDA regulated incoming passengers, vehicles and cargo to keep pest and disease carriers out of the U.S. by intercepting them at entry ports. Now, the Department is focusing more on intensive surveillance, early detection and containing and eradicating invasive organisms before they spread.

The Department also released five new germplasm lines or varieties with resistance to major fungal or viral diseases. Examples of these accomplishments include cowpea varieties with resistance to cucumber mosaic virus and Blackeye Cowpea Mosaic Virus, alfalfa germplasm with resistance to Summer Black Stem, a new fungal resistant rice cultivar and a strawberry variety with resistance to Angular Leaf Spot disease.

Additionally, USDA developed several other new crop varieties with resistance to parasites and pests. An example of these accomplishments includes sunflower germ plasm with resistance to Race-F of the parasitic organism *Orobanche*. This organism is devastating sunflower production in Eastern Europe and the Middle East.

## Serving the Public

The public benefits from these activities through cost reductions in pest and disease control and eradication measures. Other benefits include:

- Facilitating the sale of U.S. agricultural products in other countries;
- Allowing farmers to make adequate incomes;
- Reducing Federal financial assistance;
- Providing U.S. consumers with a wide variety of low-priced food and fiber;
- Protecting public and private lands and property from environmental damage and loss of species; and
- Preventing the suffering of animals and, in some cases, humans from disease.

Enhancing the Nation's capacity to protect its agricultural, food and natural resource systems from threats arising from endemic conditions, natural disasters, accidents and intentional acts is important to food and fiber producers, consumers of these products and the Nation's public health.

The primary goal of any successful agricultural biosecurity program is to prevent entry of a pathogen or pest into a susceptible population of plants or animals. When preventive measures fail, it is imperative to have early detection, rapid and accurate assessment and immediate implementation of various interventions that prevent spread, control the infection and then begin the recovery phase. The early detection of pathogens, pests and other threats, rapid and accurate assessment, and immediate responses that reduce or prevent the damage and control the infection are an essential part of USDA partnerships with State agencies and universities.

USDA is expanding its capacity to use scientific knowledge and expertise to ensure biosecurity of U.S. agricultural and rural communities, and secure and safe food production. Since many pests or pathogens are potential weapons for use by terrorist groups, the Department needs to be prepared for emerging threats – either accidental or deliberate. The effort focuses on pests and diseases that are economically significant, easily spread or have high infectivity at low-infective dose levels.

Rapid, easy, cost-effective and correct detection operates on multiple levels. Intensive production systems, where the farmer or rancher has more direct contact with production units, require different detection systems than are needed in extensive production systems. There are different detection needs for small land area operations versus large land area operations. USDA, State and university diagnostic laboratory linkage helps trace outbreaks to their source. The linkage also allows the Department to safeguard food production and supplies through appropriate containment measures.

These accomplishments help ensure the continued safety of U.S. food production for both domestic and international consumers. They also advance and expand the capacity of U.S. agriculture to provide a front-line defense for plant pathogens that attack several agronomic species. These species constitute the foundation of U.S. agricultural crop production.

### **Challenges for the Future**

Globalization, Free Trade Agreements (FTAs) and transportation technologies have increased the risk of exotic invasive species. A key protection strategy has been to regulate and inspect imports of agricultural products most likely to be carrying such species. Recent FTAs have increased the number of requests for imports into this country significantly. This increase has placed an added burden on USDA to scientifically assess a growing list of potential animal and plant health threats while, at the same time, not impeding trade.

The recent creation of the Department of Homeland Security included USDA's port-of-entry inspectors. While this reorganization will allow USDA to focus on strengthening other activities in the protection system, it also poses challenges in coordinating and communicating plans and policies between the two organizations.

To accomplish its mission, USDA coordinates with States, academic institutions and private industry in surveillance, detection and response to outbreaks. Organizations that have enjoyed autonomy and independence now must come together, communicate fully and work rapidly to contain outbreaks. With the heightened concerns about potential bioterrorism, the surveillance system needs to be expanded to include a range of other potential threats.

The protection and safety of the Nation's food production is a constant concern for producers and the industries that transport, store, process and deliver food products to the public. Reducing, controlling or eliminating agricultural pest and disease outbreaks requires a steady stream of new technologies and processes to detect, analyze and verify the emergence of pests and diseases before they become economic or health threats. The multiple-partner, diagnostic-laboratory partnership reduces the risks facing U.S.

agricultural producers by strengthening and increasing state linkages to the five National Plant Pest and Disease Diagnostic Centers.

Sclerotinia is a serious crop disease. USDA implemented the Sclerotinia Initiative in cooperation with stakeholders from seven participating commodity groups to reduce the disease's impact. Soybean rust, a devastating disease that is widespread in South America, may spread to the U.S. USDA plays an active role in collaborative efforts with stakeholders and non-Government organizations to develop a defensive strategy for the potential invasion of soybean rust. While USDA is developing molecular genetic tools and new sources of resistance to this serious pathogenic threat, research progress is impeded by a lack of adequate space in the Department's Biological Safety Level-3 (BSLC-3, the highest security level for research on plants to prevent the escape of disease into the environment)-containment facilities. Sclerotinia and soybean rust are only two of the hundreds of serious plant diseases that could pose a threat to the security of American agriculture in the future.

### **Reduce the Risk of Entry and Establishment of Pests and Diseases**

In order to reduce the risk of entry and establishment of pests and diseases, USDA does a range of interconnected activities collectively known as the "safeguarding system." These activities include:

- Collecting information on pests and diseases in other countries and assisting the respective countries' governments with them;
- Based on scientific risk assessments, deciding which imports may enter the U.S.;
- Devising policies related to inspection for and treatment of prohibited or contaminated commodities at ports of entry;
- Trapping and surveying to detect the presence of harmful, economically significant pests and diseases inside the country, or to delimit the boundaries of infestations;
- Identifying pests and diseases intercepted at ports or discovered inside the country;
- Releasing sterile insects or natural predators to prevent or manage the spread of pests;
- Regulating transport of commodities into and out of quarantine zones;
- Coordinating with states and academic institutions on emergency eradication efforts;
- Conducting research related to these activities; and
- Providing national leadership and expertise related to animal and plant health.

The outcome of these efforts is a safer U.S. agriculture and environment. Harmful, economically significant pests and diseases are kept out of the country effectively. If they do enter, they are detected and eradicated before becoming established.

The following discussion separates programs related to plant pests and diseases from those related to animal pests and diseases. Based on a broad review conducted in 1999, the National Plant Board requested that USDA coordinate a comprehensive invasive plant-pest detection system. Early detection greatly reduces potential economic and environmental losses and eradication costs. In response, the Department recently added 26 pest-survey specialists to its Plant Protection and Quarantine staff to help ensure that exotic plant pests and diseases are detected before they can spread. Until recently, many States and cooperators did not have the resources to conduct surveys according to USDA guidelines or at a level adequate to provide early detection of plant pests or diseases. Thus, increased funding has been allotted for State cooperators to increase their pest detection and survey infrastructure and activities.

The Animal Health Monitoring System is a proactive animal health monitoring and surveillance system. The National Animal Health Monitoring System (NAHMS) delivers objective information regarding animal health as it pertains to U.S. trade, agricultural productivity, public health and on-farm quality as-



surance. Information is developed and entered into NAHMS through data sharing and effective partnerships with animal commodity producer groups, State governments, university researchers and other Federal agencies.

Exhibit 48: Strengthen the Effectiveness of Pest and Disease Surveillance and Detection Systems

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.2.1 Increase the percent of known, significant introductions of plant pests or diseases that are detected before they spread from the original area of colonization and cause severe economic or environmental damage (Percentage)	95%	Available 12/31/03	Deferred
3.2.2 Number of significant introductions of foreign animal pests or diseases that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals or humans	1	1	Met

**Analysis of Results.**

The performance goal for Plant Pest Detection was deferred. While the surveillance and detection goals long have been part of USDA’s mission, this measure remains under development as a formal management tool. Actual results will be available at the end of the calendar year. At that time, States participating in the Cooperative Agricultural Pest Survey program will have finished collecting data on field survey findings and entered them into the National Agricultural Pest Information System. This performance goal’s results will be published in next year’s report.

Exhibit 49: Strengthen the Effectiveness of Pest and Disease Detection and Management Systems

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the percent of known, significant introductions of plant pests or diseases that are detected before they spread from the original area of colonization and cause severe economic or environmental damage (Percentage)	N/A	N/A	N/A	85% Baseline	Available 12/31/03
Number of significant introductions of foreign animal pests or diseases that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals or humans	N/A	N/A	N/A	0 Baseline	1

N/A = Not Applicable

The performance goal for animal diseases, new to USDA’s performance plan, was met. The numerical target of “1” was set after the major outbreak of *Exotic Newcastle Disease* already had occurred. The target would be better stated, “Not greater than the existing one.” The outbreak cost USDA and poultry producers millions of dollars because many flocks had to be depopulated and establishments decontaminated. These steps were necessary because the remaining poultry needed to be protected from this fatal disease.

It is a continuing challenge to control the disease because the smuggling of parrots and hobby birds is a possible factor in its introduction and spread. USDA, working together with its partners in State Government and the private sector, has eliminated more than 15 endemic diseases from the U.S. This partnership also has prevented many exotic animal diseases from entering the country. These actions have protected U.S. livestock and poultry, the income of farmers who raise them, the international markets of the U.S.-export community, the meat supply of U.S. consumers and human health. The value of the losses avoided by conducting monitoring programs far exceeds the cost.

### **Program Evaluation.**

The results from the Office of Management and Budget's Program Assessment Rating Tool (PART) showed that the Animal and Plant Health Inspection Service (APHIS) has a clearly defined purpose. APHIS is to seek additional input from sources outside of the Government, including peer evaluations when appropriate. While APHIS is considering the best way to seek the input, it has not identified an appropriate, non-Governmental organization capable of conducting an independent review of the program. APHIS believes that an inherent conflict of interest would prevent most organizations with sufficient expertise in areas of animal care and the program's mission from conducting an objective review. These organizations either represent individuals and facilities regulated by the Animal Care Program, such as the American Zoo and Aquarium Association, or belong to the animal-protection community, such as the Humane Society of the United States. In either case, these organizations would have a bias preventing them from evaluating the program objectively. APHIS may invite international organizations or counterparts to conduct independent reviews. The Marine Mammal Commission also may be able to review the part of the program that focuses on marine mammals.

APHIS needs to develop additional goals (including long-term goals) to measure its impact on the humane treatment of animals. In FY 2003, the Animal Welfare Program developed a long-term goal to ensure the humane care and treatment of animals covered under the Animal Welfare Act. To measure progress toward this goal, the program is tracking the number of animals affected by noncompliances noted by inspectors at regulated facilities. The measure is "number of animals affected by noncompliances documented on inspection reports." A baseline, target and results were developed and submitted with the FY 2005 budget request. A full copy of the PART may be found at [www.whitehouse.gov/omb/budget/fy2004/pma.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma.pdf).

PART assessments were initiated on the Animal and Plant Health Monitoring and Surveillance Programs as part of the FY 2005 budget process. These programs are divided by plant (Plant Detection and Animal and Plant Health Regulatory Enforcement) and animal (Animal Health, Animal and Plant Health Regulatory Enforcement, and Veterinary Biologics). A full copy of the completed evaluations will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

### **Improve Animal Emergency Management**

The Emergency Management System (EMS) is a joint Federal-State-industry effort to improve the ability of the U.S. to deal successfully with animal-health emergencies. These emergencies could range from natural disasters to introductions of exotic animal diseases. In addition to unintentional introductions of such diseases, EMS addresses intentional introductions and emerging diseases which could threaten trade. By ensuring that Federal, State and private organizations across the country are working actively to prevent, detect and respond to animal-health emergencies, USDA is improving the national infrastructure. It is doing this to protect the Nation's food and fiber supply and public health. While the challenges of international travel and trade are increasing the odds of animal diseases spreading across borders, USDA and its partners can reduce the devastating effects that a large animal-health emergency would have on national and global economies significantly. They can do this by being prepared to move quickly to prevent small emergencies from growing to epidemic proportions.

Currently, USDA is hiring emergency-management coordinators to work throughout the country and assist in developing emergency-response infrastructures. This staff will help coordinate emergency-response resources from all sources in each State (including State, Federal and private resources). For regional threats, they will help manage resources available in two or more States. Coordinators will monitor States' progress in meeting established standards for emergency preparedness and response. Reviews of States and territories to determine their status in meeting the standards for animal-health emergencies will be conducted every two years. For the review, USDA and each State veterinarian conduct a joint self-

assessment of the State's preparedness and emergency-response capability. USDA emergency-management coordinators, as they are hired, will check this self-report.

**Exhibit 50: Increase the Number of States and Territories Meeting Standards**

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.2.3 Increase the number of States and territories which meet the standards for preventing, detecting and responding to animal health emergencies.	30	Available 12/31/03	Deferred

**Analysis of Results.**

The performance goal was deferred. Results of the second review will be available December 31, 2003. Currently, a survey of State Veterinarians and Animal and Plant Health Inspection Service (APHIS) Veterinarians-in-Charge is being developed. This performance goal's results will be published in next year's report.

**Exhibit 51: Actual Number of States and Territories Meeting Standards**

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the number of States and territories which meet the standards for preventing, detecting and responding to animal health emergencies	0	0	1	1 <sup>1</sup> Baseline	Available 12/31/03

<sup>1</sup>Revised to reflect final data.

**Program Evaluation.**

The Emergency Management Program of the Animal and Plant Health Monitoring and Surveillance Programs conducts continual self-evaluations and receives input from the joint State-Federal industry National Animal Health Emergency Management System Steering Committee. Based on comments in the Animal Health Safeguarding Review, which may be obtained at [www.aphis.usda.gov/vs/pdf\\_files/safeguarding.pdf](http://www.aphis.usda.gov/vs/pdf_files/safeguarding.pdf), the program has enhanced emergency-response capabilities greatly by building a response system shared by local, State, Federal and Tribal entities. The program implemented an incident-command system in response to *Avian Influenza* in Virginia in 2002 and *Exotic Newcastle Disease* in California and other States in 2003. State, Tribal and local Government cooperators were summoned to help contain the situation and eliminate the diseases. A copy of the review of the response to *Avian Influenza* in Virginia can be obtained by calling APHIS Veterinary Services Emergency Programs at (301) 734-8073. A copy of the evaluation of the response to *Exotic Newcastle Disease* will be available March 2004 by calling APHIS Policy and Program Development at (301) 734-8511.

A PART assessment was initiated on the Animal and Plant Health Monitoring and Surveillance Programs (Emergency Management Systems) as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

Meantime, a recent internal management study, *Analysis Paper: Emergency Management Coordination in APHIS*, June 6, 2003, APHIS Policy and Program Development, Riverdale, Maryland, focused on USDA's animal and plant-pest and disease emergency-response capability. Copies of the study may be obtained by calling APHIS Policy and Program Development at (301) 734-8511.

A review (self-report) of animal health emergency-management systems in each State is underway. The self-report will be completed by the end of the first quarter of FY 2004. The emergency-management coordinators who are hired will meet with States in FY 2004. The coordinators will review the data

collected. When it is completed, the report from this review can be obtained by calling the APHIS Deputy Administrator, Veterinary Services, at (202) 720-5913.

## Improve Animal Diagnostic Services

USDA partners with States to provide effective emergency-response systems to detect, respond to and eliminate outbreaks of invasive pests and diseases. Having a fully operational diagnostic laboratory located close to a detection site and linked to a national network increases the rapidity with which an unknown disease sample can be tested accurately. It also increases the probability of containing an introduction before it becomes a significant outbreak. To address these needs, Congress appropriated funds for the National Animal Health Laboratory Network (NAHLN) in FY 2002. As part of a pilot for NAHLN, 12 State/university diagnostic laboratories received funding. With the funding, the laboratories developed capacity and surveillance programs for high-priority exotic animal diseases considered to be bioterrorist threats. Additionally, contracts were established with 26 diagnostic laboratories to assist with testing for Chronic Wasting Disease and scrapie, both of which are animal nervous system diseases.

Between these two networks, laboratories in 26 States are available to assist National Veterinary Services Laboratories (NVSL) in providing necessary Federal animal-diagnostic services. These laboratories are in the process of receiving training and further enhancing their laboratory facilities.

Exhibit 52: Ensure States Provide Animal Diagnostic Services

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.2.4 Increase the number of States that can provide necessary Federal animal diagnostic services	25	26	Exceeded

### Analysis of Results.

The performance goal was exceeded. NVSL, working in conjunction with the Cooperative State, Research, Education and Extension Service, has developed a laboratory network modeled after a broader na-

tional response strategy to integrate Federal, State and local resources more tightly. This initiative will allow any type of animal health emergency to be managed effectively. Having laboratories across the country available to assist with various diagnostic-testing techniques prepares the U.S. for emergency animal disease-situations. Additionally, during large-volume testing periods, having these laboratories guarantees timely test results. During FY 2003, six additional States joined the combined network as participants. NAHLN laboratories received training in sensitive methods for distinguishing such viruses as *Foot and Mouth Disease*, *Avian Influenza* and *Exotic Newcastle Disease*. During FY 2004, USDA will look into bolstering the capabilities of the current laboratory network members before adding additional States.

### Program Evaluation.

A PART assessment was initiated on the Animal and Plant Health Monitoring and Surveillance Programs (Veterinary Diagnostics Program) as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

Exhibit 53: Increase in States that Provide Animal Diagnostic Services

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the number of States that can provide necessary Federal animal diagnostic services	N/A	N/A	N/A	20 Baseline	26

N/A = Not Applicable

## Improve Plant Diagnostic Laboratory Capabilities

International Standards Organization (ISO) certification of the five National Plant Diagnostic Network (NPDN) Centers ultimately will establish harmonized leadership and coordination of the diagnostic laboratories. It also ensures the performance of timely diagnostics with uniform and adequate quality, and enhances the process of producing and maintaining a timely, comprehensive catalogue of pest- and disease-outbreak occurrences in a nationally accessible database. Certification and linked communication are essential to identifying new or uncommon pests and diseases accurately. USDA, in conjunction with the States, will expedite initial control responses, verify the physical boundaries of an outbreak and initiate regional or national containment strategies.

Exhibit 54: Ensure the Capabilities of Plant and Diagnostic Laboratories are Improved

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.2.5 Improve the capabilities of plant diagnostic laboratories:			Met
<ul style="list-style-type: none"> <li>• Certify National Plant Pest and Disease Diagnostic Network Centers</li> </ul>	3	3 <sup>1</sup>	
<ul style="list-style-type: none"> <li>• Connect State Plant Diagnostic Laboratories to the National Agricultural Pest Information System at Purdue University</li> </ul>	50	50 <sup>1</sup>	

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

### Analysis of Results.

The performance goal was met. No trend data are available since the Improve the Capabilities of Plant Diagnostic Laboratories effort began in FY 2003.

NPDN certification is on schedule, with three of the five National Centers certified for soybean rust.

Exhibit 55: Improve the Capabilities of Plant Diagnostic Laboratories

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Certify National Plant Pest and Disease Diagnostic Network Centers	N/A	N/A	N/A	N/A	3 <sup>1</sup> Baseline
Connect State Plant Diagnostic Laboratories to the National Agricultural Pest Information System at Purdue University	N/A	N/A	N/A	N/A	50 <sup>1</sup> Baseline

N/A = Not Applicable

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

USDA agencies partner with State agencies and universities to achieve a high level of agricultural biosecurity through the early detection, response and containment of outbreaks of invasive pests and diseases. Diagnostic laboratories, adequately staffed and stocked with cutting-edge technology, are essential to accomplishing this mission.

Future challenges to broaden overall certification, specifically developing ISO-certification criteria, include the difficulty of coordination, regional differences and the development of standard criteria. The process of connecting State and university plant-diagnostic laboratories to NAPIS is slightly behind schedule because of unanticipated funding shortfalls. These shortfalls result from the budget difficulties that most States currently are facing. While just 25 States had at least 1 plant diagnostic laboratory connected to NAPIS, at the end of the year, all 50 were connected.

Future challenges to improving the capabilities of plant diagnostic laboratories include the availability of sufficient non-Federal funding to link at least one laboratory in each State to NAPIS, and to continue to increase the number of connected laboratories in each State.

**Program Evaluation.**

No program evaluations were performed in FY 2003. All research projects undergo an external peer review at the beginning of their five-year program cycle. Any research findings undergo peer review before they are published in a scientific journal. New and improved varieties are not released until they successfully complete a rigorous evaluation of the claims made for them in uniform variety tests that are conducted at 24 or more locations.

**Research Plant Pathogens**

USDA develops and releases to potential users varieties and/or germplasm that are new or provide significantly improved (either through traditional breeding or biotechnology) characteristics enhancing pest or disease resistance. Routine delivery of these new genetic resources is needed to protect agricultural crops from the emergence of new races of virulent pathogens. These resources also can prevent the introduction of severe diseases in the U.S. by human transport or other means.

Exhibit 56: Report of Actual Variety and Germplasm Releases

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
3.2.6 Release a series of new or improved varieties or germplasm that exhibit enhanced disease resistance to each of the following plant diseases: Sclerotinia, downy mildew, rusts and exotic viral diseases	5	5	Met

**Analysis of Results.**

The performance goal was met. USDA transferred five new crop varieties with enhanced pest and disease resistance traits into public domain repositories. Use of these five genetic resources by private sector major seed companies will ensure widespread adoption of this technology to

sustain and improve U.S. agricultural productivity. Development of risk-reducing technologies is a central strategy in U.S. research efforts to guard against catastrophic economic losses due to crop pests and diseases. Continued development of technological advances in crop protection creates numerous approaches for improved detection, control or elimination of severe plant diseases. Research is different from most government programs. In FY 1999, the base year for this report, USDA released nine new or improved varieties. Currently, five significant accomplishments have been identified, meeting the target as established.

USDA will determine the need for additional research to meet future threats to the security of the U.S. crop-production system. With simultaneous research taking place on different issues, diseases and agriculturally important crops, it is difficult to predict exactly when new varieties or germplasm will be ready for release. Thus, the number of significant releases will vary from year to year.

**Program Evaluation.**

The Office of Scientific Quality Review evaluated relevant projects in the Plant, Microbial, Insect Genetic Resources, Genomics & Genetic Improvement National Program. The Office also certified approved project plans. Summary information on these reviews is available from the USDA/Agricultural Research

Exhibit 57: Variety and Germplasm Releases with Enhanced Resistance to Pests and Diseases

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Release a series of new or improved varieties or germplasm that exhibit enhanced disease resistance to each of the following plant diseases: Sclerotinia, downy mildew, rusts and exotic viral diseases	9 Baseline	9	5	5	5

Service (ARS) National Program Staff. Copies of the reviews on crops may be obtained by calling the National Program Staff office at (301) 504-6252. Copies of the reviews on animals may be obtained by calling ARS' National Program Staff office at (301) 504-7050.

### **Selected Results in Research, Extension and Statistics for Objective 3.2**

The National Animal Germplasm Program has approved 37 chicken lines developed by the USDA. The lines will be included in the National Registry of Genetically Unique Animal Populations. USDA developed the registry to recognize important genetic resources that have had and continue to have a significant impact upon the research community and the industry. These unique chicken lines have enabled scientists to characterize agriculturally important poultry traits, especially those involved in viral disease resistance. The scientists also have applied the resulting information to control economically important diseases.

Based on the development of kaolin clay-based insect repellents, evaluation of "soft" insecticides and development of biological control and other technologies, USDA developed a successful pilot project in California to control Pierce's disease and its carrier, the glassy-winged sharpshooter. Pierce's disease, which strikes grapevines, threatens the \$33 billion wine industry, almonds and other agricultural crops, landscape plants and forest trees.

USDA scientists and the Department of Defense patented the most promising new mosquito repellent in 50 years. DEET, discovered in 1954 by USDA, is the most widely used repellent in the world. The new repellent, SS 220, is longer lasting at lower concentrations and, unlike DEET, is harmless to plastics. Mosquitoes transmit a wide variety of deadly diseases - such as malaria, dengue and West Nile fever - for which there are no vaccines.

USDA scientists earned a patent for a novel biological control agent that destroys 95 percent of the aquatic stages of *Culex pipiens*, one of the most important West Nile virus carriers. The agent, CuniNPV, is a naturally occurring baculovirus that affects only *Culex* mosquitoes. When ingested by larvae, CuniNPV quickly multiplies, killing them before they transform into disease-transmitting adults. Besides sequencing the entire genome of CuniNPV, USDA scientists established that they could greatly increase effectiveness by simply combining it with low concentrations of magnesium.

Veterinary medicine and animal disease diagnosis have improved thanks to new genetic technologies. These technologies speed vaccine and diagnostic-tool development. With USDA support, Tennessee researchers devised several antibodies that detect a substance called antigen 85 in cows infected with Johne's disease. This disorder is one of the top three diseases in beef and dairy cattle. Johne's disease also has caused \$250 million-worth of annual economic losses. Scientists at the Virginia-Maryland Regional College of Veterinary Medicine developed a livestock vaccine against brucellosis, which affects both animals and humans. The complete genome sequence of *Mycobacterium paratuberculosis*, the bacterium that causes Johne's disease, was deposited into a publicly accessible database. The availability of the genome sequence will lead to better detection methods, the development of vaccines and the disease's ultimate eradication.

A way to reduce chemical use in agriculture is to entice pests away from the cash crop and onto a more-appetizing perimeter "trap" crop. This plan would allow farmers to kill the bugs on the trap crop. Connecticut researchers, supported in part with USDA funds, used this approach with a pepper pest. The treatment left the cash crop nearly 100-percent pest-free, reducing pesticide use nearly 90 percent. It also saved growers up to \$153 per acre. Kentucky State University scientists devised a mechanical means to reduce chemical use with honeybees, which are vital crop pollinators. The scientists installed special screens under hives to trap varroa mites, which are major honeybee predators.

USDA-supported scientists contributed to the completion of a 10X draft genome sequence of *Fusarium graminearum*. This microorganism causes head blight (scab) in wheat and barley. The draft has been deposited into a publicly accessible database. The availability of the sequence will increase the potential for developing methods to control this fungal pathogen. *Fusarium graminearum* caused more than \$3 billion in losses to U.S. farmers in the 1990s.



## STRATEGIC GOAL 4: IMPROVE THE NATION'S NUTRITION AND HEALTH

Exhibit 58: Resources Dedicated to Improve the Nation's Nutrition and Health

USDA Resources Dedicated to Strategic Goal 4	FY 2003	
	Actual	Percent of Total USDA
Program Obligations (\$ Mil)	\$42,245	36%
Staff Years	2,974	3%

USDA is strongly committed to improving the nutrition and health of everyone living in the United States. For example, in addition to increasing the resources households have for proper nutrition at home and at school, the Department's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and the Food Stamp Program (FSP) invested more than \$200 million and more than \$300 million, respectively, in nutrition donation in 2003. Also, in May 2003, the Department announced the purchase of 39.1 million pounds of fruit and vegetables for donation to schools, neighborhood shelters for needy families and other food-aid institutions. Overall, USDA distributed more than \$1.3 billion worth of commodity foods in 2003. The Department's distribution of these kinds of nutritious foods is making a real difference in the lives of children and low-income people across America.

USDA also awarded more than \$4 million worth of Team Nutrition training grants to help State agencies improve children's lifelong eating and physical activity habits. Team Nutrition provides schools with nutrition-education materials for children and families. It also offers technical-assistance materials for school food-service directors, managers and staff. Additionally, the program provides materials to build school and community support for healthy eating and physical activity. State agency partners provide training and technical assistance to support these programs in local schools.

Additionally, recent studies have shown that FSP, the Nation's largest nutrition-assistance program, served an increased share of those eligible for benefits two years in a row. Evidence is strong that the program is reaching more working families and the accuracy of FSP payments is at the highest level of its history.

### Objective 4.1: Improve Access to Nutritious Food

Exhibit 59: Resources Dedicated to Improve Access to Nutritious Food

USDA Resources Dedicated to Objective 4.1	FY 2003	
	Actual	Percent of Goal 4
Program Obligations (\$ Mil)	\$41,322	98%
Staff Years	1,300	44%

#### Overview

USDA's nutrition-assistance programs represent the Federal Government's primary effort to reduce hunger and improve nutrition among low-income people in the U.S. By working with States to maintain program access for those who are eligible and ensure effective benefit delivery to participants, USDA seeks to provide access to an adequate diet for those with low income and few resources.

### Serving the Public

The Department manages nutrition-assistance programs that reach one in five people directly in the U.S. annually. Additionally, these programs promote better health for all people in the U.S. through more than \$500 billion in food and nutrition education, guidance and promotion. USDA policy seeks to ensure that all Americans have access to a healthy and nutritious food supply, regardless of income. A well-nourished population is healthier, more productive and better able to learn. No child or family should go hungry.

### Challenges for the Future

Periodic studies, conducted most recently for FY 2001, show that many eligible individuals and families do not participate in USDA's nutrition-assistance programs. The *USDA Strategic Plan for FY 2002-2007* includes strategies to improve access to a number of underutilized programs, particularly the Food Stamp, School Breakfast and Summer Food Service Programs. The strategies also call for education and outreach efforts to make eligible people aware of the availability of nutrition assistance. USDA's ability to achieve its goals depends partly on sound legislative authority to promote effective access to nutrition assistance, and on adequate funding to support program participation. Additionally, as programs are delivered by third parties, with voluntary participation, responsibility for reaching program goals is shared by the Federal, State and local Governments, non-profits, and other cooperatives, including eligible recipients.

### Reduce Hunger and Improve Nutrition

Resources distributed through 15 USDA programs represent the primary Federal effort to fight hunger and poor nutrition in the U.S. FSP helps participants improve their food-purchasing power through monthly benefits delivered primarily through electronic debit technology. The school meals programs provide meals and snacks to all school children with a free or reduced-price rate for those in low-income families. WIC provides supplemental food packages, nutrition education and referrals to health and human services for low-income pregnant women, breastfeeding and non-breastfeeding new mothers, and infants and children up to 5 years old.

USDA is committed to improving access to and use of vital nutrition assistance and education programs for eligible low-income people.

Exhibit 60: Improve Nutrition

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
4.1.1 Improve Access to Nutritious Food (MII):			Met
• Food Stamp Program participation (people)	20.7	21.3	
• Special Supplemental Nutrition Program for Women, Infants and Children participation (average monthly participation) <sup>1</sup>	7.7	7.6	
• National School Lunch Program participation (average daily participation)	28.7	28.3	
• School Breakfast Program participation (average daily participation)	8.8	8.4	
• Child and Adult Care Food Program meals served	1,831	1,766	
• Summer Food Service Program participation (average daily participation)	2.0	Available 02/04	

<sup>1</sup>New measure under development.

**Analysis of Results.**

The performance goal was met. Because program participation is voluntary, performance projections are estimated based on macroeconomic assumptions and other factors that impact the behavior of eligible populations.

The increase in program participation from the 2002 level reflects the impact of decline in economic conditions for some U.S. households. It also reflects continuing efforts to ensure program access for eligible people. This participation shows that the programs can respond quickly and effectively to changing economic conditions, and provide access to nutritious food. In particular, FSP participation exceeded expectations, growing substantially over the FY 2002 level.

Exhibit 61: Trends in Improving Nutrition

Trends <sup>1</sup>	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Food Stamp Program participation (people)	18.2	17.2 Baseline	17.3	19.1	21.3
Special Supplemental Nutrition Program for Women, Infants and Children participation (average monthly participation) <sup>2</sup> .	7.3	7.2 Baseline	7.3	7.5	7.6
National School Lunch Program participation (average daily participation)	26.9	27.2 Baseline	27.5	28.0	28.3
School Breakfast Program participation (average daily participation)	7.4	7.6 Baseline	7.8	8.1	8.4
Child and Adult Care Food Program meals served	1,638	1,671 Baseline	1,681 <sup>3</sup>	1,737 <sup>3</sup>	1,766
Summer Food Service Program participation (average daily participation)	2.2	2.1 Baseline	2.1	1.9	Available 02/04

<sup>1</sup>All data is in millions.

<sup>2</sup>New measure under development.

<sup>3</sup>Revised to reflect final data.

USDA made expanding the Summer Food Service Program a priority during 2003. The Department undertook national and regional efforts to improve program participation. USDA hopes that these efforts will contribute to improved access and participation in this underutilized program in future years.

For the future, results related to this objective depend on a variety of factors. Such socioeconomic issues as the strength of the economy and job availability will shape the scope and impact of nutrition-assistance program performance. The quality of program delivery at the State and local levels also will impact results. Maintaining effective partnerships with State and local cooperators, in light of State-level resource constraints, remains an ongoing challenge.

**Program Evaluation.**

USDA completed the following analyses and evaluations:

- Characteristics of Food Stamp Households: FY 2002 (Advance) (FNS)
- Trends in Food Stamp Program Participation Rates: 1999 to 2001 (FNS)
- Food Stamp Participation Rates and Benefits: An Analysis of Variation Within Demographic Groups (FNS)
- Expunging Food Stamp EBT Benefits: A Case Study of the Elderly in Three States (FNS)
- Characteristics of Food Stamp Households: FY 2001 (FNS)
- Reaching Those in Need: State Food Stamp Participation Rates in 2000 (FNS)
- Elderly Participation and the Minimum Benefit (FNS)
- Empirical Bayes Shrinkage Estimates of State Food Stamp Participation Rates for 1994-1999 and 1998-2000 (FNS)
- Evaluation of the School Breakfast Program Pilot Program Interim Report (FNS)

- Household Food Security in the United States, 2001 (ERS)
- The Emergency Food Assistance System—Findings From The Client Survey (ERS)
- Hunger: Its Impact on Children’s Health and Mental Health (ERS)
- The Emergency Food Assistance System—Findings From the Provider Survey (ERS)
- Exploring Food Purchase Behavior of Low-Income Households: How Do They Economize? (ERS)
- Food Stamp Caseloads Over the Business Cycle (ERS)
- Food Stamp Leavers Research Study—Study of ABAWDs Leaving the Food Stamp Program in South Carolina (ERS)
- Food Stamp Leavers Research Study—Study of Nonwelfare Families Leaving the Food Stamp Program in South Carolina (ERS)
- The WIC Program: Background, Trends and Issues (ERS)
- Feeding Low-Income Children When School Is Out—The Summer Food Service Program (ERS)

Reports prepared by FNS are available at: [www.fns.usda.gov/oane/MENU/Published/Publications.htm](http://www.fns.usda.gov/oane/MENU/Published/Publications.htm).  
Reports prepared by ERS are available at [www.ers.usda.gov/Publications/](http://www.ers.usda.gov/Publications/).

Additionally, the Government Accounting Office (GAO) released the following audits related to this objective:

- *Food Stamp Employment and Training Program: Better Data Needed to Understand Who is Served and What the Program Achieves (GAO-03-388)*: GAO examined the population served by the Food Stamp Employment and Training Program (E&T), the program’s services and what is known about E&T’s outcomes and effectiveness. GAO has recommended improvement in data collection and evaluation of the program. While USDA officials agreed to consider GAO’s recommendations, they expressed concern over the costs of implementing them in light of competing priorities.
- *Food Assistance: Potential to Serve More WIC Infants by Reducing Formula Cost (GAO-03-331)*: GAO examined the extent to which WIC agencies have reduced their use of non-contract brands of infant formula to lower WIC program costs. GAO recommended that USDA work with WIC agencies to reduce nonstandard formula use. USDA plans to analyze the level of need and, if warranted, work with State agencies to develop policy and train local agencies on formula usage.

GAO reports are available at [www.gao.gov](http://www.gao.gov).

A Program Assessment Rating Tool assessment was initiated on the Food Stamp Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

## **Selected Results in Research, Extension and Statistics for Objective 4.1**

Limited-resource families in the Oregon State University Nutrition Program learned budgeting, menu planning, product labeling and comparison shopping. The program helped these families eat healthier and get the most for their money. More than 60 percent of those who complete the program say that they now read nutrition-facts labels to make healthier choices. Forty-four percent say they have enough food each month. Cooperative Extension expects to save Oregon more than \$3.60 in future health costs for every \$1 invested to improve nutrition behaviors.

National data show that each dollar invested in the Expanded Food and Nutrition Education Program (EFNEP) leads to \$10.64 in savings in future health care costs. EFNEP is a national Cooperative Extension program that targets low-income homemakers with young children. Delaware EFNEP doubled the

number people consuming more dairy, fruit, vegetables, breads and cereal products. It also allowed this same group to get all of their recommended nutritional daily allowances. A Purdue University EFNEP program is tailored to Spanish-speaking residents. Almost half the participants in this program made the recommended changes in nutrition for their households. In Arizona, 11,640 youths began eating better and experienced improved overall nutrition.

## Objective 4.2: Promote Healthier Eating Habits and Lifestyles

Exhibit 62: Resources Dedicated to Promote Healthier Eating Habits and Lifestyles

USDA Resources Dedicated to Objective 4.2	FY 2003	
	Actual	Percent of Goal 4
Program Obligations (\$ Mil)	\$757	2%
Staff Years	551	19%

### Overview

Eating right is vital to promoting health and reducing the risk for death or disability due to such chronic ailments as heart disease, certain cancers, diabetes, stroke and osteoporosis. Sadly, a large gap remains between recommended dietary patterns and what Americans actually eat. USDA's nutrition programs focus on improving eating behaviors through nutrition promotion and services. These programs also provide technical assistance, training and resources for State and local agency staff to ensure delivery of quality services.

### Serving the Public

Promoting healthy eating and lifestyle behaviors is a vital public health issue. Overweight and obesity soon will rival cigarette smoking as a leading cause of premature death and disability in the U.S. According to the Surgeon General's *2001 Call to Action to Prevent and Decrease Overweight and Obesity*, the costs related to obesity and inactive lifestyles reach into the billions of dollars annually. Based on the Surgeon's General report, the human cost attributed to this cause is approximately 300,000 deaths annually. The burden of medical costs and the loss of productivity are shared by all Americans.

Nutrition, health and education professionals look to USDA to provide the information, tools and educational materials they need to help people improve their diets. Additionally, USDA develops and distributes information, and provides assessment and educational tools for the general public. One such tool is the Interactive Healthy Eating Index (IHEI). The Index allows an individual to assess daily food intake and compare it to current national standards. In 2003, individuals used IHEI more than one million times to help them check their own food choices and identify how they could be improved.

Additionally, USDA's nutrition education for the public will focus on providing information that will motivate Americans to improve their food choices. This focus includes a particular emphasis on attaining and maintaining a healthy weight. Because low-income people and members of certain ethnic groups experience a disproportionate share of diet-related problems and risk factors, USDA's nutrition-assistance programs include strategies to convey motivational messages and behavior-focused nutrition guidance to encourage healthier eating habits. Tools such as the *Eat Smart. Play Hard.*<sup>TM</sup> campaign and Team Nutrition help nutrition, health and education professionals reach low-income families, children and their caregivers make healthy choices together early in life and beyond.

### Challenges for the Future

As the Surgeon General’s report notes, more than 6 in 10 Americans are overweight or obese, with the number growing. The most recent statistics from the Center for Disease Control and Prevention indicate that 15 percent of 6-to-19-year-old children and adolescents are overweight. These numbers are even higher among low-income Americans. To meet the challenge posed by obesity and diet-related diseases, USDA will continue to focus its efforts on:

- Using sound science to provide healthy school meals;
- Promoting breastfeeding;
- Developing educational materials with information designed to help Americans improve their food choices; and
- Maintaining a healthy weight.

While an understanding of healthy eating is vital knowledge, it is not enough. Messages and materials must be crafted to convince Americans to make such positive changes as selecting a balanced diet with more fruits and vegetables, and being sensible about calorie intake.

### Healthier Eating Habits and Lifestyles

A healthy diet, which includes fruits and vegetables, can lessen the risk for certain chronic illnesses. Thus, USDA encourages and promotes eating these foods through its nutrition-assistance programs. For babies, breastfeeding has been shown to make a significant difference in their health in infancy and beyond. Since all Americans can benefit from improving their diets, USDA is distributing educational materials with simple, clear messages about what and how much Americans should eat.

Exhibit 63: Improve America’s Diet

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
4.2.1 Promote Healthier Eating Habits and Lifestyles:			Exceeded
• Support for fruits and vegetables provided through nutrition assistance programs (\$ Mil)	8,246	8,351 <sup>1</sup>	
• School Meals Initiative monitoring reviews conducted by State agencies	2,900	4,113 <sup>1</sup>	
• Percentage of WIC mothers initiating breastfeeding (Percentage, data collected biennially)	N/A	N/A	
• USDA nutrition education materials and education interventions disseminated (Mil. of pieces)	6.1	19.6 <sup>1</sup>	

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

N/A = Not Applicable – data collected every two years.

### Analysis of Results.

The performance goal was exceeded. In the three areas for which data are available, USDA successfully implemented its nutrition promotion and diet-quality improvement strategies. Its key accomplishments include:

- Increasing support for consumption of fruits and vegetables through nutrition-assistance programs. Partial data indicates an increase over last year’s level and a continuation of a trend of increases in recent years. This trend represents improved variety in the diets of program participants.
- Continued monitoring and oversight of the nutrition quality of meals served through school meal programs. USDA’s partners conducted more School Meal Monitoring Reviews than last year. USDA’s partners also continued steady progress in meeting the goal of reviewing all schools in a five-year cy-

cle. Results of these reviews are used by State and local agencies to target corrective action to improve meals.

- Increased dissemination of nutrition-education materials to targeted audiences and the general public. The current level of disseminated materials increased from FY 2002. The increase reflects a large distribution of materials due to increased demand for nutrition information from USDA’s program cooperators. Additionally, the Department increased its use of the Internet as an efficient means to allow more Americans to access these materials. These science-based, tested nutrition-education materials can make a real difference in improving peoples’ diets and motivating other healthy behavioral changes.

While data on breastfeeding in WIC are unavailable this year, USDA is committed to continue its efforts to promote it as the preferred infant-feeding practice. The Department also looks to sustain the increase in breastfeeding-initiation rates that have occurred over the past several years.

A key challenge for the future in achieving results is the priority the American population places on healthy eating and maintaining a healthy weight. USDA’s nutrition education efforts are designed so that program participants and the general public are influenced by a wide range of messages. The Department’s ability to promote dietary improvements and regular exercise will be impacted by societal behavior, including the changing of products and practices in the food marketplace.

Exhibit 64: Trends in Improving America’s Diet

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Support for fruits and vegetables provided through nutrition assistance programs (\$ Mil)	6,692	6,747 Baseline	7,102	7,628	8,351 <sup>1</sup>
School Meals Initiative monitoring reviews conducted by State agencies	2,937	3,939 Baseline	4,073	3,517	4,113 <sup>1</sup>
Percentage of WIC mothers initiating breastfeeding (Percentage, data collected biennially)	N/A	44.5% Baseline	N/A	48.3%	N/A
USDA nutrition education materials and education interventions disseminated (Mil. of pieces)	.38	2.2 Baseline	3.4	14.8	19.6 <sup>1</sup>

N/A = Not Applicable

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Program Evaluation.**

USDA completed the following analyses and evaluations:

- Environmental Scan and Audience Analysis for Phase II of *Eat Smart. Play Hard™* (FNS)
- Survey of the Public Health Nutrition Workforce (FNS)
- Effects of Food Assistance and Nutrition Programs on Nutrition and Health (FNS)
- Evaluation of the USDA Fruit and Vegetable Pilot Program: Report to Congress (ERS)
- Balancing Food Costs with Nutrition Goals in WIC (ERS)
- Factors Affecting the Macronutrient Intake of U.S. Adults (ERS)
- Effects of Food Assistance and Nutrition Programs on Nutrition and Health: Volume II, Data Sources (ERS)

Reports prepared by FNS are available at: [www.fns.usda.gov/oane/MENU/Published/Publications.htm](http://www.fns.usda.gov/oane/MENU/Published/Publications.htm).

Reports prepared by ERS are available at [www.ers.usda.gov/Publications/](http://www.ers.usda.gov/Publications/).

Additionally, GAO released the following audits related to this objective:

- *School Lunch Program: Efforts Needed to Improve Nutrition and Encourage Healthy Eating (GAO-03-506)*: GAO examined schools’ efforts to provide and promote healthy meals, and Federal, State and local actions to overcome factors that deter healthy eating. It recommended that the USDA and

the Departments of Health and Human Services and Education help schools promote nutrition education while still meeting the demands of State standards-based assessments. GAO also wants the Departments to direct states to identify a focal point to promote collaborative efforts that would further develop nutrition-education activities for the schools.

- *School Meal Programs: Few Instances of Foodborne Outbreaks Reported, but Opportunities Exist to Enhance Outbreak Data and Food Safety Practices (GAO-03-530)*: GAO found that about 3 percent of the 7,390 foodborne outbreaks reported nationally from 1990-1999 occurred in schools. It recommended that CDC add school meals as an outbreak category to its report, the Agricultural Marketing Service (AMS) highlight its more stringent school procurement specifications on its Web site, and FNS and AMS promote training and certification of key food service personnel, and study the advantages and disadvantages of donating precooked or irradiated food. USDA generally accepted the report's recommendations.

GAO reports are available at [www.gao.gov](http://www.gao.gov).

## **Selected Results in Research, Extension and Statistics for Objective 4.2**

USDA has developed new search applications to provide the American public with easy, user-friendly access to USDA's unique food composition data through personal digital assistants, personal computers and the Web-based National Nutrient Database. These applications allow consumers and health professionals to access the information needed to make better choices and recommendations for healthier foods more easily.

Researchers in the Processed Foods Research unit at the Western Regional Research Center (WRRC) developed and licensed a technology for forming 100-percent fruit health bars from pears to add value and create new markets for pears. In collaboration with USDA, the industrial partner now is producing the bars commercially in a plant in North Bonneville, Washington, which is an area of high unemployment. Ninety new jobs have been created. This grassroots effort of pear growers has expanded into other fruits from the Western states. This action is designed to enhance grower profitability and assist people in the U.S. in meeting their daily requirements for fruits.

Researchers in the Processed Foods Research Unit at WRRC developed casting technologies to produce 100-percent fruit and vegetable wraps. They entered into a Cooperative Research and Development Agreement with an industrial partner to scale up the production process for these films. ARS researchers successfully enhanced the production of the 100-percent fruit and vegetable wraps.

Researchers, with USDA funding support, demonstrated that the hormone leptin functions less effectively in obesity-prone mice when they consume high-fat diets. Leptin is produced by fat cells and involved in appetite regulation. The researchers also discovered the mechanisms responsible for this effect. Normally, leptin is an important component of a feedback system between adipose tissue and the brain to match rates of energy utilization with rates of energy intake. These studies are relevant to humans because leptin resistance is a hallmark of essentially all forms of human obesity. Knowledge gained from the studies improved USDA's understanding of how leptin functions in humans. It also guided the development of effective treatments and intervention strategies.

USDA-supported researchers identified factors that determine fruit and vegetable consumption by low-income African-American mothers of young children. They did this by using the Transtheoretical Model to explain behavior change. This model is used by researchers to develop effective interventions to promote health-behavior changes. While all mothers enrolled in the study expressed some concern about their children eating healthier diets, those who already had or were preparing to make changes in their children's diets used more complex strategies to increase fruit and vegetable consumption. The results



will be used to develop educational materials tailored specifically for use in nutrition counseling for African-American mothers of young children.

Missouri Cooperative Extension taught the *Show-Me Nutrition* curriculum to 14,000 students at risk for obesity. After completing the education program, 53 percent made healthier food and beverage choices in the school cafeteria.

### Objective 4.3: Improve Food Program Management and Customer Service

#### Exhibit 65: Resources Dedicated to Improve Food Program Management and Customer Service

USDA Resources Dedicated to Objective 4.3	FY 2003	
	Actual	Percent of Goal 4
Program Obligations (\$ Mil)	\$166	0% <sup>1</sup>
Staff Years	1,123	38%

<sup>1</sup>Less than 1 percent (0.4 percent)

#### Overview

USDA is strongly committed to attaining the best-possible program outcomes while preventing program abuse or wasting taxpayer dollars. The Department also wants to ensure that nutrition-assistance programs serve those in need at the lowest possible costs. USDA continued to improve stewardship by reducing program error and continuing its use of electronic technology to enhance customer service.

#### Serving the Public

Maintaining public trust in the Department's nutrition-assistance programs is vital to their success and continued public support. The sheer size of these programs demands that the utmost attention be given to applying efficient management practices and preventing errors in distributing benefits. In the Food Stamp Program (FSP), collaborative efforts between States and USDA to improve payment accuracy have worked, resulting in more program benefits issued in the proper amounts.

In the School Lunch Program, the risk of erroneous payments remains a significant concern. Work undertaken by USDA provided important information about the size of the problem and its complexities. USDA is working to develop strategies to address certification inaccuracy without compromising access for eligible children or unduly burdening school authorities.

#### Challenges for the Future

To meet the challenge of continued improvements in payment accuracy in the FSP, USDA continues to dedicate significant resources to this area. Nevertheless, there are two significant challenges that will affect success in the future:

- Congressional action has changed the quality-control process. It remains to be seen how States will react to the lowered risk of penalties for poor performance and less incentives for good performance.
- State budgets have been and will continue to be extremely tight. This factor could hurt State performance in the payment-accuracy arena.

Regarding the National School Lunch Program (NSLP), USDA is aware of the growing discrepancy over time between the number of children certified for free meals and the estimates of those eligible. While certification errors alone do not result in Government losses, they represent a risk of erroneous payments.

Payment errors occur only when ineligible students actually receive meals. This is a daily decision. No data are collected to document if or how often those who are certified actually participate. To improve information in this area, USDA is exploring the feasibility of a nationally representative study of the level of NSLP payment error. The Department also is seeking funding and authority for regular assessments of a variety of key program outcome measures. These measures include the level of certification error and program loss as part of Child Nutrition reauthorization.

### Improve Food Management Efficiency

USDA continued to implement strategies to reduce erroneous payments within the Food Stamp and School Meal Programs. Efforts resulted in more program benefits being delivered in the proper amounts. Additionally, continued development and deployment of electronic debit technologies resulted in improved customer service by reducing stigma and improving program management.

Exhibit 66: Increase Efficiency in Food Management

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
4.3.1 Improve Food Program Management and Customer Service:			Deferred
<ul style="list-style-type: none"> <li>Increase the Food Stamp payment accuracy rate (Percentage; Cumulative)</li> </ul>	91.5%	Available Spring 2004	
<ul style="list-style-type: none"> <li>Decrease the number of children certified for free school meals in excess of those estimated eligible (Percentage)</li> </ul>	25%	TBD	

#### Analysis of Results.

The performance goal was deferred. FY 2003 performance data with respect to FSP payment accuracy will not become available until FY 2004. Available data for FY 2002 indicate that program integrity continues to improve, representing better targeting of the taxpayer investment in this program to those most in need.

Exhibit 67: Trends in Increasing Efficiency in Food Management

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase the Food Stamp payment accuracy rate (Percentage; Cumulative)	90.1%	91.1%	91.3% Baseline	91.7%	Available Spring 2004
Decrease the number of children certified for free school meals in excess of those estimated eligible (Percentage)	27%	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	TBD

<sup>1</sup>Measurement methodology is being revised.

The most important factor in maintaining improved performance in this area is the need for State partners to continue and renew their commitment to utilize findings from the Quality Control system. This commitment will improve payment accuracy. To support State improvement, USDA will continue efforts to resolve Quality Control liabilities through settlements which require States to invest in specific program improvements. The Department also will support States in improving accuracy with “best practices” information sharing, develop specific intervention plans for high issuance/high error rate States and encourage States to adopt available options that simplify program rules.

A results measure currently is unavailable for NSLP certification accuracy because USDA is refining its methodology for calculating certification error. Since the FY 2003 *Annual Performance Plan* measure and targets were set, the Department has continued to explore alternative analyses of data that may match program-eligibility requirements more closely. While these alternatives vary in the level of discrepancy between the total number of free certifications and the estimates of those eligi-

ble, the evidence remains clear that certification accuracy is a serious problem that must be addressed.

The Department does not believe that such a measure is feasible using available data sources. USDA has recommended a number of policy changes to address certification accuracy as part of Child Nutrition reauthorization with an approach that balances the need to improve integrity with promoting program access for eligible children. Department recommendations include:

- Expanding the use of “direct certification” for school meals of children already participating in other means-tested programs. This approach can improve accuracy without causing barriers to eligible children already participating in the Food Stamp Program.
- Improving the paper-based application process by providing for year-long certifications using a single application for all children in a household, increasing the verification sample and requiring a robust follow-up process to encourage eligible children to remain on the program; and
- Continuing to test methods to improve the application and verification processes through a program of applied research and analysis. This includes a nationally representative study of certification error and the number of dollars lost to program error.

#### **Program Evaluation.**

USDA completed the following analyses and evaluations related to this outcome:

- Evaluation of the National School Lunch Application/Verification Pilot Projects (FNS)
- Evaluation of the School Breakfast Program Pilot Program Interim Report (FNS)
- Food and Nutrition Service Regional Office Verification Activity (FNS)
- The Food Assistance Landscape (ERS)
- Rural Welfare Reform: Lessons Learned (ERS)
- Assessment of WIC Cost-Containment Practices (ERS)
- Aiming for Targets, Saving on Arrows: Insights from Two USDA Food Assistance Programs (ERS)
- Direct Certification in the National School Lunch Program—Impacts on Program Access and Integrity (ERS)

Reports prepared by FNS are available at: [www.fns.usda.gov/oane/MENU/Published/Publications.htm](http://www.fns.usda.gov/oane/MENU/Published/Publications.htm).

Reports prepared by ERS are available at [www.ers.usda.gov/Publications/](http://www.ers.usda.gov/Publications/).

Additionally, the Office of Inspector General (OIG) and GAO released the following audits related to this objective:

- *Controls over the Access, Disclosure and Use of Social Security Numbers (27601-29-CH)*: OIG concluded that, while Federal-level controls are in place and functioning, improvements are needed at the State and county food stamp offices of Wisconsin and Illinois to protect social security numbers from identify theft. USDA generally agreed with the report’s findings and recommendations.
- *School Meal Programs: Revenue and Expense Information from Selected States School-Meal Programs: Revenue and Expense Information from Selected States (GAO-03-569)*: GAO explored how overall revenues and federal reimbursement in particular, from school years 1996-2000 compared with the expense of producing meals during this timeframe. GAO found that, for the six States reviewed, the primary revenue sources are federal reimbursements and food sales. Approaches to enhance program revenues focused on increasing participation and a la carte sales. The report contains no recommendations.

GAO reports are available at [www.gao.gov](http://www.gao.gov). OIG reports are available at [www.usda.gov/oig/rptsaudits.htm](http://www.usda.gov/oig/rptsaudits.htm).

The Office of Management and Budget completed a Program Assessment Rating Tool (PART) review of NSLP. While the review showed that NSLP is generally well-designed and has a clear purpose, it also found that the program's performance measures do not link to long-term goals adequately. The PART also noted that inaccuracy in the certification of participants remains an important problem. Based on the findings, USDA intends to pursue program changes to increase certification accuracy and improve measures related to erroneous payments and other aspects of program performance. A copy of the PART assessment may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/nationalschool.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/nationalschool.pdf).

### **Selected Results in Research, Extension and Statistics for Objective 4.3**

USDA conducted the first nationally representative survey of the emergency food-assistance system. This system includes food pantries, emergency kitchens, food banks and other organizations. The findings indicate that this informal network provides more than 173 million meals and distributes about 2.9 billion pounds of food annually. Public and private food-assistance providers or organizations work together to offer more comprehensive aid than either could offer alone.

The Department's Economic Research Service also launched *The Food Assistance Landscape*. This first-ever periodic publication highlights USDA's food-assistance efforts. Several important studies were completed that provide policymakers, program agencies and others with information to improve the Department's food-assistance programs. These studies included an evaluation of a pilot program to provide fruits and vegetables to schools. Also examined were infant-formula pricing in WIC's Special Supplemental Nutrition Program and the background, trends and issues surrounding WIC.

## STRATEGIC GOAL 5: PROTECT AND ENHANCE THE NATION'S NATURAL RESOURCE BASE AND ENVIRONMENT

Exhibit 68: Resources Dedicated to Protect the Nation's Natural Resource Base and Environment

USDA Resources Dedicated to Strategic Goal 5	FY 2003	
	Actual	Percent of Total USDA
Program Obligations (\$ Mil)	\$11,306	10%
Staff Years	53,117	47%

USDA assisted the approximately 100,000 residents of Lake Arrowhead, California, by providing more than \$13 million to the Lake Arrowhead and Idyllwild areas of the San Bernardino National Forest. This funding was to address the significant wildfire threat from thousands of dead and dying trees caused by California's worst-recorded drought.

Large stands of trees and vegetation suffered severe damage on more than 354,000 acres of the San Bernardino and San Jacinto Mountains. This left the resulting stressed and weakened trees vulnerable to rapidly increasing bark beetle populations and such pathogens as *root disease* and *mistletoe*. The funding was used for removing dead and stressed trees and brush, thinning overstocked stands, replanting trees and vegetation, and providing technical assistance to private landowners and communities.

In another action demonstrating the Department's commitment to protecting the environment, USDA accepted two million acres of the Nation's most environmentally sensitive land into the Conservation Reserve Program (CRP). CRP allowed eligible farmers and ranchers to establish voluntarily long-term conservation practices on highly erodible and environmentally sensitive cropland. In exchange, they received 10 to 15 years of annual rental payments and cost-share assistance for maintaining those practices.

Additionally, the USDA Forest Service partnered with State Foresters, conservation organizations, land-grant institutions, Indian tribes and forest landowner organizations. The groups worked together to develop an interim rule for the Forest Land Enhancement Program (FLEP) authorized by the Farm Security and Rural Investment Act of 2002. Non-industrial, private forest landowners may receive cost-share, technical and educational assistance under FLEP from State forestry organizations. This assistance enables landowners to implement forest-stewardship plans on their properties. Thus, they maintain the land's productive health and provide public goods and services.

State Foresters interested in participating in FLEP prepare priority plans with the State Forest Stewardship Coordinating Committee to identify priorities. States adopting priority plans are granted FLEP funds by the Forest Service for assistance in support of forest-stewardship activities. The funds then are used to sustain non-industrial, private forest lands.

Through its Conversation Technical Assistance (CTA) program, USDA helped private resource managers and State, local and Tribal governments assess their resources and develop plans to meet their objectives. The Department provided planning assistance through CTA on more than 18 million acres. This assistance came in the form of site-specific planning on individual operations and area-wide plans for larger landscapes. For example, USDA helped develop a long-range plan to solve water and other natural resource conservation concerns in the Klamath River Basin of Oregon and California. This plan contains long-term solutions to enhance water quantity and quality. These solutions involve applying good management, planning and information to mitigating the impacts of drought and protecting public health. The

assessments that USDA assisted the local conservation districts to conduct as a basis for this plan were CTA activities. Financial assistance for implementing the plan is being provided through programs authorized by the Farm Security and Rural Investment Act of 2002 (FSRIA).

In FY 2003, USDA effectively continued to execute activities to implement the expanded public investment in conservation provided by FSRIA. The Department continued to write clear and flexible program rules. USDA produced the proposed and final rules for the Farm and Ranch Lands Protection Program; the final rule for the Conservation of Private Grazing Land and Environmental Quality Incentives Program; and the interim final rule for Technical Service Provider Assistance.

One of USDA’s goals for FY 2003 was to ensure that every producer knew about farm bill programs and had an opportunity to participate. Department employees and partners in every State worked to inform the public about these programs. USDA received thousands of applications for farm-bill funds because of these outreach efforts. Underserved segments of the producer population were well represented.

A key element of USDA’s outreach involved posting the national and local priorities for conservation programs onto the Internet. Having access to these priorities helps producers focus their time and effort on submitting applications that have the best chance of being approved. This assistance demonstrated one more way in which USDA’s electronic government efforts produce better service for its customers.

To help provide the technical assistance that the expanded programs entail, USDA implemented the Technical Service Provider (TSP) process. TSPs are non-USDA technical specialists certified to deliver conservation technical services to farmers and ranchers participating in USDA conservation programs. TSPs were authorized by FSRIA as a strategy to meet conservation goals while reducing the need for substantial increases in Federal staff. The names of certified specialists are available to landowners, farmers, ranchers and others seeking conservation technical assistance on a National, Web-based registry called TechReg. More than 1,600 potential TSPs have applied for certification through the TechReg site. More than 1,000 of these providers have completed the certification process. Additionally, “not to exceed” payment rates for categories of technical services provided by TSPs have been established for each State, based on USDA’s total cost to provide technical assistance for conservation practices.

**Objective 5.1: Implement the President’s Healthy Forests Initiative and Other Actions to Improve Management of Public Lands**

Exhibit 69: Resources Dedicated to Implementing the Healthy Forest Initiatives and Other Actions

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USDA Resources Dedicated to Objective 5.1	FY 2003	
	Actual	Percent of Goal 5
Program Obligations (\$ Mil)	\$5,671	50%
Staff Years	38,168	72%

**Overview**

USDA is dedicated fully to implementing the President’s Healthy Forest Initiative to reduce the threat of catastrophic wildfires and protect communities. The Department is improving processes involving the National Environmental Policy Act (NEPA), administrative appeal rules, timely consultation by Federal agencies and implementing Council on Environmental Quality guidelines. USDA is improving the management of public lands for the enjoyment of U.S. citizens to promote and sustain the health of all

National Forest System lands, and ensure the viability of the U.S. natural resource base and the environment in the future. In this goal, USDA's focus is on Improving Fire Management, Managing Sustainable Rangelands and the Cleanup of Hazardous Wastes.

Together, USDA and the U.S. Department of the Interior (DOI) implemented the National Fire Plan (NFP) as described in *Managing the Impact of Wildfires on Communities and the Environment*, and in the 10-Year Comprehensive Strategy Implementation Plan released in May 2002. USDA and DOI are working to reduce catastrophic wildfire risks, protect rural communities and increase firefighting readiness.

USDA is responsible for managing federally owned rangelands in the National Forest System to assure their sustainability. There are approximately 90 million acres of rangeland within USDA grazing allotments. Rangelands are a type of land on which grasses, forbs and shrubs dominate the natural vegetation. The land is managed as a natural ecosystem. Grazing allotments are an area of land designated for livestock grazing under USDA permit.

### **Serving the Public**

To implement NFP effectively, USDA and DOI worked with the States to develop a 10-year Comprehensive Strategy and a collaborative Implementation Plan. These documents guide USDA's efforts to protect communities and manage wildland fire on and around the 192 million acres of National Forest and Grasslands. The Western Governor's Association, the National Association of State Foresters, the National Association of Counties and the Intertribal Timber Council endorsed the 10-year Comprehensive Strategy and Implementation Plan.

Qualified USDA employees oversee grazing allotments by implementing management direction from NEPA analyses for grazing allotments under permit to members of the public. Improved management of grazing allotments and improved monitoring have resulted in public benefits, including the maintenance or improvement of watershed conditions and habitat of endangered species.

### **Challenges for the Future**

USDA's main challenge is to reduce the risk of catastrophic wildfire on public lands. The Department also must protect communities in the Wildland-Urban interface. The interface is an area where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuel.

To meet the Implementation Plan's goals, USDA and DOI have adopted three guiding principles: 1) Protect communities and high-priority watersheds at risk, 2) Enhance collaboration among governments and stakeholders, and 3) Increase accountability through performance measures and monitoring.

Improved monitoring and management of grazing allotments in the future, through the implementation of new decisions that are analyzed under NEPA procedures, represent a continuing challenge for the USDA's range-management program.

### **Improve Fire Management**

In September 2002, The National Academy of Public Administration released the report, *Wildfire Suppression: Strategies for Containing Costs*. The report recommends four strategic initiatives designed to:

- Hasten the job of reducing fuel loads and sharing the cost;
- Mitigate fire hazards at the interface between people and wildlands;
- Make managing large incidents more efficient and accountable; and
- Speed the contributions of science, technology and information management to cost-effective fire management.

In response, the Forest Service (FS) developed two Action Plans designed to reduce large wildland fire-suppression costs. The first, "Large Fire Cost Reduction Action Plan," emphasizes actions to reduce large fire-suppression costs. The plan recommends increased training, awareness and accountability for decisions; a provision of assistance to line officers making large fire-cost decisions; changing some organization procedures; developing additional decision-support computer systems; and providing a greater degree of administrative oversight. The second, "Fire and Aviation Operations Action Plan," provides direction to line officers, agency administrators and field managers to focus on four areas: preparedness, cost containment, hazardous fuel treatment and firefighter and public safety. These plans define strategies and tactics managers will use to reduce large fire-suppression costs while maintaining safety and effectiveness.

The Hazardous Fuels program reduces hazards in the interface area. This program includes coordination with partners and projects on State and private lands to maximize benefits across the landscape. USDA emphasizes continuous maintenance.

Exhibit 70: Reduce Risk of Catastrophic Fire

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.1.1 Continue to restore, rehabilitate and maintain fire-adapted ecosystems by treating hazardous fuels in both the Wildland Urban Interface (WUI) and non-WUI areas (Mil. of acres)	1.6	1.4	Unmet
5.1.2 Ensure Federal fire management plans are in compliance with Federal Wildland Fire Policy (Percentage)	75%	75%	Met
5.1.3 Control unplanned and unwanted fires during initial attack (Percentage)	99%	99%	Met

**Analysis of Results.**

The performance goal for the treatment of hazardous fuels was not met. Accomplishment was 1.4 million acres, compared with the target of 1.6 million acres. The severe fire season required a funding transfer from the hazardous fuels account. This transfer was designed to maintain the capability to conduct vegetation-management treatments and activities in areas that will reduce the risk of wildland fires to communities. Drought and a severe fire season – factors external to USDA’s control – caused FS to fall short of the FY 2003 target for hazardous fuel reduction treatments.

Exhibit 71: Trends in Reducing Risk of Catastrophic Fire

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Continue to restore, rehabilitate and maintain fire-adapted ecosystems by treating hazardous fuels in both the Wildland Urban Interface (WUI) and non-WUI areas (Mil of acres)	1.4	0.8	1.4 Baseline	1.3	1.4
Ensure Federal fire management plans are in compliance with Federal Wildland Fire Policy (Percentage)	N/A	N/A	N/A	50% Baseline	75%
Control unplanned and unwanted fires during initial attack (Percentage)	98.3% <sup>1</sup>	97.5% <sup>1</sup>	98.7% <sup>1</sup> Baseline	99%	99%

N/A = Not Applicable

<sup>1</sup>Revised to reflect USDA and DOI jointly developed data.

The performance goal for fire management plans was met. These plans are being updated to comply with Federal Wildland Fire Policy and in conjunction with revisions being undertaken for National Forest Land and Resource Management Plans. USDA expects 75 percent of Fire Management Plans to be compliant and on schedule to be 100 percent compliant by calendar year 2004, in coordination with the four DOI bureaus having wildland fire-fighting management responsibilities.



The performance goal for the initial control of fires was met. USDA wildland fire-preparedness resources controlled 99 percent of unplanned wildland fires during initial attack in FY 2003. Controlling wildland fires during initial attack reduces threats to life and property, protects forest resources and reduces wildland fire-suppression expenses. The ability to control fires with initial attack results in fewer acres burned and less catastrophic wildfires. Large fires imperil private homes and businesses, destroy such USDA infrastructure as campgrounds and administrative facilities, and threaten the health and lives of the rural residents and firefighters. Resource loss from large fires includes reduced water quality, degraded fish and wildlife habitat and burned timber. Additionally, firefighting costs escalate rapidly once more suppression resources are mobilized. Meeting the target of controlling 99 percent of fires with initial attack helps prevent these negative consequences of large fires and contains the cost of large fires.

Future challenges include reducing unit costs for fuel treatment in the wildland-urban interface (WUI) while addressing a number of issues. These issues include smoke management, air quality, using mechanical versus prescribed fire for fuel treatments, prolonged drought in many areas of the western U.S., human-caused fires, administrative appeals of proposed fuel-treatment projects and potential litigation that delay the work. The success of initial attack to control unplanned and unwanted fires hinges largely on the level of fire-preparedness resources available, such weather conditions as drought, the reduction of hazardous fuel levels and the severity of the fire season.

#### **Description of Actions and Schedules.**

The projected accomplishment of 1.4 million acres of hazardous fuel treatment is approximately 200,000 less than the target of 1.6 million acres. Treating fewer acres leaves some areas of the country more at risk from wildland fire than if they had been treated as planned. USDA will consider those areas as a priority for treatment next fiscal year. The Department also will continue to treat as much acreage of priority hazardous fuel as practical. This treatment is part of implementation of the President's Healthy Forest Initiative (HFI). Some of the challenges to reducing hazardous fuel levels, such as inefficient NEPA regulations, Endangered Species Act consultation, appeals and litigation, are addressed by HFI. Other challenges and barriers USDA will confront include steep and fragile lands precluding mechanical treatment, lack of markets for non-commercial trees, endangered species concerns and barriers to the use of prescribed fire to treat fuels. These barriers include private homes interspersed with wildland areas, smoke distribution concerns and the precise weather and fuel conditions required for safe burning. Wild-fire ignitions and droughts leading to conflagrations largely are beyond the control of USDA. The Department will focus on public and firefighter safety, and protection of communities as it responds in future years to high fire risk.

#### **Program Evaluation.**

The Office of Management and Budget's (OMB) Program Assessment Rating Tool (PART) on Wildland Fire Management Program determined that the program has a clear and well-focused purpose and design. In order to track and control firefighting efficiency, a systematic cost-containment strategy is needed. The Forest Service (FS) needs to develop a real-time obligations system to improve the accountability of firefighting costs and accuracy of wildland-fire obligations. FS also needs to ensure that States are paying their fair share of costs. OMB also recommended the completion of a fire-preparedness model to focus on efficient allocation of available resources. Additionally, OMB recommended that FS establish project criteria consistent with the 10-year implementation strategy to ensure that all hazardous fuels-reduction funds are targeted as effectively as possible. A full copy of the PART can be found at [www.whitehouse.gov/omb/budget/fy2004/pma/usdawildlandfire.xls](http://www.whitehouse.gov/omb/budget/fy2004/pma/usdawildlandfire.xls).

Additionally, while OMB's PART on the Capital Improvement and Maintenance Program determined that the program has a clear and important purpose, in order to improve the management of the public's physical assets, financial data-quality improvements are needed. FS needs to improve the collection of

timely, reliable and complete financial data of physical assets. Additionally, annual performance measures must be linked to ongoing management initiatives. A full copy of the PART can be found at [www.whitehouse.gov/omb/budget/fy2004/pma/nationalforest.xls](http://www.whitehouse.gov/omb/budget/fy2004/pma/nationalforest.xls).

The General Accounting Office (GAO) report *Wildland Fire Management: Additional Actions Required to Better Identify and Prioritize Lands Needing Fuel Reduction (GAO-03-805)* describes the hazardous fuel problem on public lands. The report also portrays the range of issues that may impact hazardous fuel-reduction treatments as they are accomplished. GAO makes several specific recommendations to ensure that Federal lands needing the most fuel reduction are treated. In response, USDA is evaluating methods to identify more accurately the amount and location of lands with excess fuel buildup. The Department also is facilitating the prioritization of fuel-reduction treatments. Additionally, USDA is working with States and other partners to refine WUI and its application in prioritizing fuel-reduction treatments. A copy of the report may be found at [www.gao.gov](http://www.gao.gov).

## Managing Sustainable Rangelands

USDA is responsible for managing Federally owned rangelands in the NFS to assure watershed sustainability. Land managers base their management decisions on environmental analyses and assessments of land conditions pursuant to the NEPA. Implementing environmental-protection measures contained in decisions supported by NEPA analyses provide for the maintenance, restoration or rehabilitation of NFS rangelands to provide the public benefits of economic enterprise and environmental protection. There are approximately 90 million acres of rangeland within FS grazing allotments.

Ranchers and farmers who live on private lands near NFS lands benefit from a permit program managed by USDA. The program allows these landowners to use higher-elevation national forest lands for part of their forage needs during the summer. They graze their livestock on their own lands during the fall, winter and spring. By providing high-elevation forage during the dry summer months, the program contributes economically to ranching and farming operations. The plan maintains open space and provides winter habitat for wildlife.

Exhibit 72: Maintain Rangeland Allotments

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.1.4 Allotment acres administered to 100 percent of standard (Mil of acres)	24.5	38 <sup>1</sup>	Exceeded

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

### Analysis of Results.

The performance goal was exceeded. NEPA analyses have identified necessary environmental protection measures that address past grazing practices, Endangered Species Act concerns, riparian area concerns, State-listed sensitive species concerns, and expanding deer and elk populations. These new measures, along with new Forest Service (FS) range management guidelines requiring periodic, on-the-ground USDA monitoring of allotment compliance, often have led to a decline in acres available for grazing. Appeals and litigation of decisions have increased substantially in recent years. These legal issues have led to a further decline in

Exhibit 73: Administering Livestock Grazing Allotments

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Allotment acres administered to 100 percent of standard (Mil of acres)	N/A	45.0 Baseline	44.0	21.0	38 <sup>1</sup>

N/A = Not Applicable

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

the acreage of NFS lands for the same use. The decline from the 2000 baseline reflects a shift in management emphasis from administering allotment acres to standard toward updating management plans consistent with new NEPA analyses. By administering more than 42 percent of the approximately 90 million acres of rangeland within USDA grazing allotments to standard each year, the Department manages all acres to standard over a four-year period. This reflects the implementation of required directions found in decision documents, allotment-management plans and biological opinions. An allotment is considered managed to standard when all management direction is implemented for that year. This management approach protects and enhances the Nation's natural resource base and environment. The public benefits through clean water, soil conservation, available habitat for threatened and endangered plant and animal species, forage for wildlife, the maintenance of open space, and the production of forage for domestic animals grazing on public lands. Limited availability of trained staff challenges FS to accomplish required visits to all allotments on the ground and administer them over a three-year period. Shifting USDA range-management staff to allotment management once the backlog of NEPA analysis is completed should increase acres managed to standard in future years.

**Program Evaluation.**

PART assessments were initiated for the Forest Legacy, Land Acquisition and McIntire-Stennis Cooperative Forest Research Programs as part of the FY 2005 budget process. A full copy of these completed evaluations will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

**Cleanup of Hazardous Wastes**

USDA established the Hazardous Materials Management Program in the 1980s to clean up environmental contamination on Department-managed lands. These lands are the headwaters of many of the Nation's most significant watersheds. Among the most important benefits and services that ecosystems and watersheds provide are water for drinking and irrigation, recreation, employment opportunities and havens for biodiversity. Contamination that degrades or interrupts those benefits and services harms the economy at all levels. When fish cannot survive in a community's streams because of sedimentation or contamination from heavy metals, pesticides or other pollutants, development and revitalization are impacted adversely.

Exhibit 74: Cleanup USDA-Managed Lands

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.1.5 Cleanup Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) sites on USDA-managed lands and facilities (Cumulative percent of five-year goals to complete 150 cleanups)	26	33	Exceeded

**Analysis of Results.**

USDA performed 50 site cleanups under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) during FY 2003. This is 33 percent of the 5-year goal. The performance goal of 26 percent was exceeded. While the number of cleanups completed in FY 2003 exceeds the baseline rate for 1998 through 2002, it is unlikely that this performance level will be maintained once the smaller, simpler, less-expensive cleanups are done.

CERCLA provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Analysis reveals that more than 40,000 sites are releasing, could release or are potential threats to release such substances. Upon investigation, many may be determined

Exhibit 75: Cleanup Program Performance

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Cleanup CERCLA sites on USDA-managed lands and facilities (Cumulative percent of 5-year goal to complete 150 cleanups)	44	60	91	110 <sup>1</sup>	33
Baseline: 1998-2002 = 22 percent of the 5-year goal per year					

<sup>1</sup> Five-year goal for 1998-2002 exceeded.

too small a threat to human health or the environment to warrant action. Based on historical percentages, USDA estimates that between 5 and 10 percent of the 40,000 sites will require some level of CERCLA cleanup. Each completed investigation narrows this range. USDA uses five-year performance goals to compensate for these types of uncertainty.

The Department has cleaned up between 200 and 300 CERCLA sites so far. An exact number is unavailable because the cleanups performed under the various environmental laws were not distinguished until the late 1990s. While Resource Conservation and Recovery Act requirements called for USDA to “clean up” more than 2,000 underground storage tanks (USTs), the Department’s actions did not reduce its inventory of CERCLA sites requiring cleanup.

All environmental cleanups are not the same because they yield differing degrees of benefits for the public. USDA agencies substantially completed the UST cleanup program in about 10 years at a small fraction of the estimated cost needed to complete the CERCLA cleanup program. Most USTs had not leaked and proven technologies were available to address all but a few of those that had. That is not the case with CERCLA cleanups, which involve much more toxic, environmentally persistent and technically challenging pollutants.

The public benefits of USDA’s environmental cleanup program include safeguarded or restored:

- Places of work;
- Sources of drinking and irrigation water;
- Areas in which to hunt, fish, camp, boat, swim or hike;
- Natural resources that strengthen the American economy; and
- Refuges for biodiversity and subsistence hunting and gathering.

The 50 environmental cleanups delivered, in varying degrees, these public benefits. These USDA environmental cleanups targeted heavy metals (e.g., arsenic, lead, mercury), persistent pesticides (e.g., coumaphos) and wood-treating chemicals (e.g., pentachlorophenol). Many of the newly cleaned sites had released pollutants at toxic levels to streams or groundwater for years.

**Program Evaluation.**

No program evaluations were performed during FY 2003.

**Selected Results in Research, Extension and Statistics for Objective 5.1**

Southern Utah, like many areas throughout the U.S., faces increasing threats of wildfire due to residential growth in areas prone to wildland fire. USDA researchers and local managers are developing fuel and

vegetation information to model fire behavior and effects across the landscape, and to produce maps to display this information. Researchers are assisting land managers in using the data, models and protocols to support fuel-treatment decisions. Fuel maps developed from the cooperative project in Utah have been used successfully to model wildfire, and these techniques can be expanded to other areas of the country.

USDA and the Department of Interior’s Bureau of Land Management staff collaborated to develop and revise Ecological Site Descriptions (ESDs) for rangelands in portions of the southwestern U.S. ESDs represent the core technology at the base of rangeland management. The new ESDs are consistent with new scientific theory and can be used by ranchers and natural resource professionals. They are providing a model for ESD revisions for remaining areas of the Nation’s grazing lands. These new descriptions provide more ecologically based tools for management of public and private rangelands.

Department researchers, in cooperation with state agencies and other partners, established the Fire Consortia for Advanced Modeling of Meteorology and Smoke. This national initiative, a network of regional-modeling consortia, provides high terrain resolution (4 KM grid spacing) weather and smoke dispersion predictions of up to 72 hours into the future. Fire managers used these predictions during the Biscuit and Hayman fires that occurred in the summer of 2002 in southwest Oregon and central Colorado respectively to protect lives and public health, and to develop a plan for prescribed burning.

Research by USDA scientists in the Albuquerque Bosque on the Rio Grande River have identified fuels-reduction practices that will preserve cottonwoods and other native plants, reduce wildfire risk via fuels removal, control spread of exotic woody shrubs and have positive or neutral impacts on wildlife species.

A Connecticut urban and community-forestry project, supported with USDA funds, helped 38 communities enact shade-tree ordinances and plant 1,700 trees. Connecticut Cooperative Extension specialists trained more than 160 urban-forestry volunteers who worked on community-service projects in their hometowns.

In Arizona, which provides little shade, studies show that proper tree placement can reduce home-cooling costs by 20 percent. Working with an electric company, Cooperative Extension distributed more than 1,469 trees to 509 residents in FY 2002. Master Gardener volunteers showed people how to plant the trees for the best results.

## Objective 5.2: Improve Management of Private Lands

Exhibit 76: Resources Dedicated to Improve Management of Private Lands

USDA Resources Dedicated to Objective 5.2	FY 2003	
	Actual	Percent of Goal 5
Program Obligations (\$ Mil)	\$5,635	50%
Staff Years	14,948	28%

### Overview

USDA uses a “portfolio” approach in helping farmers, ranchers and owners of private, non-industrial forest land conserve natural resources, while producing food, fiber, energy and other agricultural goods and services. The portfolio includes:

- Technical assistance tailored to the needs of individual producers;
- Financial assistance in the form of cost shares and incentive payments to apply key practices on working land;

- Easements and rental payments to protect sensitive land; and
- Research, technology development, resources inventory and assessment programs to provide the information and effective tools resource managers need to be good stewards of the Nation's land and water.

USDA's assistance on private, non-industrial forest land is provided through State departments of forestry. Assistance on agricultural land is provided in partnership with local conservation districts and State conservation agencies.

### **Serving the Public**

Farmers, ranchers and private forest landowners manage two-thirds of the Nation's land. They are the primary stewards of U.S. soil, air and water. Society gains from good stewardship. Thus, the Nation has established public programs to provide land managers with the science-based information and expertise they need to practice good stewardship. Other programs share the costs that land managers incur in seeking to protect and enhance their natural resources. Since the 1930s, USDA, in partnership with local conservation districts, has helped land managers protect their soil and water resources, working directly with them on their land. In recent years, an increasing part of USDA's assistance has been devoted to helping land managers meet the requirements for environmental quality enacted in local, State or Federal laws and regulations.

USDA's assistance for private forestland enables landowners to better assess the current and potential future value of their forest resources. It also helps them produce the goods and services they desire. Professional resource managers and service foresters prepare forest stewardship plans. They work closely with individual landowners to develop management strategies that address unique private objectives.

Because not all resource issues can be addressed by individuals working separately, USDA's watershed planners and other experts help people in communities work together to protect their shared environment. The assistance provided to State and local governmental entities, Tribes and private sector organizations helps them protect the environment and improve the standard of living and quality of life for the people they represent.

USDA conducts research and develops and transfers technology, including conservation standards, specifications and guidelines for conservation practices. The Department also collects and disseminates data on water and soil conditions and related resources. The information and technical tools developed and provided to the public through USDA activities are the fundamental basis for sustaining natural resources. USDA information reaches a wide and diverse audience with increasing emphasis on electronic communications technology.

### **Challenges for the Future**

The dynamic nature of the Nation's economy results in a continuous challenge to maintain past gains. For example, between 1997 and 2001, land managers converted almost 23 million acres of cropland to other uses. They also converted almost 17 million acres of land from other uses to cropland. While almost 6 million fewer acres of cropland existed in 2001 than in 1997, 17 million acres needed new conservation systems after their conversion to cropland. Many of the 23 million acres converted to other uses also needed new conservation systems appropriate for those new uses. On millions of acres of other cropland that remained in production between 1997 and 2001, farmers changed their cropping system or equipment. This modification required conservation-system changes so that the new production process would not cause resource deterioration.

Greater population densities exert greater pressures on the environment. Continuing demand for new sites for homes and industries, transportation and recreation results in conversion of agricultural land to non-agricultural uses and fragmentation of open space. As the landscape increasingly becomes a mosaic of developed areas scattered within agricultural land, the need for conservation increases while the options available to producers may be constrained.

Many environmental and social factors continue to threaten the existence and health of much of the Nation's remaining non-industrial private forestland. Landowners who do not know how to manage or assess the value of their forested properties often convert them to non-forest uses or sell them to developers. Fragmented and parceled forest areas are less functional in terms of the services they can provide. This aspect makes them less valuable and even more threatened by conversion or subject to a lack of management. USDA continues to identify effective ways to provide landowners with the technical assistance they need to manage and enhance the productivity of their forested properties. USDA also continues to consider the full range of forest uses and values so that all landowner objectives are provided for and encouraged.

### **Maintain Resource Health and Productive Capacity**

Privately owned cropland, rangeland, pastureland and forestland make up a substantial and vibrant agricultural economy that provides food and fiber for the Nation. Conservation helps ensure that these important agricultural lands sustain productivity and support healthy plant, animal and human communities. Farmers, ranchers and forestland owners are responsible for protecting the resource base against changes that would reduce their properties' capacity for sustained use. USDA assists landowners and land managers in adopting environmentally sound management practices. Land managers who receive Department assistance are more likely to plan, apply and maintain conservation systems that support agricultural production and environmental quality as compatible goals.

USDA provides information and technical and financial assistance to land managers to maintain the productive capacity of land and water for agricultural uses. USDA's Conservation Operations provides the basic resource-inventory data, technical tools and comprehensive planning approach producers need. Technical and financial assistance to apply conservation practices are provided through the Environmental Quality Incentives Program (EQIP) and other programs authorized by FSRIA. The Grasslands Reserve Program and Wetlands Reserve Program (WRP) provide long-term protection of environmentally sensitive land through long-term or permanent easements. The Conservation Reserve Program (CRP) provides rental payments through 10-15-year contracts. FSRIA also authorized USDA to provide cost-share, technical and education assistance through the Forest Land Enhancement Program (FLEP) to implement stewardship plans. These plans are designed to maintain the productive health of the land. They also provide public goods and services, and local economic diversification.

Exhibit 77: Maintain Productive Health of Land

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.2.1 Protect the productive capacity of agricultural and forestland:			Met
<ul style="list-style-type: none"> <li>• Protect against degradation (Mil acres) <ul style="list-style-type: none"> <li>- Working<sup>1</sup> cropland and grazing land with new conservation practices</li> <li>- Highly erodible and other environmentally sensitive cropland and grazing land under long-term land retirement contracts (Cumulative)</li> </ul> </li> <li>• Total erosion prevented (Mil tons)<sup>3</sup></li> <li>• Carbon sequestered in soil and vegetation through long-term retirement of crop and grazing land (Mil metric tons per year)<sup>4</sup></li> <li>• Non-industrial private forestlands under approved stewardship management plans (Mil acres)</li> </ul>	16 34.4 474.5 16.8 1.6	27 34.1 <sup>2</sup> 479 <sup>2</sup> 17 <sup>2</sup> 1.6 <sup>2</sup>	

<sup>1</sup>Does not include land retired from production under CRP contracts.

<sup>2</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

<sup>3</sup>Includes working cropland and CRP land.

<sup>4</sup>The performance measure for carbon sequestration was included in the *USDA FY 2004 Annual Performance Plan* under Objective 5.2.2. While carbon sequestration benefits both soil productivity and the atmosphere, the performance measure has been moved to this objective because the primary emphasis is on the benefits to soil productivity.

**Analysis of Results.**

The performance goal was met. As a result of the actions taken with USDA assistance, producers maintained the productive capacity of more than 61 million acres of agricultural land (27 million acres of working land and 34.1 million acres in CRP) or 6 percent of the Nation's total cropland and grazing land. The conservation practices applied on working land this year will continue to provide protection for many more years. During the next few years, the amount of land on which conservation is applied each year will increase substantially as a result of the increased assistance authorized by the Farm Security and Rural Investment Act of 2002 (FSRIA). The major challenge for continued progress in maintaining the productive capacity of natural resources is to assist producers in planning for sustainable resource management. This planning would

Exhibit 78: Trends in Land Management

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Working cropland and grazing land with new conservation practices (Mil. acres)	N/A	20.7 Baseline	21.8	25.6	27
Highly erodible and other environmentally sensitive cropland and grazing land under long-term land retirement contracts (Cumulative, Mil. Acres)	29.8	31.5 Baseline	33.6	33.9	34.1 <sup>1</sup>
Total erosion prevented on working cropland and CRP land (Mil. tons) <sup>2</sup>  Baseline: Total cropland erosion in 1982 = 3.07 billion tons	368	470	507	475	479 <sup>1</sup>
Carbon sequestered in soil and vegetation through long-term retirement of crop and grazing land (Mil. Metric tons per year)	14.6	15.5 Baseline	16.1	16.3	17 <sup>1</sup>
Non-industrial private forestlands under approved stewardship management plans (Mil. acres)	1.9 Baseline	1.4	1.6	1.6	1.6 <sup>1</sup>

N/A = Not Available

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

<sup>2</sup>FY 1999 includes only CRP lands. Other years include working cropland and CRP lands.



require land managers to take a comprehensive approach that covers their entire operation and considers the operating unit as part of a larger landscape. USDA's efforts to support this comprehensive approach rely on the assistance provided through its Conservation Technical Assistance, Water Resources and research programs.

The reported performance on working cropland and grazing land exceeded the target level for several reasons:

- The budget as enacted provided a higher funding level than that on which the target was based; and
- Program delivery was streamlined, making more time available for planning and application.

The data for conservation practices applied to working land include 16 million acres of cropland and grazing land. On this land, producers applied all conservation measures needed to protect the resource base during 2003. Conservationists call this the "resource management system" level of conservation. Assuming that applied management is maintained properly, the land's productive capacity will be sustained under long-term use. On an additional 11 million acres, practices were applied to resolve specific resource issues, while others issues were left for a later date. FSRIA modified EQIP, the Department's largest financial-assistance program for working land, to emphasize this incremental approach.

The 34.1 million acres of environmentally sensitive land enrolled in CRP includes 24.6 million acres of highly erodible cropland. Due to wind and water (sheet and rill), this cropland eroded an average 15 tons per acre per year before CRP enrollment. This rate is almost three times the current average cropland-erosion rate. Erosion is reduced to less than one ton per acre on lands enrolled in CRP. An additional indicator of soil-health benefits, carbon sequestered in vegetation and soils enrolled in CRP, is estimated to be increased a total of 17 million metric tons. The majority of the increased carbon is sequestered in the soils.

Research has shown that agricultural cultivation of more than 20 years significantly reduces soil carbon levels between 20 to 60 percent on lands previously maintaining forest ecosystems or native grasses. Reforestation, or the planting of grass on CRP land in retirement, increases the terrestrial carbon sink. It also helps mitigate climate change.

In the early 1980s, USDA redirected activities to address the erosion problems that had increased in severity for a number of years. The baseline condition, as identified in the *1982 National Resources Inventory*, showed a total annual cropland erosion of 3.07 billion tons. By 1995, erosion on all cropland, including CRP land, had been reduced by 38 percent to about 1.9 billion tons per year. The Department assisted farmers and ranchers in reducing the erosion through three major strategies. USDA assisted in removing highly erodible land from production through CRP. The Department provided technical assistance for application of acceptable management systems to operators of highly erodible cropland who received benefits from USDA income support and supply-control programs. USDA offered conservation technical assistance to producers who were controlling erosion on their land voluntarily without Department financial assistance. Since 1995, there has been little change in the tons of cropland soil eroded annually. While the assistance that USDA provided each year since 1995 was adequate to maintain progress between 1985 and 1995, it did not expand significantly the progress the Department had made to that date.

In support of stewardship management plans for non-industrial private forest lands, USDA field units have developed grants for State Foresters to provide technical and financial assistance to private landowners. This assistance will allow the landowners to develop forest stewardship plans. These plans will help them maintain resource health and productivity while providing public goods and services, and contributing to the local economy. The plans developed in 2003 add approximately 15 percent fewer acres to

the total acreage managed under forest stewardship plans than were added in the baseline year. These new acres add to each State's total acreage.

Future challenges include the large number of non-industrial private forest landowners without forest management training, and widely varying management objectives. FLEP will make additional funds available for State Foresters. The foresters will be able to use the funds to increase the level of technical, financial and educational assistance to non-industrial private forest landowners.

### **Program Evaluation.**

GAO completed a review of USDA activities for the protection of highly erodible cropland and wetlands (*GAO-03-418, April 2003*). The report recommended strengthening oversight of these activities. While the Statement of Action still is being prepared, activities already are underway to address the audit's five recommendations. A new automated system for distributing and tracking compliance reviews has been implemented. It will serve as the prototype design for a Web-based system in 2004. A copy of this review may be obtained at [www.gao.gov](http://www.gao.gov).

The Economic Research Service is conducting a congressionally mandated study of CRP's economic effects. Meantime, USDA conducted and published an environmental impact statement on CRP's environmental benefits. The environmental-impact statement identifying CRP's impacts may be obtained at [www.fsa.usda.gov/dafp/cepd/epb/nepa.htm](http://www.fsa.usda.gov/dafp/cepd/epb/nepa.htm). The Department also conducted a cost/benefit analysis of CRP during the rulemaking process. The analysis concluded that CRP benefits included reduced commodity payments, increased farm income and enhanced soil productivity. A copy of the analysis may be obtained by calling the Farm Service Agency, Conservation and Environmental Programs Division, at (202) 720-6221.

An economic analysis of FSRIA's potential impact estimated that its technical-service provider process will benefit the Nation's natural resources. According to the analysis, the process will:

- Accelerate the adoption of conservation practices;
- Increase environmental and resource benefits;
- Maintain and enhance long-term productivity of the resource base;
- Reduce non-point source pollution damage and farming costs; and
- Contribute to an increase in net farm income.

A copy of the analysis may be obtained by calling the Natural Resources Conservation Service (NRCS), Resource Economics and Social Sciences Division, at (202) 720-5009.

The results of the Office of Management and Budget's (OMB) FY 2004 Program Assessment Rating Tool (PART) showed that the Farm and Ranch Lands Protection Program is administered effectively. The program prioritizes applications at the State level and selects the best projects for protecting important agricultural lands from development. The PART also stated that the program has no appropriate long-term performance measures. In response, NRCS conducted an internal review of the program in 2003. A copy of the PART assessment may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/farmland.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/farmland.pdf).

PART assessments were initiated on the Soil Survey, Conservation Technical Assistance, National Resources Inventory and Plant Materials Programs as part of the FY 2005 budget process. A full copy of these completed evaluations will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

Additionally, eight states (AZ, MA, MD, MI, NE, NM, TN, and UT) conducted Forest Stewardship Program reviews. The results of the reviews may be obtained by calling the Cooperative Forestry Division at (202) 205-1602.

## Clean and Abundant Water Supplies

The ability of water resources to meet the Nation's needs is an increasing concern in many areas. Concerns focus on the water supply's quality and quantity. Agriculture is one potential source of pollutants in the Nation's waters. Runoff from agricultural operations can carry sediment, bacteria, nutrients, salinity and pesticides into the Nation's streams, lakes and estuaries. Pollutants also can seep through the soil to groundwater. While the most extensive threat to water quality from agricultural activities is sediment, the greatest current public concern is the possibility of excess nutrients and pathogens entering water from poorly managed animal agriculture facilities. This concern particularly is relevant in areas of concentrated livestock production. Water demand is growing nationwide. The needs for competing uses must be considered to find the best balance. Agriculture is the major water consumer. It accounts for nearly 80 percent of all water consumption nationwide. The major agricultural use of water is irrigation.

Comprehensive, locally-led watershed planning and management can ensure that the Nation's watersheds provide adequate supplies of clean, well-managed water. USDA has a major role in assisting individuals, Tribes and communities with comprehensive water resources planning and management. USDA's water resources programs provide technical and financial assistance to help local and State entities plan and implement projects to protect water quality, improve its supply and enhance wildlife habitat. The Department's Conservation Operations provides the basic resource inventory data, including soil moisture and water supply forecasts, on soil properties and water. It also offers technical tools and a comprehensive planning approach for producers. Technical and financial assistance to apply conservation practices is provided through FSRIA-authorized programs. CRP, the Grasslands Reserve Program and WRP provide long-term protection of environmentally sensitive land. USDA's activities to improve management of water supplies and protect water quality are executed in cooperation with such entities as Tribal governments, State conservation agencies, State Foresters, resource conservation and development councils, conservation districts, irrigation districts, the U.S. Department of Interior's Bureau of Reclamation and the Environmental Protection Agency (EPA).

### Exhibit 79: Ensure Clean and Abundant Water Supplies

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.2.2 Manage watersheds to provide clean and abundant water supplies:			Met
<ul style="list-style-type: none"> <li>• Animal feeding operations with comprehensive nutrient management plans (Number) <ul style="list-style-type: none"> <li>- Developed</li> <li>- Applied</li> </ul> </li> <li>• Working land with new conservation measures applied to reduce potential for off-site pollution by nutrients (Mil. acres)</li> <li>• Sheet and rill erosion prevented (Mil tons)<sup>2</sup></li> <li>• Reduced nitrogen applications on land under long-term land retirement contract (Thousand tons)</li> <li>• Reduced phosphorus applications on land under long-term land retirement contract (Thousand tons)</li> <li>• Land in buffers under long-term land retirement contract (Mil. acres)</li> <li>• Land benefiting from application of improvements to irrigation management (Mil acres)</li> <li>• Increase national implementation rate: <ul style="list-style-type: none"> <li>- Forestry best management practices (Percentage)</li> <li>- States conducting effectiveness monitoring</li> </ul> </li> </ul>	 4,556 3,013 <sup>1</sup> 4.1 216 691 106 2.4 1.5  89% 26	 4,860 3,237 4.7 214 <sup>3</sup> 655 <sup>3</sup> 103 <sup>3</sup> 2.4 <sup>3</sup> 1.8  89% <sup>3</sup> 26 <sup>3</sup>	

<sup>1</sup>The target was stated incorrectly in the published plan.

<sup>2</sup>Includes only CRP.

<sup>3</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

### Analysis of Results.

The performance goal was met. Indicators for this performance goal identify actions that producers are taking with USDA assistance to minimize the risk that pathogens, sediment, phosphorus and nitrogen will move from agricultural operations into the environment.

Applying erosion-control practices, including conservation buffers on working lands, improving nutrient management and retiring critical areas from crop production, reduce the potential for off-site movement. Implementation of comprehensive nutrient management plans for animal-feeding operations ensures that collection, storage and disposal of animal wastes are managed in ways that minimize the potential for environmental damage.

Although FSRIA provided for increased funding for conservation, slight decreases occurred in the number of comprehensive nutrient-management plans assisted in 2003 as compared to 2002. The acreage amount of working land where nutrient management was applied also showed a slight drop in the same period. This is because many conservation measures, such as comprehensive nutrient management plans, cannot be completed in a single year. Performance on these indicators will increase sharply in future years as producers who contracted for assistance this year complete their application of conservation practices.

Sedimentation in surface water bodies is the greatest single impairment to water quality associated with agricultural activities. Reduction of water-driven (sheet and rill) erosion and installation of conservation buffers through long-term land retirement contracts protect surface and ground water from sedimentation and nutrient (nitrogen and phosphorus) runoff. While estimates of sediment and nutrient load reductions attributable to CRP currently are unavailable, water-quality benefits are demonstrated by the 214 million tons of sheet and rill erosion and fertilizer-application reductions on CRP land. Buffers intercept sediment

Exhibit 80: Trends in Water Resources Protection

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Animal feeding operations with comprehensive nutrient management plans (Number) <sup>1</sup>					
- Developed	N/A	6,314	6,206	5,214 Baseline	4,860
- Applied	N/A	4,405	4,315	3,352 Baseline	3,237
Working land with new conservation measures applied to reduce potential for off-site pollution by nutrients (Mil. acres)	2.7	4.3 Baseline	5.4	5.5	4.7
Sheet and rill erosion prevented (Mil. tons) <sup>2</sup>	175	201 Baseline	214	215	214 <sup>3</sup>
Reduced nitrogen applications on land under long-term land retirement contract (Thousand tons)	553	605 Baseline	634	681	655 <sup>3</sup>
Reduced phosphorus applications on land under long-term land retirement contract (Thousand tons)	80	87 Baseline	99	104	103 <sup>3</sup>
Land in buffers under long-term land retirement contract (Mil. acres)	1.2	1.3 Baseline	1.7	2.1	2.4 <sup>3</sup>
Land benefiting from application of improvements to irrigation management (Mil. acres)	N/A	1.25 Baseline	1.25	1.9	1.8
Forestry best management practices (Percentage) <sup>4</sup>	Not Tracked	87% Baseline	Not Tracked	Not Tracked	89% <sup>3</sup>
States conducting effectiveness monitoring <sup>4</sup>		17 Baseline			26 <sup>3</sup>

<sup>1</sup> Technical guidance for comprehensive nutrient management plans (CNMPs) was first implemented in FY 2002. The data for FY 2000 and 2001 are for waste management systems, which may be less complex and comprehensive than CNMPs.

N/A = Not Available

<sup>2</sup> Includes only CRP data.

<sup>3</sup> Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

<sup>4</sup> FY2000 data are from the biannual NASF Nonpoint Source Pollution Monitoring Report.

and nutrients before they reach water bodies. Long-term CRP contracts cover 2.4 million acres of buffers. These buffer practices primarily impact water quality: almost 1.4 million acres of grass filterstrips and riparian (trees) buffers, 160,000 acres in wellhead protection areas, 90,000 acres of grass waterways and 280,000 acres in permanent vegetation to reduce salinity.

Irrigated agriculture makes a significant contribution to the U.S. farm economy—nearly 40 percent of total crop sales come from irrigated acreage, which accounts for only about 15 percent of all cropland. Inadequate management of irrigation water can increase irrigation costs and degrade soil and water resources. Improvements in irrigation water management can help maintain the viability of the irrigated agricultural sector, and protect and improve soil and water quality. USDA continues to provide assistance through the Conservation Technical Assistance Program. Additionally, increased technical and financial assistance was provided through EQIP, the Ground and Surface Water Conservation Program and the Klamath-Basin Program. USDA's assistance resulted in saving an estimated 4.5 million acre-inches of water. An acre-inch is the amount of water needed to cover an acre of land with a layer of water one-inch deep. For future years, USDA will set performance goals in terms of water conserved rather than acres with improved management. Water conservation is only one of the benefits of improved irrigation-water management. Others include reductions in irrigation-induced erosion, salinity delivered to ground and surface water, and drought vulnerability.

The National Association of State Foresters (NASF) facilitates data monitoring and compilation in compliance with Forestry Best Management Practices (BMPs) performed by State Foresters. BMPs are developed autonomously by each State under authority delegated to them by EPA, usually under the lead of the State Forester. These State BMPs vary considerably in terms of objectives and means from State to State. To date, the State BMP program has been successful in improving forest products harvest and transportation activities. It also has maintained water quality and quantity and avoided adoption of total maximum daily load standards and discharge-permit requirements for forest management.

Taxpayer benefits from increased BMP implementation include:

- Maintenance of water quality for municipal water supplies without the expense of costly filtering systems;
- Protection and improvement of aquatic habitats for fish and other species; and
- Avoidance of new discharge-permit requirements for forest management that would lower the availability and raise the cost of forest products.

Future challenges include the relatively short duration of ownership, the continued decrease in the parcel size of non-industrial private forest land and the lack of forest management knowledge of new forest owners.

A major challenge is to develop a practical and reliable methodology to document the effects of conservation practices on water quality. USDA is conducting studies to develop this methodology. The National Resources Inventory-Conservation Effects Assessment Project (NRI-CEAP) is an interagency effort that will provide data and analytical models to produce scientifically defensible estimates of conservation-program benefits. In 2005, NRI-CEAP will provide initial estimates on conservation systems' effects on cropland condition and the movement of sediment and nutrients from farm fields.

#### **Program Evaluation.**

A cost-benefit assessment of CRP demonstrated that the benefits associated with CRP lands include reduced erosion and nutrient runoff, increased producer income and reduced commodity-program payments. A copy of this assessment may be obtained by calling the Farm Service Agency, Conservation and Environmental Programs Division, at (202) 720-6221.

USDA conducted and published an environmental-impact statement for CRP, evaluating the program's impact on water quality. The statement is available at [www.fsa.usda.gov/DAFP/CEPD/EPB/nepa.htm](http://www.fsa.usda.gov/DAFP/CEPD/EPB/nepa.htm).

The Department is participating in a cooperative agreement between the Office of Risk Assessment and Cost-Benefit Analysis and the Food & Agricultural Policy Research Institute at the University of Missouri. The agreement is designed to estimate CRP enrollment impacts on edge-of-field nutrient and sediment runoff and nutrient seepage beyond the root zone, and changes in soil carbon levels.

A cost-benefit analysis (CBA) of EQIP found that the program benefits the adoption of conservation practices. Additionally, when installed or applied according to technical standards, EQIP will achieve economic and environmental gains. Other benefits are long-term productivity maintenance of the resource base, reductions in non-point source pollution damage and wildlife enhancements. A copy of the analysis may be obtained at [www.nrcs.usda.gov/programs/eqip](http://www.nrcs.usda.gov/programs/eqip).

USDA contracted with NASF to compile results from State-level monitoring of Forestry BMPs. NASF's Water Resources Committee will oversee the evaluation. The committee consists of seven State Foresters (American Samoa, HI, KY, MD, NE, OH and VA) who promote forest-management practices. These practices are designed to protect water quality and prevent water-quality problems. Results of the evaluation will be available from NASF in FY 2004 at [www.stateforesters.org](http://www.stateforesters.org).

A PART assessment was initiated on the Snow Survey and Water Supply Forecasting Program as part of the FY 2005 budget process. A full copy of the completed evaluation will be available February 2004 at [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).

## **Wildlife Habitat**

The rural landscape provides critical habitat, food and safety for much of the Nation's wildlife. Many of the conservation practices that farmers and ranchers apply to cropland and grazing land improve the habitat those lands provide for wildlife. Additional actions are needed to protect specific ecosystems and landscapes—including wetlands, grasslands, floodplains and certain types of forests. These ecosystems can help support wildlife and aquatic species. They also can provide benefits in the form of recreation, hunting and other forms of agro-tourism.

USDA assists in improving fish and wildlife habitat through the programs that help producers manage working lands. The Department helps producers evaluate the effects of production practices while developing comprehensive plans through the Conservation Technical Assistance Program. USDA provides financial assistance for restoring and improving important wildlife habitat, including wetlands, native grasslands and species at risk through WRP, CRP, the Wildlife Habitat Incentives Program and EQIP. USDA's activities for protecting wetlands and fish and wildlife habitat are cooperative actions conducted in partnership with Tribal governments, State agencies, private sector organizations and interest groups, and Federal land-management agencies.

Exhibit 81: Improve Wildlife Habitats

Annual Performance Goals and Indicators	Fiscal Year 2003		
	Target	Actual	Result
5.2.3 Ensure diverse wildlife habitats:			Met
<ul style="list-style-type: none"> <li>Increase protection of wetlands by enrolling in the Wetlands Reserve Program wetlands identified as high priority by States (Mil. acres, Cumulative)</li> </ul>	1.5	1.5	
<ul style="list-style-type: none"> <li>Wetlands and associated upland under multi-year CRP contracts (Mil. acres)</li> </ul>	1.9	1.9 <sup>1</sup>	
<ul style="list-style-type: none"> <li>Apply new management practices to improve wildlife habitat on working cropland, grazing land, forest and other land (Mil. acres)</li> </ul>	7	10.1	
<ul style="list-style-type: none"> <li>Land retired from cropping and grazing and restored to ecosystems with high benefits for wildlife, including threatened and endangered species (Mil. acres, Cumulative)</li> </ul>	3.5	3.5 <sup>1</sup>	

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

**Analysis of Results.**

The performance goal was met. The land protected in USDA's reserve programs and the working land where practices were applied will provide a better habitat. This better habitat will enable the landscape to support healthy and diverse wildlife populations. The Department will continue to increase its assistance for protection of wetlands and wildlife habitat.

Since the early 1980s, USDA has given increasing attention to protecting wetlands. Wetlands are among the most biologically diverse areas on earth. They provide habitat for a rich mixture of plants and animals--including many rare,

threatened and endangered species. Wetlands protect shorelines, filter impurities from water, help control floodwaters, regulate waterflow and help reduce soil erosion. Between 1992 and 1997, 101,000 acres of wetlands were converted to other uses. During that same period, almost 69,000 acres were gained annually for an overall average of 32,600 acres per year. Agriculture accounted for 26 percent of the losses and 52 percent of the gains. Compared to earlier periods, this represents a dramatic slowing of the rate of wetland loss. Much of the reduction in loss of agricultural wetlands results from USDA's programs and activities to restore wetlands and discourage their conversion to agricultural uses. The indicators in this plan reflect the key strategy of restoring wetlands under permanent and long-term easements in the WRP and long-term contracts in the CRP. Because the reserves have proven to be popular and effective, FSRIA expanded these efforts.

Exhibit 82: Trends in Enhancement of Wetlands and Wildlife Habitat

Trends	Fiscal Year Actual				
	1999	2000	2001	2002	2003
Increase protection of wetlands by enrolling in the Wetlands Reserve Program wetlands identified as high priority by States (Mil. acres, Cumulative)	0.785 Baseline	0.934	1.074	1.27	1.5
Wetlands and associated upland under multi-year CRP contracts (Mil. acres)	1.3	1.5 Baseline	1.7	1.7	1.9 <sup>1</sup>
Apply new management practices to improve wildlife habitat on working cropland, grazing land, forest and other land (Mil. acres)	N/A	7.5 Baseline	8.1	10	10.1
Land retired from cropping and grazing and restored to ecosystems with high benefits for wildlife, including threatened and endangered species (Mil. acres, Cumulative)	1.6	2.5 Baseline	3.0	3.3	3.5 <sup>1</sup>

<sup>1</sup>Result based on projected estimate. See the Data Assessment of Performance Measures section for more information.

N/A = Not Applicable

USDA is helping producers and other land managers enhance wildlife habitat for a wide range of species. Because the target species varies by site, national-level baselines and targets have been set only in terms of acres of habitat affected. On a majority of the acreage of working cropland, wildlife habitat is a secondary use. USDA also provides technical and financial assistance to landowners and others to develop upland, wetland, riparian and aquatic habitat areas on their property through the Wildlife Habitat Incentives Program (WHIP). WHIP offers 1-year, 5-10-year and 15-year agreements. The 15-year agreements authorized under FSRIA fund up to 100 percent of the costs for implementing practices designed to restore and protect essential plant and animal habitat. This enables landowners to implement beneficial wildlife habitat practices that do not offer economic return, such as declining species like bog turtles and bats.

The 3.5 million acres of sensitive wildlife ecosystems restored under long-term land retirement contracts (CRP) include 1.9 million acres of wetland and upland buffers, 390,000 acres of rare and declining habitat, 220,000 acres of longleaf pine habitat, and 50,000 acres of shallow water areas for wildlife. Additionally, about 18 million acres of land enrolled in CRP since 1996 have been established with covers determined locally to be "best suited to wildlife." Under CRP, wildlife habitat is created through consolidation of large blocks of land with undisturbed vegetation. This consolidation forms vital space where wild populations can breed and expand. While not all of the 39 million acres enrolled in CRP are planted and managed specifically for wildlife, most of it provides valuable habitat.

Future challenges are to bring interested parties together to develop landscape scale plans to achieve effective habitat enhancement. Pursuing environmental quality across a diverse landscape mosaic will better safeguard wildlife populations and healthy ecosystems. The alternative is limiting conservation to small, specialized and isolated tracts.

#### **Program Evaluation.**

A CBA demonstrated that the environmental benefits associated with CRP lands include wildlife recreation opportunities, increased producer income and reduced commodity program payments. A copy of the CBA may be obtained by calling the Farm Service Agency, Conservation and Environmental Programs Division, at (202) 720-6221.

U.S. Geological Survey wildlife biologists surveyed CRP participants in 2001 and 2002 on attitudes about the program's administration. The survey focused on the program's emphasis on wildlife. Of those surveyed, 73 percent called the amount of attention given to wildlife habitat in CRP enrollment requirements appropriate. Additionally, 20.9 percent said that grazing would be the most suitable management practice for their CRP lands, while 24.7 percent preferred burning. A copy of the report *A National Survey of Conservation Reserve Program (CRP) Participants on Environmental Effects, Wildlife Issues, and Vegetation Management on Program Lands* may be obtained by calling the Farm Service Agency, Conservation and Environmental Programs Division, at (202) 720-6221.

OMB's PART showed that WHIP is managed effectively, prioritizes funding for rare, threatened and endangered fish and wildlife, and leverages significant resources from partners. PART also stated that WHIP did not have appropriate, long-term performance measures. NRCS is developing better measures for the program. An internal review scheduled for 2003 has been postponed until 2004. A copy of the PART assessment may be found at [www.whitehouse.gov/omb/budget/fy2004/pma/habitat incentives.pdf](http://www.whitehouse.gov/omb/budget/fy2004/pma/habitat incentives.pdf).

#### **Selected Results in Research, Extension and Statistics for Objective 5.2**

USDA researchers examined the net effects of species diversity within the plant community on long-term carbon sequestration in soils. Pastures planted in the Northeastern States with 3- and 11-species mixtures



had greater photosynthetic rates and greater total root biomass than those planted with a 2-species mixture. Additionally, the pastures had a greater proportion of root biomass concentrated in the lower soil profile. Increasing plant-species diversity in pastures could help mitigate the adverse effects of greenhouse gas emissions that may contribute to global climate change by increasing the potential for soil carbon sequestration.

USDA measured nitrate-nitrogen in surface waters and in shallow wells at two different depths to determine the extent of seasonal movement of nitrogen from poorly drained grass seed fields. The results showed low concentrations of nitrate-N in water originating from these fields. The use of direct seeding, rather than conventional tillage, further lowered nitrate-N losses without reducing crop yield. These data showed that perennial grasslands in western Oregon function much like buffer strips and are highly effective in preventing nutrient movement into ground and surface waters.

Recent USDA research assesses the effects that restrictions on the land application of animal manure would have on the costs to animal-feeding operations. While results suggest that livestock and poultry farms' net income could decline by more than \$1 billion (around 3 percent), the outcome depends heavily on the extent to which cropland operators are willing to use manure. It also depends on the degree to which livestock price increases offset cost increases. USDA research suggests that, while net returns in the crop sector could increase by more than \$400 million as manure nutrients replace commercial fertilizer, consumers could face slightly higher prices for animal products.

Tennessee Cooperative Extension programs encourage farmers Statewide to increase their no-till and conservation tillage practices. Organizers estimate that these tillage changes have reduced soil-erosion potential by 20 million tons. Using techniques learned from Georgia Cooperative Extension, farmers in one county switched to conservation tillage on 9,000 acres in 2002. They produced yields comparable to conventional tillage at less cost, saving \$30 per acre.

Leafy spurge, an invasive noxious weed, is spreading throughout the West. It costs Oregon ranchers at least \$13 million a year in lost income and ineffective herbicide treatments. Oregon State University scientists, supported in part by USDA, use angora goats to reduce the need of herbicide use. One-hundred goats on a 150-acre ranch reduced herbicide costs by \$10,000 per year. Translated Statewide, this could cut herbicide costs by \$1 million. North Dakota State University scientists also found that sheep suppressed the growth of leafy spurge by more than 90 percent.

Texas A&M University and New Mexico State University researchers, supported by USDA, found that lining irrigation canals can prevent water seepage of up to seven cubic feet per second per mile. Utah State University researchers helped 70 large water users with water audits and irrigation scheduling. This assistance reduced water use up to 28 percent last year. The 67 million gallons saved annually translates economically to \$207,146.

USDA-supported researchers in several States are working to develop methods to reduce harmful manure odor from hog farms. Purdue University researchers reduced the odor by changing the pigs' diet. By reducing the crude protein and adding synthetic amino acids, they cut nitrogen levels in manure by up to 30 percent. They also reduced ammonia concentrations in the air in half and dropped detectable odors and "rotten egg" gas emissions by 40 percent. South Dakota State University researchers developed a biofilter that hog farmers can build themselves for as little as \$1,500. The biofilter also can reduce odor in a confinement facility by as much as 97 percent. Michigan State University scientists are adding ozone to stored swine manure to remove odor and render it safe as fertilizer.

## FY 2003 PROGRAM OBLIGATIONS AND STAFF YEARS

### Fiscal Year 2003 Program Obligations Incurred

The following table depicts the component agencies and staff offices of the Department of Agriculture with total program level dollars for each account allocated to each objective. The program level dollars are displayed in millions and have been rounded to the nearest tenth. An account's funding was allocated to more than one objective when the amount for each objective was significant and could be identified. Thus, the table provides a general indication of the funding dedicated to each objective. Staff office and departmental management accounts generally support all USDA objectives and, in most cases, have been reallocated equally among all strategic objectives.

USDA FY 2003 Program Obligations																
(Dollars in Millions)																
Agency	Account	Program Obligations	Objectives													
			1.1	1.2	1.3	1.4	2.1	2.2	3.1	3.2	4.1	4.2	4.3	5.1	5.2	
OSEC	Office of the Secretary	54.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OCFO	OCFO	15.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	Working Capital Fund	356.0	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
OCIO	OCIO	38.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	Common Computing Environment	144.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	0.0	0.0	0.0	0.0	0.0	18.0	18.0
DA	Agriculture Buildings and Facilities Rental Payments	198.0	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
	Departmental Administration	57.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	Hazardous Materials Management	12.0	-	-	-	-	-	-	-	-	-	-	-	-	12.0	-
OC	OC	9.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
OIG	OIG	77.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
	IG Assets Forfeiture Funds+B18	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OGC	OGC	36.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
OCE	OCE	11.0	0.7	0.7	2.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
NAD	NAD	14.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
OBPA	OBPA	7.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
ERS	Economic Research	70.6	9.9	3.5	3.5	12.7	2.8	4.2	3.5	4.9	4.2	4.2	8.5	-	-	8.5
NASS	NASS	155.4	77.3	0.0	-	7.5	45.7	-	13.8	-	-	-	-	-	-	11.1
ARS	ARS Salaries and Expenses	1,107.4	-	-	104.1	-	-	-	104.1	626.8	33.2	33.2	33.2	86.4	86.4	-
	Buildings and Facilities	81.2	-	-	7.6	-	-	-	7.6	46.0	2.4	2.4	2.4	6.3	6.3	-
	ARS-No Year Funds	11.8	-	-	1.1	-	-	-	1.1	6.7	0.4	0.4	0.4	0.9	0.9	-

USDA Performance and Accountability Report for FY 2003  
Annual Performance Report

<b>USDA FY 2003 Program Obligations</b>																
<b>(Dollars in Millions)</b>																
<b>Agency</b>	<b>Account</b>	<b>Program Obligations</b>	<b>Objectives</b>													
			<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>2.1</b>	<b>2.2</b>	<b>3.1</b>	<b>3.2</b>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>	
ARS (Cont.)	Miscellaneous Contributed Funds	21.5	-	-	2.0	-	-	-	-	2.0	12.2	0.6	0.6	0.6	1.7	1.7
	Collaborative Research with the Newly Independent States (AID) FY 03-04	5.0	-	-	0.5	-	-	-	-	0.5	2.8	0.2	0.2	0.2	0.4	0.4
CSREES	Extension Activities	484.8	33.9	19.4	43.6	24.2	24.2	24.2	24.2	58.2	38.8	43.6	-	75.1	75.1	
	Research and Education Activities	582.2	52.4	52.4	75.7	17.5	17.5	17.5	40.8	81.5	29.1	17.5	-	90.2	90.2	
	Integrated Activities	45.9	0.0	0.0	0.6	0.6	0.6	0.6	3.7	22.0	6.4	0.0	-	6.0	5.5	
	Native Americans Institutions Endowment Fund	1.7	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	-	0.3	0.3	
	Community Food Projects	5.0	-	-	-	-	-	-	-	-	-	-	5.0	-	-	
	Outreach for Socially Disadvantaged Farmers and Ranchers	6.8	-	-	-	6.8	-	-	-	-	-	-	-	-	-	
APHIS	Salaries and Expenses	1,435.4	172.2	-	-	-	-	-	-	-	1,263.2	-	-	-	-	
	Buildings and Facilities	2.2	-	-	-	-	-	-	-	-	2.2	-	-	-	-	
	Trust Funds	14.6	-	-	-	-	-	-	-	-	14.6	-	-	-	-	
FSIS	FSIS-Salaries & Expenses	838.6	-	-	-	-	-	-	-	-	838.6	-	-	-	-	
	FSIS-No Year Funds	31.0	-	-	-	-	-	-	-	-	31.0	-	-	-	-	
	Trust Funds	3.7	-	-	-	-	-	-	-	-	3.7	-	-	-	-	
GIPSA	Salaries and Expenses	33.2	13.6	0.7	1.7	14.6	2.7	-	-	-	-	-	-	-	-	
	Inspection and Weighing Services	35.9	35.9	-	-	-	-	-	-	-	-	-	-	-	-	
AMS	Marketing Services	110.7	110.7	-	-	-	-	-	-	-	-	-	-	-	-	
	Payments to States and Possessions	1.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	
	Perishable Ag. Commodities Act Fund <sup>1</sup>	(10.2)	(10.2)	-	-	-	-	-	-	-	-	-	-	-	-	
	Funds for Strengthening Markets/Income/Supply	1,285.5	1,285.5	-	-	-	-	-	-	-	-	-	-	-	-	
	Wool Research Development and Promotion Trust Fund	2.2	2.2	-	-	-	-	-	-	-	-	-	-	-	-	
	Expenses & Refunds, Inspection & Grading of Farm Products	93.5	93.5	-	-	-	-	-	-	-	-	-	-	-	-	
	Payment to Expenses & Refunds, Inspection & Grading of Farm Products	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	
RMA	Administrative and Operating Expenses	70.2	-	-	-	70.2	-	-	-	-	-	-	-	-	-	
	Federal Crop Insurance Corporation Fund	2,902.0	-	-	-	2,902.0	-	-	-	-	-	-	-	-	-	
FSA	Salaries and Expenses	1,447.1	-	-	-	1,316.9	-	-	-	-	-	-	-	-	130.2	
	State Mediation Grants	4.0	-	-	-	4.0	-	-	-	-	-	-	-	-	-	

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<b>USDA FY 2003 Program Obligations</b>															
<b>(Dollars in Millions)</b>															
<b>Agency</b>	<b>Account</b>	<b>Program Obligations</b>	<b>Objectives</b>												
			<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>2.1</b>	<b>2.2</b>	<b>3.1</b>	<b>3.2</b>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>
FSA (Cont.)	Agricultural Credit Insurance Fund (Prog.)	790.1	-	-	-	790.1	-	-	-	-	-	-	-	-	-
	Agricultural Conservation Demonstration Program Account	0.6	-	-	-	-	-	-	-	-	-	-	-	-	0.6
	Dairy Indemnity Program	0.4	-	-	-	0.4	-	-	-	-	-	-	-	-	-
	Agricultural Conservation Program	5.7	-	-	-	5.7	-	-	-	-	-	-	-	-	-
	Emergency Conservation Program/Transfer to CCC	27.4	-	-	-	-	-	-	-	-	-	-	-	-	27.4
	Agricultural Credit Insurance Fund	23.7	-	-	-	23.7	-	-	-	-	-	-	-	-	-
	Farm Storage Facility Loan Direct Financing Acct.	66.0	-	-	-	66.0	-	-	-	-	-	-	-	-	-
	Ag. Conservation Guarantee Financing Acct.	0.8	-	-	-	0.8	-	-	-	-	-	-	-	-	-
	Agricultural Credit Insurance Fund-Direct (Fin.)	1,701.6	-	-	-	1,701.6	-	-	-	-	-	-	-	-	-
	Agricultural Credit Insurance Fund-Guar. (Fin.)	222.8	-	-	-	222.8	-	-	-	-	-	-	-	-	-
	CCC Apple Loans Direct Loan Financing Account	1.0	-	-	-	1.0	-	-	-	-	-	-	-	-	-
	CCC Apple Loans Direct Loan Program Fund	1.3	-	-	-	1.3	-	-	-	-	-	-	-	-	-
	CCC Export Loans Program Account	722.7	-	722.7	-	-	-	-	-	-	-	-	-	-	-
	Commodity Credit Corporation	33,948.5	4,073.8	-	156.4	27,487.0	-	-	-	-	-	-	-	-	2,231.2
	CCC Export Guarantee Financing Account	738.2	-	738.2	-	-	-	-	-	-	-	-	-	-	-
	CCC Export Guaranteed Loans Liquidating Account	1.8	-	1.8	-	-	-	-	-	-	-	-	-	-	-
	CCC Emergency Boll Weevil Direct Loan Financing Account	0.3	-	-	-	0.3	-	-	-	-	-	-	-	-	-
CCC Farm Storage Facility Loans Program Account	0.8	-	-	0.8	-	-	-	-	-	-	-	-	-	-	
NRCS	Conservation Operations	815.0	-	-	-	-	-	48.9	-	-	-	-	-	-	766.1
	Watershed Rehabilitation Programs	29.0	-	-	-	-	-	29.0	-	-	-	-	-	-	-
	Biomass Research and Development Program	14.0	-	-	14.0	-	-	-	-	-	-	-	-	-	-
	Farm Security and Rural Investment Programs	1,213.0	-	-	-	-	-	12.1	-	-	-	-	-	-	1,200.9
	Resource Conservation and Development	50.0	-	-	0.5	-	-	26.0	-	-	-	-	-	-	23.5
	Watershed Surveys and Planning	11.0	-	-	-	-	-	6.1	-	-	-	-	-	-	5.0
	Watershed and Flood Prevention Operations	185.0	-	-	-	-	-	42.6	-	-	-	-	-	-	142.5
	Wildlife Habitat Incentive Program	1.0	-	-	-	-	-	-	-	-	-	-	-	-	1.0
RD	Rural Community Advancement Program	1,053.0	-	-	-	-	452.8	600.2	-	-	-	-	-	-	-
	Salaries and Expenses	673.0	-	-	-	-	269.2	403.8	-	-	-	-	-	-	-

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USDA FY 2003 Program Obligations															
(Dollars in Millions)															
Agency	Account	Program Obligations	Objectives												
			1.1	1.2	1.3	1.4	2.1	2.2	3.1	3.2	4.1	4.2	4.3	5.1	5.2
RHS	Rental Assistance Program	724.0	-	-	-	-	-	724.0	-	-	-	-	-	-	-
	Rural Housing Assistance Grants	48.0	-	-	-	-	-	48.0	-	-	-	-	-	-	-
	Mutual and Self-Help Housing Grants	42.0	-	-	-	-	-	42.0	-	-	-	-	-	-	-
	Rural Housing Insurance Fund (Prog.)	798.0	-	-	-	-	-	798.0	-	-	-	-	-	-	-
	Rural Housing Insurance Fund (Liq.)	401.0	-	-	-	-	-	401.0	-	-	-	-	-	-	-
	Rural Housing Insurance Fund Direct (Fin.)	2,648.0	-	-	-	-	-	2,648.0	-	-	-	-	-	-	-
	Rural Housing Insurance Fund-Guar. (Fin.)	109.0	-	-	-	-	-	109.0	-	-	-	-	-	-	-
	Rural Community Facility Loans-Direct (Fin.)	373.0	-	-	-	-	-	373.0	-	-	-	-	-	-	-
	Farm Labor Housing	32.0	-	-	-	-	-	32.0	-	-	-	-	-	-	-
	Rural Community Facility Loans-Guar. (Fin.)	3.0	-	-	-	-	-	3.0	-	-	-	-	-	-	-
RBCS	Rura Cooperative Development Grants	60.0	-	-	-	-	60.0	-	-	-	-	-	-	-	-
	Renewable Energy Program	22.0	-	-	-	-	22.0	-	-	-	-	-	-	-	-
	Rural Development Loan Fund (Prog.)	24.0	-	-	-	-	24.0	-	-	-	-	-	-	-	-
	Rural Economic Development Grants	4.0	-	-	-	-	4.0	-	-	-	-	-	-	-	-
	Rural Economic Development Loans (Prog.)	3.0	-	-	-	-	3.0	-	-	-	-	-	-	-	-
	Rural Economic Development Loans (Fin.)	22.0	-	-	-	-	22.0	-	-	-	-	-	-	-	-
	National Sheep Industry Improvement Center Re- volving Fund	1.0	-	-	-	-	1.0	-	-	-	-	-	-	-	-
	Rural Development Loan Fund -Direct (Fin.)	58.0	-	-	-	-	58.0	-	-	-	-	-	-	-	-
	Rural Business and Industry Direct Loans (Fin.)	6.0	-	-	-	-	6.0	-	-	-	-	-	-	-	-
	Rural Business and Industry Direct Loans-Guar. (Fin.)	121.0	-	-	-	-	121.0	-	-	-	-	-	-	-	-
Rural Empowerment Zones/Enterprise Communi- ties	27.0	-	-	-	-	27.0	-	-	-	-	-	-	-	-	
RUS	RETRF (Prog. Acct.)	193.0	-	-	-	-	135.1	57.9	-	-	-	-	-	-	-
	Rural Telephone Bank Program Account	7.0	-	-	-	-	4.9	2.1	-	-	-	-	-	-	-
	Distance Learning and Medical Link Programs	68.0	-	-	-	-	47.6	20.4	-	-	-	-	-	-	-
	High Energy Cost Grants	19.0	-	-	-	-	13.3	5.7	-	-	-	-	-	-	-
	Rural Communication Development Fund	3.0	-	-	-	-	2.1	0.9	-	-	-	-	-	-	-
	Distance Learning Telemedicine Direct Loan (Fin. Acct.)	83.0	-	-	-	-	58.1	24.9	-	-	-	-	-	-	-

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<b>USDA FY 2003 Program Obligations</b>															
<b>(Dollars in Millions)</b>															
<b>Agency</b>	<b>Account</b>	<b>Program Obligations</b>	<b>Objectives</b>												
			<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>2.1</b>	<b>2.2</b>	<b>3.1</b>	<b>3.2</b>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>
RUS (Cont.)	Rural Development Insurance Fund (Liq. Acct.)	132.0	-	-	-	-	-	92.4	39.6	-	-	-	-	-	-
	Rural Telephone Bank (Fin. Acct.)	196.0	-	-	-	-	-	137.2	58.8	-	-	-	-	-	-
	RETRF (Fin. Acct. - Direct)	5,308.0	-	-	-	-	-	3,715.6	1,592.4	-	-	-	-	-	-
	Rural Water & Waste Disposal Loans (Direct Fin. Acct.)	1,138.0	-	-	-	-	-	796.6	341.4	-	-	-	-	-	-
	RETRF (Liq. Acct.)	998.0	-	-	-	-	-	698.6	299.4	-	-	-	-	-	-
	Rural Telephone Bank (Liq. Acct.)	28.0	-	-	-	-	-	19.6	8.4	-	-	-	-	-	-
	Appalachian Reg. Commission Transfer	17.0	-	-	-	-	-	11.9	5.1	-	-	-	-	-	-
	Dept. of Commerce Transfer	3.0	-	-	-	-	-	2.1	0.9	-	-	-	-	-	-
FAS	Scientific Activities Overseas (Foreign Curr. Prog) <sup>2</sup>	(7.8)	-	(7.8)	-	-	-	-	-	-	-	-	-	-	-
	Trade Adjustment Assistance for Farmers	2.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-
	Salaries and Expenses	197.8	128.6	69.2	-	-	-	-	-	-	-	-	-	-	-
	Title I Ocean freight Differential Grants	30.3	-	30.3	-	-	-	-	-	-	-	-	-	-	-
	P.L.480 (Liq. Acct.)	9.2	-	9.2	-	-	-	-	-	-	-	-	-	-	-
	P.L.480 (Prog.)	87.6	-	87.6	-	-	-	-	-	-	-	-	-	-	-
	P.L. 480 Title II	1,530.9	-	1,530.9	-	-	-	-	-	-	-	-	-	-	-
	Program & Grants Accounts	248.4	-	248.4	-	-	-	-	-	-	-	-	-	-	-
	P.L.480-Direct (Fin. Acct.)	652.7	-	652.7	-	-	-	-	-	-	-	-	-	-	-
	Food for Progress (Russia)	208.3	-	208.3	-	-	-	-	-	-	-	-	-	-	-
	Debt Reduction (EAI) Fin. Acct.	47.2	-	47.2	-	-	-	-	-	-	-	-	-	-	-
McGovern-Dole Account	100.0	-	100.0	-	-	-	-	-	-	-	-	-	-	-	
FNS	Food Donations Programs	59.5	-	-	-	-	-	-	-	-	-	59.5	-	-	-
	Food Stamp Program	25,688.0	-	-	-	-	-	-	-	-	-	25,431.1	256.9	-	-
	Commodity Assistance Program	169.0	-	-	-	-	-	-	-	-	-	169.0	-	-	-
	Food Program Administration	139.0	-	-	-	-	-	-	-	-	-	87.6	2,848.7	-	-
	Special Supplemental Nutrition Program (WIC)	4,686.0	-	-	-	-	-	-	-	-	-	4,358.0	328.0	-	-
	Child Nutrition Programs	11,034.0	-	-	-	-	-	-	-	-	-	11,034.0	-	-	-
FS	Land Acquisition Title VIII	2.4	-	-	-	-	-	-	-	-	-	-	-	2.4	-
	Capital Improvement and Maintenance	654.6	-	-	-	-	-	-	-	-	-	-	-	-	654.6

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USDA FY 2003 Program Obligations																
(Dollars in Millions)																
Agency	Account	Program Obligations	Objectives													
			1.1	1.2	1.3	1.4	2.1	2.2	3.1	3.2	4.1	4.2	4.3	5.1	5.2	
FS (Cont.)	Forest and Rangeland Research	328.3	-	-	-	-	-	-	-	-	-	-	-	-	328.3	-
	State and Private Forestry	444.6	-	-	-	-	-	-	-	-	-	-	-	-	71.1	373.5
	National Forest System	1,644.7	-	-	-	-	-	-	-	-	-	-	-	-	1,644.7	-
	Wildland Fire Management	1,913.6	-	-	-	-	-	-	-	-	-	-	-	-	1,837.1	76.5
	Payments to States	282.7	-	-	-	-	-	-	-	-	-	-	-	-	-	282.7
	Payments to States, Northern Spotted Owl Guarantee	18.7	-	-	-	-	-	-	-	-	-	-	-	-	18.7	-
	Management of National Forest Lands for Subsistence Uses	5.6	-	-	-	-	-	-	-	-	-	-	-	-	5.6	-
	Emergency Pest Suppression Fund	0.2	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-
	Working Capital Fund	227.6	-	-	-	-	-	-	-	-	-	-	-	-	227.6	-
	Land Acquisition	169.8	-	-	-	-	-	-	-	-	-	-	-	-	169.8	-
	Recreation Fees for Collection Costs	0.8	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-
	Federal Payment, Payments to States, National Forests Fund	137.6	-	-	-	-	-	-	-	-	-	-	-	-	137.6	-
	Timber Roads, Purchaser Elections <sup>3</sup>	(0.2)	-	-	-	-	-	-	-	-	-	-	-	-	(0.2)	-
	Roads and Trails for States, National Forest Fund	17.4	-	-	-	-	-	-	-	-	-	-	-	-	17.4	-
	Timber Salvage Sales	70.5	-	-	-	-	-	-	-	-	-	-	-	-	70.5	-
	Expenses, Brush Disposal	8.0	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-
	Range Betterment Fund	3.4	-	-	-	-	-	-	-	-	-	-	-	-	3.4	-
	Payment to Minnesota from the National Forests Fund	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1
	Licenses Programs <sup>4</sup>	(10.7)	-	-	-	-	-	-	-	-	-	-	-	-	(10.7)	-
	Restoration of Forest Lands	2.2	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
	Acquisition of Lands to Complete Land Exchanges	4.0	-	-	-	-	-	-	-	-	-	-	-	-	4.0	-
	Operation and Maintenance Quarters	6.9	-	-	-	-	-	-	-	-	-	-	-	-	6.9	-
	Timber Sale Pipeline Restoration Fund	2.2	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
	Recreation Fee Demonstration Program	37.1	-	-	-	-	-	-	-	-	-	-	-	-	37.1	-
	Midwin National Tallgrass Prairies Rental Fees <sup>5</sup>	(0.3)	-	-	-	-	-	-	-	-	-	-	-	-	(0.3)	-
	Land Between the Lakes Management Fund <sup>3</sup>	(0.2)	-	-	-	-	-	-	-	-	-	-	-	-	(0.2)	-
	Cooperative Work Trust Fund	36.7	-	-	-	-	-	-	-	-	-	-	-	-	36.7	-

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<b>USDA FY 2003 Program Obligations</b>																
<b>(Dollars in Millions)</b>																
<b>Agency</b>	<b>Account</b>	<b>Program Obligations</b>	<b>Objectives</b>													
			<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>2.1</b>	<b>2.2</b>	<b>3.1</b>	<b>3.2</b>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>	
FS (Cont.)	Reforestation Trust Fund	22.0	-	-	-	-	-	-	-	-	-	-	-	-	22.0	-
	Gifts and Bequests	0.5	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-
	Payments to Counties, National Grasslands <sup>5</sup>	(0.8)	-	-	-	-	-	-	-	-	-	-	-	-	(0.8)	-
	Federal Highway Transfer (FS)	9.5	-	-	-	-	-	-	-	-	-	-	-	-	9.5	-
<b>Total</b>		<b>118,850</b>	<b>6,169</b>	<b>4,600</b>	<b>499</b>	<b>34,763</b>	<b>6,984</b>	<b>8,936</b>	<b>1,142</b>	<b>2,208</b>	<b>41,322</b>	<b>757</b>	<b>166</b>	<b>5,671</b>	<b>5,635</b>	
<b>Total by Goals*</b>			<b>46,031</b>				<b>15,920</b>			<b>3,350</b>			<b>42,245</b>		<b>11,306</b>	

\*Goal and objective totals have been rounded to the nearest whole number. Totals may not add due to rounding.

<sup>1</sup>Negative balance is a result of investments with commercial banks. Investments create de-obligations in the account. At the end of FY 2003 there was no obligation to offset the earlier de-obligation.

<sup>2</sup>Negative balance is due to the transition from the old central accounting system to the new system (FFIS). When overseas transactions were reconciled, overstated obligations were eliminated. Funds were de-obligated to bring the account into sync with Treasury.

<sup>3</sup>Negative balance due to adjustment of funds in FY 2003 to ensure that both current and historical data were aligned appropriately between the budgetary and proprietary accounts.

<sup>4</sup>Negative balance in FY 2003 is a result of 2002 restated financial activity.

<sup>5</sup>Negative balance is due to reviews and adjustments of on-going payments to States. Transfers from the receipts accounts had not been completed. Research currently is being conducted.



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### Fiscal Year 2003 Staff Years

The table below depicts the component agencies and staff offices of the Department of Agriculture with estimated staff years obligated to each objective. Staff years have been rounded to the nearest tenth and have been allocated to more than one objective when the amount of each objective was significant and could be identified. Staff offices and departmental management generally support all USDA objectives and, in most cases, have been reallocated equally among all objectives.

USDA FY 2003 Staff Years														
Agency	Staff Years	Objectives												
		1.1	1.2	1.3	1.4	2.1	2.2	3.1	3.2	4.1	4.2	4.3	5.1	5.2
OSEC	70	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
OCFO	1,650	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9	126.9
OCIO	310	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
DA	684	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
DA/HMM	6	-	-	-	-	-	-	-	-	-	-	-	6.0	-
OC	98	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
OIG	621	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
OBPA	64	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
OGC	319	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
OCE	53	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
ERS	438	70.1	21.9	21.9	78.8	21.9	30.7	21.9	30.7	21.9	21.9	43.8	-	52.6
NAD	119	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
NASS	1,076	461.1	-	-	58.0	320.9	-	-	96.0	-	-	-	-	140.1
ARS	8,622	-	-	845.0	-	-	-	845.0	5,345.6	120.7	120.7	120.7	612.2	612.2
CSREES	360	28.8	28.8	28.8	18.0	14.4	14.4	21.6	36.0	25.2	25.2	25.2	46.8	46.8
APHIS	7,462	895.4	-	-	-	-	-	-	6,566.6	-	-	-	-	-
FSIS	9,479	-	-	-	-	-	-	9,479.0	-	-	-	-	-	-
GIPSA	707	289.9	14.1	35.4	311.1	56.6	-	-	-	-	-	-	-	-
AMS	3,361	3,361.0	-	-	-	-	-	-	-	-	-	-	-	-
RMA	515	-	-	-	515.0	-	-	-	-	-	-	-	-	-
FSA	5,905	-	-	-	5,786.9	-	-	-	-	-	-	-	-	118.1
FSA Non-Federal	12,368	-	-	-	10,512.8	-	-	-	-	-	-	-	-	1,855.2
NRCS	12,140	-	-	-	-	-	1,140.7	-	-	-	-	-	-	10,999.3
RD	6,788	-	-	-	-	2,715.2	4,072.8	-	-	-	-	-	-	-
FAS	1,002	651.3	350.7	-	-	-	-	-	-	-	-	-	-	-
FNS/CNPP	1,528	-	-	-	-	-	-	-	-	825.1	76.4	626.5	-	-
FS	38,014	-	-	-	-	-	-	-	-	-	-	-	37,196.7	817.3
<b>Total</b>	<b>113,759</b>	<b>6,064</b>	<b>722</b>	<b>1,238</b>	<b>17,587</b>	<b>3,436</b>	<b>5,565</b>	<b>10,674</b>	<b>12,382</b>	<b>1,300</b>	<b>551</b>	<b>1,123</b>	<b>38,168</b>	<b>14,948</b>
<b>Total by Goals*</b>			<b>25,612</b>			<b>9,001</b>		<b>23,056</b>		<b>2,974</b>			<b>53,117</b>	

\*Goal and objective totals have been rounded to the nearest whole number. Totals may not add due to rounding.

## **DATA ASSESSMENT OF PERFORMANCE MEASURES**

### **Strategic Goal 1: Enhance Economic Opportunities for Agricultural Producers**

#### **Objective 1.1: Expand International Market Opportunities**

##### **Improve International Marketing Opportunities**

Data for the World Trade Organization and tariff rate are projected estimates based on results posted to the performance-tracking system within the Foreign Agricultural Service (FAS) during the first three quarters of FY 2003. Estimates for the fourth quarter of the reporting year 2003 are derived by estimating the sum value of trade-policy disputes currently under negotiation. USDA believes the disputes will be resolved successfully by the end of the fiscal year. Data are reliable and used by Agency and Department officials to highlight successes in the trade-policy arena.

While USDA uses an automated performance-tracking system to collect and analyze actual performance data from the Department's network of overseas offices and its headquarters, there often is a lag time between reported successful resolution of trade issues and estimated value to U.S. agriculture. This also can happen with independent verification through the U.S. Government's official trade statistics. There is no known remedy immediately available to address this problem.

The primary sources of trade data are U.S. Customs (which was absorbed into the Department of Homeland Security), information compiled by the U.S. Census Bureau, the USDA publication *Foreign Agricultural Trade of the United States* and other databases. For some products, trade data are not recorded. Thus, estimating the potential value of a sanitary and phytosanitary (SPS) accomplishment may be a challenge, especially where new exports to a previously closed market are concerned. In arriving at these estimates, USDA considers such factors as similar exports by other countries, the importing countries' respective purchasing power and sales into comparable markets. In addition to trade data, other sources include market reports compiled by USDA and industry estimates.

The raw data on animal-export protocols are complete, reliable and of good quality. The lists of new export protocols negotiated by the National Center for Import Export are updated monthly and can be obtained at [www.aphis.usda.gov/vs/ncie/iregs/animals/history.html](http://www.aphis.usda.gov/vs/ncie/iregs/animals/history.html). Program management staff has collected and posted the data where any errors can be seen by all interested parties and, if necessary, corrected.

The data for the number of international standards adopted are complete, final, reliable and of good quality. USDA's Animal and Plant Health Inspection Service (APHIS) personnel who attend the meetings of standard-setting bodies helped develop these international standards. The personnel provides updates to the Trade Support Team. The team then reports these accomplishments in the annual *SPS Accomplishments Report*. These standards are documented on the Web sites of the International Plant Protection Convention, the North American Plant Protection Organization and the International Organization of Epizootics. APHIS is developing a new performance measure for FY 2005 for Trade Issues Resolution and Management, which will reflect proposed increases in funding more accurately.

## **Objective 1.2: Support International Economic Development and Trade Capacity Building**

### **Support International Economic Development and Foreign Food Assistance**

Projected estimates indicate that USDA expects to meet its budgeted number of activities and projects completed to support international economic development and trade-capacity building. Data are based on results for the first three quarters. Estimates for the fourth quarter of the reporting year 2003 are derived by estimating the sum value of trade-policy disputes currently under negotiation. USDA believes the disputes will be resolved successfully by the end of the fiscal year. They are deemed to be reliable and are used by Agency and Department officials to highlight successes in the trade-policy arena.

An automated performance-tracking system is in place to collect and analyze actual performance data from USDA's network of overseas offices and its headquarters. However, there often is a time lag between the reported successful resolution of trade issues and estimated value to U.S. agriculture, and independent verification through the U.S. Government's official trade statistics. There is no known remedy immediately available to address this problem.

## **Objective 1.3: Develop Alternative Markets for Agricultural Products and Activities**

### **Increase the Use of Bioenergy and Biobased Products**

The data upon which performance information is based is complete and reliable. It represents the universe of applications for program participation received during the open-enrollment periods during FY 2003. Data quality is high since they represent the universe of actual sign-ups in the programs, proposals for funding or projects funded under the programs. Certification is approved by program managers.

## **Objective 1.4: Provide Risk Management and Financial Tools to Farmers and Ranchers**

### **Provide Risk Management Tools to Farmers and Ranchers**

The data are deferred until the end of the second quarter of FY 2004 because of the unavailability of actual crop-year data. Analysis has shown that 99 percent of the acreage and liability data will be reported to USDA during the first quarter of the new fiscal year. Once received, the Department will take extensive steps to verify the data's accuracy and validity. Thus, final actual data for any given fiscal year is unavailable until the second quarter of the following fiscal year. Additionally, the forecasted participation rates are calculated from USDA baseline projections of acres planted. Prior to FY 2003, the Department's baseline information contained planted acreage data for 13 principle crops. As of this fiscal year, the baseline information has been changed to seven major crops. This report contains updates to information submitted in previous performance reports to reflect more complete Federal crop-insurance data. Data for the number of commodities eligible for crop insurance are derived from internal sources and considered final and reliable.

### **Provide Credit to Agricultural Producers**

Data for these indicators are projected estimates. The projected year-end results are based on actual data through August 31, 2003.

Most farm-loan program data originates from the Agency's accounting system and is subject to internal and external audits. Service Center staff enters progress as applications are processed. The reliability of this data has been improving through system changes and reviews.

Comprehensive reviews are conducted annually to ensure that loan decisions are sound and program implementation complies with statutes and regulations. Additionally, the Office of Inspector General (OIG) audited FSA's Government Performance and Results Act process in FY 2001-02. OIG did not identify any problems related to the reliability of indicators for the farm loan programs.

Reports generated from the Executive Information Service System and the Intranet are the primary means of measuring farm loan program performance. The National Office reviews these reports quarterly to monitor progress toward achievement of the performance goals. Web-based FOCUS programs have been developed to monitor performance.

#### **Provide Income Support to Agricultural Producers**

Data for eligible commodity production are final. Actual production data are from the National Agricultural Statistics Service (NASS) Published Estimates Database, which can be found at [www.nass.usda.gov:81/ipedb/](http://www.nass.usda.gov:81/ipedb/). Loan and Loan Deficiency Payment (LDP) data are from the year 2002 *National Loan Summary Report* and the crop year 2002 *LDP Summary Report*. These two query reports may be found on the Online Reports section of FSA's Price Support Division (PSD) Web page at [www.fsa.usda.gov/dafp/psd/](http://www.fsa.usda.gov/dafp/psd/).

Data for the amount of commodity placed under marketing assistance loans and LDP originates from the USDA Service Centers, where it is input by FSA staff. This data then is uploaded daily to an automated system maintained at Kansas City. To help ensure accuracy, FSA personnel perform periodic spot checks to verify the quantity and eligibility of commodities placed under loan or LDP.

NASS production data may not be final for some commodities for up to two years after the end of the crop year. Additionally, NASS may not always have data for every State in which the PSD database shows loan or LDP activity. This report only includes data for those States with both loan and/or LDP data and NASS data. Therefore, a data limitation is that results may not always account for 100 percent of loan/LDP activity and actual production.

#### **Improve Electronic Delivery of Information and Services**

Data are projected estimates, with year-end projections based on system data as of September 16, 2003. Data source is a Web-based Database maintained and verified by FSA's Forms, Graphics and Records Branch within the Management Services Division. Data are updated daily as additional forms are added or a change in the status of a form occurs. For example, forms may become obsolete or programs expire. Reports are generated on request for Agency management.

Information contained in the Database constantly changes because of program changes or system enhancements, which allow additional forms to be added.

## **Strategic Goal 2: Support Increased Economic Opportunities and Improved Quality of Life in Rural America**

### **Objective 2.1: Expand Economic Opportunities through USDA Financing of Businesses**

#### **Improve Rural Economic Opportunities**

Business program data are collected in two ways. The Finance Office records and reports total loan and grant obligations, as of the date of obligation. These data are collected as part of the obligation process. Additionally, Rural Development uses one of its own systems, GLS, to collect more information for man-

agement and evaluation purposes. This information includes the number of jobs created or saved. Data on delinquency status mostly are reported by lenders directly to GLS. In other cases, Rural Development staff reports the information.

The data are final and complete as of September 2003 year-end calculations. While hundreds of lenders report the financial performance of their borrowers semi-annually to the Rural Business-Cooperative Service, all lenders currently are not reporting. There also is no consistency to the timing of their reports. In lieu of this, the Finance Office's financial data have been found acceptable to OIG, as are State Office-verified data on the financial performance of loans. Data for jobs created or saved are obtained by State Office staff and entered into GLS. These data are reliable when they have been updated and verified by State staff. USDA computes the jobs saved or created based on feasibility projections accompanying loan documents. The jobs are counted only in the initial year. The delinquency rate, excluding bankruptcy cases, is based on feasibility projections accompanying loan documents.

While the percentage of States verifying third-party financial and jobs data have improved each year, further improvements remain stalled due to staffing limitations and competing assignments. Rural Development has entered into an agreement with ERS to design and complete a model to better compute and measure the impacts of business programs in rural communities. These programs include such "quality of life" issues as health and education.

#### **Improve Telecommunication for Rural Residents**

Data are actual, final and complete. The county data are collected from each approved loan application. Applicants are required to detail their proposed service territories. This includes the number of subscribers to be served and location by county. Loan funds are advanced only for approved purposes. Measuring the extent to which broadband service is deployed in rural America on a county-by-county basis will enable Rural Development to assess improved economic conditions because of the availability of high-speed telecommunications network access for residents and business.

The data on the number of counties to be served for each loan are derived from applicants' loan applications. Data must be complete before loans can be approved. While applicants are required to perform market surveys of their proposed service areas, the actual counties served may vary from the plan if all funds are not used or the borrower later requests a change of purpose from the original loan application. Overall, the data on counties served are reliable.

All applications undergo an extensive review to determine eligibility. Additionally, all approved applications must show feasibility from a financial and technical standpoint. Applicants also are required to perform market surveys of their proposed service areas. Therefore, the data are reliable. As previously noted, the data on the number of counties to be served for each loan approved come from the applicant's loan application. The data are dependent upon the borrower drawing down loan funds and constructing the system as portrayed in the applicant's loan design. Loan funds only may be used for the approved purposes for which the loan was made. Thus, variances may result if a borrower does not draw down all loan funds or requests approval for a change of purpose from the original loan. This could result in a different number of counties served from the plan.

## **Objective 2.2: Improve the Quality of Life through USDA Financing of Quality Housing, Modern Utilities and Needed Community Facilities**

#### **Improve the Standard of Living in Rural America**

Homeownership data are actual, final and complete. The initial entry point for homeownership data is the Web-based UniFi system. This centralized server application ensures viable data collection. It tracks per-

formance and forecast needs. Information entered into UniFi also uploads nightly into the MortgageServ (a.k.a. Fasteller) system that is used to obligate funds, establish closed loans, administer escrow accounts, manage defaulted loans and perform other administrative functions. Brio, a query and reporting tool, serves as the interface between the data warehouse and Rural Development staff.

Homeownership data originate in systems used to obligate funding and are reliable. Data for initial placement of households into their own homes are reliable since they are linked directly to homeownership loans maintained in Rural Development's financial accounting systems. This is despite the fact that no adjustments are made for later defaults and the resulting loss of homeownership that lowers net homeownership achieved. Homeownership data are based on loan obligations collected in the Dedicated Loan Origination and Servicing system and stored in the Rural Development's Data Warehouse. As such, the data on number of households is auditable. Data represents the population served based on available U.S. census information. Rural Development's National Office screens the data annually for completeness and they are reliable.

Community Facilities program data are complete and final. They are collected by means of two streams of input. The Finance Office records and reports total loan and grant obligations as of the date of obligation. These data are collected as part of the obligation process. Additionally, Rural Development collects information for management and evaluation purposes. Data on delinquency status are reported by the Finance Office for Community Facilities Direct loans, and by lenders for the Community Facilities Guaranteed loans.

Community Facilities data are entered into GLS by field staff at the time program funds are obligated. Data are final, complete and reliable, and represent the population served based on available U.S. census information. Rural Development's National Office screens the data annually for completeness and they are reliable. Population data served by community facilities are estimates. Rural Development's National Office screens data annually for irregularities. Given the variety of service areas served by different types of community facilities (e.g., libraries, fire equipment, health clinics), estimation is an art, not a precise science. Population estimates served by community facilities are much less reliable as indicators of the extent of benefits. Rural Development is developing mapping technologies that will enable more consistent determination of service areas for community facilities. Data are reliable, based on engineering studies used for design of new or expanded public utilities systems.

New program applications are developed using the Community Programs Application Processing (CPAP) system. CPAP is a software tool used by field staff to work directly and interactively with applicants regarding planned system characteristics. The program contains a number of edit checks to enhance reliability. The data are stored on a server and moved nightly to the Data Warehouse for permanent storage and reporting. This manner of developing system plans greatly enhances data reliability since they are integral to program planning.

The number of subscribers (650,000) receiving new or improved water or wastewater service are determined by USDA's Rural Development field staff. This number, then, are entered into the Rural Community Facilities Tracking System. This figure is a projected estimate based on approximately 10 months of actual data. It is adjusted for the remaining time and available funding.

## **Strategic Goal 3: Enhance Protection and Safety of the Nation's Agriculture and Food Supply**

### **Objective 3.1: Enhance the Protection of Meat, Poultry and Egg Products from Foodborne Hazards in the U.S.**

#### **Strengthen Food Safety**

The data used to develop risk assessments are complete, reliable and of good quality. They are the best data that the food-safety and public-health community can assemble. USDA works with partners and contractors to ensure the data's quality and the science behind risk assessments. If a risk assessment is to be used as the basis for a regulation, it is peer reviewed by experts from academia, other government agencies and/or the public-health community.

#### **Enhance Protection from *Salmonella* and *Listeria monocytogenes***

The data are complete, reliable and of good quality. The data are derived from sampling programs and analysis of product samples taken from meat and poultry plants by USDA employees. The samples are analyzed by Food Safety and Inspection Service (FSIS) and International Organization for Standardization-accredited laboratories to ensure accurate results. The results of the analyses are entered into the Pathogen Reduction Enforcement System. The information is used to schedule future sampling at FSIS-inspected plants. FSIS considers the data to be extremely reliable and bases policy, program decisions and resource allocation upon this data.

#### **Improve Detection of Foodborne Hazards**

Data for developing systems for detecting foodborne hazards are complete, highly reliable and of good quality. Each research unit submits annual progress reports via USDA's state-of-the-art, electronic-information and database system. Line and program managers review the information and report their findings to Congress, customers, stakeholders, partners and the general public. Progress reports are available at [www.ars.usda.gov](http://www.ars.usda.gov). Once you arrive at the site, click on "Research." The reports also are available at the Food Safety Research Information Office (FSRIO) at the USDA-National Agricultural Library. FSRIO is the source for all Federal food-safety research information, having absorbed the role and duties of the Joint Institute for Food Safety Research. Data from the USDA Food Safety Research Program must meet FSRIO's quality standards. Customers and stakeholders provide the Department with continual feedback on the data's quality, relevance, value and usefulness.

### **Objective 3.2: Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks**

#### **Reduce the Risks of Entry and Establishment of Pests and Diseases**

The data on plant-pest detection cannot be complete and final until the surveys are finished at the end of the calendar year. Surveys are based on plant-pest biology instead of fiscal years. Recent increases in the program's appropriation and funding for State cooperators will increase the number of surveys. The data are retrieved from the National Agricultural Pest Information System (NAPIS) after they have been recorded by State and university cooperators working under cooperative agreements. The data are reliable because they track actual finds or the absence of pests. The final percentage reported is based on the findings from NAPIS, pest risk assessments and the New Pest Advisory Group.

The data on animal pests and disease are complete, final, reliable and of good quality. Veterinary Services' management officials use many information sources to alert them to the possibility of new diseases. Information on the presence or absence of animal diseases is collected monthly from each State's Chief

Animal Health Official. The diseases for which the information is collected are those that are listed as being most serious by the Office International des Epizooties (OIE). When a suspected animal disease outbreak occurs, USDA investigates. Databases have been developed to track exotic animal disease investigations. The emerging animal disease database is verified and analyzed on a quarterly basis by the Emergency Programs Staff.

Other important surveillance information is found in NAHMS' database. The National Animal Health Reporting System (NAHRS) is a joint effort of the U.S. Animal Health Association (USAHA), the American Association of Veterinary Laboratory Diagnosticians (AAVLD) and USDA's APHIS. NAHRS is considered one part of a comprehensive, integrated animal health surveillance system in the U.S.

Reporting criteria for OIE's disease list were developed by commodity working groups consisting of representatives from USAHA, AAVLD, the respective industry, USDA and private practitioners. The commodities currently covered are cattle, sheep and goats, equine, swine, and commercial poultry and food fish. OIE's list can be found in the *NAHRS Operational Manual/Uniform Methods and Rules*. More information about USDA's animal disease-monitoring surveillance can be found at [www.aphis.usda.gov/vs/ceah/cahm/index.htm](http://www.aphis.usda.gov/vs/ceah/cahm/index.htm).

### **Improve Animal Emergency Management**

The data on the number of States and territories which meet the standards for preventing, detecting and responding to animal-health emergencies, once reported, will be complete, final, reliable and of good quality. They are based on a self-assessment provided jointly by USDA's Area Veterinarian in Charge, the Department's Emergency Management Coordinator (when all are hired) and the State Veterinarians. The assessments are verified by peer reviews and test exercises. Each test exercise contains an evaluation component that assesses the preparedness and response capability of the coordinated responders. APHIS expects to have all coordinators in place by the end of FY 2005.

### **Improve Animal Diagnostic Services**

The NAHLN Steering Committee determines the criteria for adding diagnostic laboratories to the Network. A letter is sent to each newly accepted laboratory recognizing its membership. Contracts are initiated for those laboratories selected to assist with Chronic Wasting Disease (CWD) and scrapie testing. Those two lists are reviewed and the number of States represented is tallied and used as the data source for animal-diagnostic services.

The data are complete, final, reliable and of good quality. Approval is provided either by the steering committee or the NVSL director before a laboratory can be placed on a list identifying them as NAHLN or as a contract CWD/scrapie laboratory. Since the data are merely a tally of those States involved, statistical misrepresentation is impossible. Managers use the information to evaluate whether their laboratories have access to adequate backup in an animal disease emergency situation. Ongoing listings of both NAHLN laboratories and the CWD/scrapie laboratories are maintained.

### **Improve Plant Diagnostic Laboratory Capabilities**

The data represent actual and projected accomplishments. The data are direct counts of accomplishments—the number of laboratories receiving certification and connected to the National Agricultural Pest Information System. State and university partners report the data to National Program Leaders for review and verification through certification providers and Purdue University.

This new effort of improving plant diagnostic laboratory capabilities makes it impossible to provide any data other than the numbers of laboratories achieving certification or linkup. As the effort continues, more



valid and specific performance data will become available. Specifically, the data will represent the combined performance measurement score (0 to 100) reflecting annual and periodic (five-year) scientific, academic or expert and stakeholder review of the relevance, quality and performance of the portfolio of diagnostic activities. Scores represent the respective panels' assessment along a continuum from exceeding expectations, to meeting expectations, to needing improvement in one or more of the three dimensions. This scoring procedure, based on OMB's new Research and Development Criteria, currently is under development, and baseline measures will be developed in FY 2004.

### **Research Plant Pathogens**

Data represents actual accomplishments and are highly reliable.

All intramural research projects undergo an external peer review at the beginning of their five-year program cycle. Any research findings undergo peer review before they are published in a scientific journal. New and improved varieties are not released until they successfully complete a rigorous evaluation of the claims made for them in uniform variety tests that are conducted at 24 or more locations.

The formal system of annual progress reports is received via a state-of-the-art, electronic-information and database system. Initial reviews were conducted by line management prior to submission to National Program Staff for final review and reporting to Congress and stakeholders.

## **Strategic Goal 4: Improve the Nation's Nutrition and Health**

### **Objective 4.1: Improve Access to Nutritious Food**

#### **Reduce Hunger and Improve Nutrition**

The data are of good quality and highly reliable. Data for the Food Stamp Program (FSP) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) are 12-month, fiscal-year participation averages. National School Lunch Program (NSLP) and School Breakfast Program (SBP) data are nine-month, fiscal-year participation averages. The summer months are excluded because activity is minimal. Child and Adult Care Food Program (CACFP) meals served are a 12-month cumulative total.

Summer Food Service Program (SFSP) average daily attendance is reported only for the month of July. It should be noted that the only bases for estimating SFSP activity is initial data for meals served in June. These data have been subject to substantial revision in prior years. July data for average daily attendance are not available until the end of November.

Internally, agency managers use USDA data regularly with confidence.

Some of the users who accept the reliability of USDA data regularly include:

- The Office of Management and Budget (OMB): OMB accepts and utilizes the Department's budget projections biannually. These include the use of both complete and preliminary data.
- Food and Nutrition Service (FNS): USDA publicly releases its data on the FNS Web site monthly. Any use of preliminary data always is labeled as such.
- The Office of Inspector General (OIG): OIG auditors accept USDA data annually as part of the documentation for the FNS (and now USDA) financial statement.
- The Government Accounting Office (GAO): GAO routinely uses the eligibility, participation and financial information in the National Data Bank (NDB) in its reports to Congress and the general public. There have been no reported instances of data reliability being questioned subsequent to publication in GAO reports.

State agency reports are submitted to FNS regional offices. The reports are reviewed for completeness and consistency. The State agency validates and certifies the data. Regional office analysts review State agency submissions to verify completeness, reliability and quality. If the data are acceptable, the regional analyst posts them to the NDB Preload System. The System is a holding area for data review prior to release. If the data are unacceptable as provided, regional office personnel reject the report and contact the State agency. Data posted by regional personnel into the NDB Preload are reviewed at FNS Headquarters by staff of the Program Reports, Analysis and Monitoring Branch, Budget Division. If data are reasonable and consistent with previous reports, they will be downloaded to the NDB Production System for public release. If not, headquarters rejects the reports and contacts the regional office. The office then informs the State agency that it must provide more reasonable data or a valid explanation of apparent inconsistencies.

## **Objective 4.2: Promote Healthier Eating Habits and Lifestyles**

### **Healthier Eating Habits and Lifestyles**

Data for support for the purchase of fruits and vegetables and School Meal Monitoring Reviews are projected estimates. Data on the USDA purchase of fruits and vegetables for commodity distribution programs come from the Processed Commodities Inventory Management System (PCIMS) and the Food Distribution Program on Indian Reservations (FDPIR). Data maintained in both systems record the amount of inventory of fruits and vegetables purchased by USDA for its programs along with the corresponding program costs.

Estimates of the proportion of food stamp benefits or Child Nutrition Program meal reimbursements used to support fruits and vegetables are based on national studies and data sets. The estimate of the amount of food stamp benefits spent on fruits and vegetables is based on data collected in 1996. That data indicated that about 20 percent of the dollars available for household food is spent on fruits and vegetables. Similarly, estimates of the amount of Child Nutrition Program meal reimbursements are based on 1996-97 data collection that indicated public schools spent about 20 percent of all food dollars on fruits and vegetables. Since all Child Nutrition Programs have similar meal-pattern requirements, this percentage has been applied to all program estimates. An analysis of the WIC food packages suggests that slightly more than 15 percent of total WIC food benefits are spent on fruits and vegetables. Currently, there is no information available that suggests purchasing patterns have changed sufficiently over the last five years to require revision of these estimates.

While data on School Meal Monitoring Reviews are obtained from the State administering agencies that conduct the reviews, the agency's ability to ensure that they are complete and accurate is limited because their collection is voluntary and informal. These limitations exist because of strong opposition from the school food service community to a more formal data collection process. Despite the collection process' flaws, the data are the best-available on the oversight of school-meals quality.

PCIMS tracks commodity purchases for nutrition-assistance programs. USDA staff enters and validates PCIMS data. FDPIR data are obtained from Defense Department billing information and verified through USDA administrative records. Both are maintained in database systems. Estimates of the portion of food benefits or meal reimbursements spent on fruits and vegetables utilize information obtained from nationally representative studies. These studies provide the most current estimates of food expenditures on fruits and vegetables. USDA is unaware of any significant limitations on the data's validity or accuracy.

Data for the percentage of WIC mothers breastfeeding are deferred because performance data is available only biennially. Targets are set only for those years. This information comes from a biennial analysis of WIC participation data provided by State agencies. The data represent a census of WIC participants and are reliable.

Data for dissemination of USDA nutrition-education materials are projected estimates. Contractors, which include the National Technical Information Service, U.S. Chamber of Commerce and the District of Columbia Archival Research Catalogue, distribute materials for USDA. They provide distribution reports to USDA, which are verified through management reviews and other reporting mechanisms as resources permit.

Additionally, USDA staff collects and compiles data for its own hard-copy dissemination efforts from internal mailing lists and Agency print orders. The Department also collects information on Web downloads using WebTrends software. The software tracks Web-site traffic over time. USDA compiles Web data monthly and verifies its accuracy. The Department is unaware of any significant limitations of the data's validity.

Data on the overall number of materials released cannot be linked directly to the number or proportion of participants reached by these events. USDA plans to evaluate the impact of its nutrition-education efforts as resources permit.

### **Objective 4.3: Improve Food Program Management and Customer Service**

#### **Improve Food Management Efficiency**

The most-current Quality Control data available are for FY 2002. Final conclusions about a more current rate cannot be made until the established methodology for calculating it is completed. The Food Stamp payment accuracy data are used annually to support the Food Stamp Quality Control process based on statistically valid methodology. The process uses a systematic random sampling of FSP participants. The results of these activities are used to determine individual States combined payment-error rate. This rate is made up of over-issuances and under-issuances of FSP benefits. A regression formula is applied to the results of the reviews to arrive at the official error rates. The Quality Control error rate is valid and accepted by GAO and OIG.

State agencies select cases monthly that are reviewed to determine the accuracy of the eligibility and benefit-level determination. They include a client interview and a process of getting verification of all elements of eligibility, and the basis of issuance of Food Stamp benefits. Federal reviewers validate a sample of the State's reviews by conducting a second review. State agencies can verify and validate data through an informal review process. This process and the protections in place to ensure the data's accuracy are based on an agreement between the States and Federal reviewers. The process has proven to be a sound method of arriving at reliable data.

A results measure currently is unavailable for NSLP certification accuracy because USDA is refining the methodology for calculating certification error. Since the FY 2003 *Annual Performance Plan* measure and targets were set, the Department has continued to explore alternative analyses of data that may match program-eligibility requirements more closely. These alternatives vary in the discrepancy level between the total number of free certifications and the estimates of those eligible.

## **Strategic Goal 5: Protect and Enhance the Nation's Natural Resource Base and Environment**

### **Objective 5.1: Implement the President's Healthy Forests Initiative and Other Actions to Improve Management of Public Lands**

#### **Improve Fire Management**

The data for Fire Management are reliable, of good quality and certified by the respective line officer. They are based on actual FY 2003 performance data. USDA wildfire program managers collected, compiled and analyzed the data. Data for hazardous fuels were reported through the National Fire Plan Operations and Reporting System. This system was co-developed by USDA and Department of Interior land-management agencies. Field units reported data for the fire-management plans and success in controlling wildfires during initial attacks directly to national headquarters. The Office of Management and Budget uses the data in preparing the President's budget to Congress. The data are generated from the USDA accounting system and subject to internal and external audits.

#### **Managing Sustainable Grasslands**

Rangelands-management data are considered reliable and of high quality. Rangeland data were projected estimates from 10 months of actual 2003 performance data and 2 months projected data. Data are based on FS records of acres contained within individual allotments and are records certified by the respective line officers. Employees who manage rangelands and grazing allotments enter data into the Management Attainment Reporting System. This data reflect the implementation of required directions found in decision documents, allotment management plans and biological opinions. An allotment is considered managed to standard when all management direction is implemented for that year. Data reported through September are estimates. Actual final figures will become available between late-October and mid-November. The data are valid for each allotment that is assessed. Data from assessed allotments are joined with similar data for the remaining allotments. This combination results in a reliable rollup of quality data to USDA.

#### **Cleanup Hazardous Wastes**

Each agency has assigned responsibility for planning, implementing, documenting and reporting results in the environmental cleanup program to a professional staff at an appropriate organizational level. The data is reliable and used throughout the year by the agencies and USDA.

With respect to data quality, there may be issues associated with specific sites targeted for cleanup. During any given fiscal year, the specific cleanups declared complete may differ from those identified as performance targets. Deviations may be due to unexpected findings, emergencies or delays in working with States and other stakeholders. Agency environmental coordinators review planned and actual performance, and senior management confirm the results before reporting is finalized. The Department then reviews all reported data.

### **Objective 5.2: Improve Management of Private Lands**

#### **Maintain Resource Health and Productive Capacity**

Data for protection of working cropland and grazing land and data for erosion reduction on working cropland are collected through the NRCS Performance and Results Measurement System (PRMS). Data for these indicators are final.

Data are reported by agency employees and partners in each field office across the Nation. Ongoing quality assurance activities are designed to minimize variation in data-definition interpretation. State-level managers certify the quality of their data. Data-quality checks also are conducted at the national level. Additional training is provided if reviews indicate a need. GAO conducted a review (GAO/RCED-00-83) of the accountability system, including PRMS. Data are considered reliable for use in monitoring progress toward goals and demonstrating use of program funds. Improvements to be implemented in FY 2004 are designed to improve data quality while reducing the reporting burden for field-level employees.

Data reported for land under long-term retirement contract are projected estimates. They are direct enumerations based on Conservation Reserve Program (CRP) contract file data. Year-end estimates are based on actual data through August, plus projected performance for the remaining two months of the fiscal year. Data are derived from the Farm Service Agency (FSA) National CRP Contract and Offer Data Files. The data are reliable and of acceptable quality. CRP data are uploaded from the USDA Service Centers to the automated CRP data files weekly. These files record the conservation practice installed and the location of land relative to National and State priority areas. They also document the erodibility index (EI) and other soil characteristics of the land enrolled in each contract. To help ensure program integrity, service center employees conduct on-site spot checks. They also review producer files prior to annual payment issuance to ensure conservation practices are maintained in accordance with program requirements. CRP acreage and soils descriptions could be considered certified by the contract's completion and accompanying conservation plan approval process.

CRP's erosion impacts are projected estimates using regional average National Resources Inventory (NRI) erosion rates on CRP land in 1997 (after CRP). These rates are compared with erosion rates estimated to have occurred on CRP land in 1982 (before CRP). Erosion rates before CRP are estimated by a multi-step process. First, 1982 average erosion rates by county, type of erosion and erodibility index from the NRI are assigned to each CRP contract. The rates are based on the contract's county, erosion type and EI. State (and regional, if needed) average erosion rates are used to assign erosion rates to CRP contracts that do not have assigned rates after the first step. Erosion prevented by type is the difference between the before and after estimates. NRI data for resource attributes are the highest quality available and are reliable and acceptable. Erosion estimates are considered preliminary because the models used are updated and improved periodically.

Carbon sequestration data are projected estimates using CRP contract and current global change research data. The CRP contract data are sorted to identify the area in grass and tree cover. The tree data then are sorted by region and age. For grasslands, projected estimates of the carbon sequestered per acre are obtained from the Agricultural Research Service (ARS). Those estimates then are merged with CRP contract data to estimate total carbon sequestered by CRP grasslands. FS estimates of the carbon sequestered per acre by region, tree species and age are merged with the corresponding data from CRP contract data. This is done to estimate total carbon sequestered by CRP forestlands. Total carbon sequestered is the sum of the grassland and forestland estimates. These projected estimates provided by ARS and FS are the best available and considered reliable and acceptable. Data from USDA was developed in 2001 through 2002. The data for estimating the amount of carbon sequestered remains under development. Current estimates rely on the extrapolation of regional parameters. Additional research may lead to improved measurement capabilities, resulting in more accurate estimates. While the data currently reported represent the best estimates available at this time, they could change as the USDA/Department of Energy carbon-accounting rules are completed.

Data on acreage under approved forest stewardship management plans are collected by the Forest Service (FS) from the State Foresters and entered into the Performance Measurement Accountability System. The projected number of acres of non-industrial private forestlands under approved stewardship management

plans equals that of the planned accomplishments for the year. The Forest Stewardship Program is administered by the State Foresters under FS grants that stipulate that State Foresters report on grant accomplishments after the end of the grant period.

Because forest stewardship plans must be approved by the State Foresters, they are prepared by professional foresters and include acreage of forest land. The data are deemed reliable and of high quality.

The respective regional FS office reviews each State's implementation of the Forest Stewardship Program every five years. These reviews include field inspection of a selection of properties to verify acreage covered in the plans. Additionally, FS headquarters executes a program and management review of each regional office every five years. FS also has begun a direct-mail survey of a sample of program participants to determine the degree of implementation of management activities included in the stewardship plans. The survey also is designed to assess whether the program affected non-industrial, forest-land-owner management decisions on the ground.

### **Clean and Abundant Water Supplies**

Data for planning and application of comprehensive nutrient management plans (CNMPs) for animal-feeding operations, application of all nutrient-management measures on working land and irrigation water management on working cropland are collected through PRMS. Data for these indicators are final.

Data are reported by agency employees and partners in each field office across the Nation. Ongoing quality assurance activities are designed to minimize variation in interpretation of data definitions. FY 2002 marked the first year of implementation of new guidance for CNMPs. Extensive training of field staff was conducted prior to implementation. GAO conducted a preliminary review of the system. Data are considered reliable for use in monitoring progress toward goals and demonstrating use of program funds. System enhancements to be implemented in FY 2004 are designed to further improve data quality while reducing the reporting burden for field-level employees.

Data for sheet and rill erosion, reductions in phosphorous and nitrogen, and carbon sequestration are projected estimates. They are estimated based on models which are updated and improved periodically. Year-end estimates of buffer acreage are based on actual data through August, plus projected performance for the remaining two months of the fiscal year. Projected performance is based on the estimated number of acres that will be enrolled through CRP signup during September. The reliability of erosion indicators is discussed in the "Maintain Resource Health and Productive Capacity" section above. Reduced nitrogen and phosphorus applications are projected estimates. The estimates are derived using CRP contract data and National Agricultural Statistics Service (NASS) fertilizer-usage data. Land under long-term retirement contract is assumed to have been growing a normalized mix of crops by State. Reduced nutrient applications are projected estimates. These estimates are derived by merging fertilizer applications rates with CRP State acres. NASS surveys provide the best quality, crop-specific, fertilizer-usage data in the Nation. The data are reliable and accurate.

Data for the land buffer indicator are direct enumerators from the FSA National CRP Contract and Offer Data Files. They are considered reliable and of acceptable quality. The amount of land managed as buffers is a subset of the total acres under long-term land retirement contract. Conservation practices, such as grass-filter strips and riparian buffers planted with trees, are identified within the contract data. The data are considered reliable and of acceptable quality.

The National Association of State Foresters (NASF) facilitates the monitoring and compilation of data on compliance with Best Management Practices (BMP), which are performed by State Foresters. The data

projected for performance goals indicate that both the percentage of forestry BMPs and the number of States conducting effectiveness monitoring were met. The USDA does not have responsibility for developing or monitoring BMPs. BMP implementation and effectiveness monitoring are carried out by the States and data are compiled by the NASF. While BMP data are believed to be reliable and accurate, USDA does not directly monitor implementation or effectiveness of BMPs and has no program to determine data reliability and quality.

### **Wildlife Habitat**

Data for acreage enrolled in WRP are reported through the NRCS WRP National database. Data for conservation that benefits wildlife applied on working land are collected through the NRCS PRMS. Data for these indicators are final.

Data are reported by agency employees and partners in each field office across the Nation. Ongoing quality assurance activities are designed to minimize variation in interpretation of data definitions. State-level managers certify the quality of their data in PRMS. Data-quality checks also are conducted at the national level. WRP data provided by field and State offices are reviewed for accuracy by the national program manager. Data are considered within acceptable limits for current uses. System enhancements to be implemented in FY 2004 to both the program reporting databases and the performance reporting system are designed to further improve data quality while reducing the reporting burden for field-level employees.

CRP data for wetlands and wildlife habitat are projected estimates. They are direct enumerators of CRP contract data. Year-end estimates are based on actual data through August, plus projected performance for the remaining two months of the year. Projected performance is based on the estimated number of acres that will be enrolled through continuous CRP signup during September. Data are reliable and of acceptable quality. CRP data are uploaded from the USDA Service Centers to the automated CRP data files weekly. CRP Offer Data Files are uploaded following each general sign-up period. These files record the conservation practice installed, location of land relative to National and State priority areas, EI and other soil characteristics of the land enrolled in each contract. To help ensure program integrity, service center employees conduct on-site spot checks. They also review producer files prior to annual payment issuance to ensure conservation practices are maintained in accordance with program requirements.