

AGRICULTURAL RESEARCH SERVICE

Statement of Dr. Edward B. Knipling, Administrator  
Before the Subcommittee on Agriculture, Rural Development,  
Food and Drug Administration, and Related Agencies

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to present the Agricultural Research Service's (ARS) budget recommendations for fiscal year (FY) 2012. The President's FY 2012 budget request for ARS' research programs is \$1,137,690,000, which is a net decrease of \$41,949,000 below the agency's FY 2010 funding level.

ARS' FY 2012 budget request proposes to enhance by \$55,723,000 research initiatives in food safety; crop/animal breeding and protection; child and human nutrition; bioenergy/biomass; plant, animal, and microbial collections (germplasm and genetic resources); production systems for sustainable agriculture; global climate change; and the National Agricultural Library. In addition, the agency proposes an increase of \$3,000,000 for the repair and maintenance of its laboratories and facilities. Offsetting ARS' requested increases are \$100,672,000 in proposed reductions to ongoing research programs, reflecting the need to eliminate Congressionally earmarked projects and some current base programs, in order to fund the highest priority needs and curtail Federal spending.

*Proposed Increases (Salaries and Expenses)*

The specific priority research initiatives that ARS proposes for FY 2012 are:

- Food Safety -- \$10,650,000

Foodborne outbreaks are a major cause of morbidity, mortality, chronic diseases, and economic devastation. The full cost/burden is estimated to be over \$150 billion per year. The causes of the continued outbreaks remain unresolved, but issues such as intensive food production, rapidly increasing international trade in foods, changes in consumption habits, and travel and immigration are suspect. With the proposed increase, ARS will provide more sensitive technologies for detecting pathogens and toxins in foods; develop alternatives to antibiotics used in animals; and research “chemical threat agents” which could be used by terrorists.

- Crop Breeding -- \$4,723,000

Research is critically needed to increase crop yields. New knowledge and tools are needed for crop breeders, to use the Nation’s germplasm collections more efficiently, and to develop new varieties that strengthen food security and meet market needs. With the proposed increase, ARS will develop plants with higher yields, greater disease resistance and weather stress tolerance, and decreased dependence on inputs such as fertilizers and fuel.

- Livestock Production -- \$4,000,000

World hunger is a major threat to global stability; population increases over the next 40 years are projected to occur most rapidly in regions that are currently the most food stressed. The key to meeting the demands of the growing population will be improving productivity. With the proposed increase, ARS will increase productivity by improving animal feed efficiency and nutrient utilization.

- Crop Protection -- \$3,250,000

Sustainability of our Nation's food supply depends on a continuous supply of improved plant varieties with protection from emerging diseases, insects, and damaging environmental conditions. New and emerging grain diseases are putting the world's grain supply at risk. For example, a virulent wheat stem rust mutant, Ug99, has emerged in Eastern Africa that threatens wheat and barley production in Africa and Asia; North and South American wheat production is also at risk. With the proposed increase, ARS will enhance crop yields by improving genetic disease resistance.

- Livestock Protection -- \$3,600,000

A growing world population along with environmental challenges, limits on the availability of arable land and natural resources, and climate change will have considerable impact on our ability to grow and safeguard the food supply.

Production of animal products must increase exponentially to meet these challenges. The health of animals, which are constantly challenged by pests and diseases, is the cornerstone of food security and agricultural productivity. With the proposed increase, ARS will enhance and safeguard the Nation's food supply by developing veterinary countermeasures, technologies, and vaccines to combat new and emerging diseases, foreign animal diseases, and biological threats (e.g., from African Swine Fever, Classical Swine Fever, Foot and Mouth Disease, and pests of small ruminants).

- Human Nutrition -- \$7,500,000

Obesity rates among adults and children in the U.S. have increased significantly over the past several decades so that today only one-third of Americans are at a healthy weight. Obesity is an underlying risk factor for numerous chronic diseases including cardiovascular disease, cancer, arthritis, and diabetes.

Reducing the prevalence of obesity will greatly improve the overall health of Americans and reduce future health care costs in the United States. With the

proposed increase, ARS will determine the nutrient requirements of children, and identify the impediments to adherence to the *Dietary Guidelines for Americans*, the basis for all food policy in the U.S.

- Bioenergy/Biomass -- \$6,000,000

America's dependence on foreign oil for energy threatens the Nation's security and adversely impacts the country's economy. Imports account for over two-thirds of the Nation's oil consumption forcing consumers to spend more than \$100 billion annually on oil from foreign sources. Moreover, homeland security and national defense concerns have renewed the need to reduce energy imports and diversify the energy sector. With the proposed increase, ARS will help the Nation become energy independent by developing improved biomass feedstocks and production systems on a regional basis for sustained sources of biofuels.

- Plant, Animal, and Microbial Collections -- \$6,000,000

The capacity of agricultural research to solve problems relies on a dynamic foundation of invaluable living plant, animal, and microbial genetic resources, and scientific collections (germplasm and genetic resources) of preserved biological specimens. Today, critical components of that foundation are eroding – and some imperiled – by lack of facilities, personnel, and operating funds needed to meet the growing demands of global agricultural research. The

collections are necessary for: developing pest management strategies and biological control of insects and weeds; responding to climate change and habitat loss; and biosecurity purposes. With the proposed increase, ARS will be able to protect and expand plant, animal, insect, and microbial genetic resources and germplasm.

- Production Systems for Sustainable Agriculture -- \$4,500,000

American farms generate more than \$200 billion in goods and services on 442 million acres, but the profitability and viability of many farms are challenged by the ever increasing costs of land, fuel, and other purchased inputs. In addition, there is increasing competition for land and natural resources within the U.S. caused by urban expansion, alternative uses, and the need to meet environmental regulatory requirements. The challenges producers face regarding productivity, profitability, and natural resource stewardship are complex. With the proposed increase, ARS will provide new strategies and technologies which support and enhance agricultural productivity, sustainability, and resource management.

- Global Climate Change -- \$4,000,000

Climate change will pose new challenges for American agriculture in the future. Increasing demands on natural resources coupled with uncertainties in temperature changes and precipitation patterns requires new strategies to ensure

sustainable production to meet our food and biofuel needs. New crop varieties with essential traits, such as resistance to drought and extreme temperatures, are needed to sustain agricultural production. With the proposed increase, ARS will provide healthier, higher yielding crops which are more tolerant of climate change and weather extremes, and improve water management and resource conservation in production systems.

- National Agricultural Library -- \$1,500,000

The National Agricultural Library (NAL) is the largest and most accessible agricultural research library in the world. NAL's specialized Information Services provides electronic access to comprehensive and essential scientific databases and other information resources focusing on specific aspects of agriculture. With the proposed increase, NAL will enhance its capacity to provide researchers and scientists with important information on sustainability, carbon sequestration and greenhouse gas emissions, tillage, and conservation program benefits.

- Repair and Maintenance -- \$3,000,000

Over the years, funding for repair and maintenance has not kept pace with the needs of ARS' facilities. Due to the age of many of ARS' research facilities, major building systems – heating, ventilation, air conditioning, electrical, roofs,

and infrastructure (i.e., paving, steam and water lines, and waste treatment disposal systems) – have either reached or passed their useful life expectancies. Other existing deficiencies affecting safety and health also need to be corrected. The proposed increase will help ARS address some of its facilities needs so that the agency can continue to carry out its research mission.

*Proposed Decreases (Salaries and Expenses)*

Due to the need to allocate very limited resources to the highest priority needs, \$58,783,000 of ongoing ARS programs are proposed for reduction or termination to fund the proposed enhancements. Difficult choices were made to identify these reductions. In this regard, ARS systematically reviewed and evaluated programs using a number of criteria, such as their priority within the agency; whether they were viable and sustainable based on current funding; and whether they lacked critical mass for an effective program.

The proposed reductions include the discontinuation of \$20,122,000 in extramural cooperative agreements with our external research partners and the elimination of \$38,661,000 associated with the closure of 10 ARS locations, laboratories, and worksites at: Fairbanks, Alaska; Shafter, California; Brooksville, Florida; Watkinsville, Georgia; New Orleans, Louisiana; Coshocton, Ohio; Lane, Oklahoma; Clemson, South Carolina; Weslaco, Texas; and Beaver, West Virginia. Additionally, \$41,889,000 in Congressionally earmarked projects are proposed for termination to provide savings and to support deficit reduction. In total, the budget proposal for ARS includes \$100,672,000

in proposed reductions to ongoing in-house and cooperative research programs. These recommended reductions will help focus the agency's limited resources on priority investments and serve to help curtail Federal expenditures.

*Proposed Decreases (Buildings and Facilities)*

The FY 2012 budget also proposes a rescission of \$223,749,000 in the ARS Buildings and Facilities account. Under this request, unobligated funds from partially funded new buildings and facilities projects, and remaining balances from completed ARS facilities are to be rescinded. Cancelling these projects would save about \$1.4 billion in current dollars in future costs that would eventually be needed to complete the projects.

Mr. Chairman, this concludes my statement of ARS' budget recommendations for FY 2012. I will be happy to answer any questions that the Subcommittee may have.