

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

Statement of
Dr. Colien Hefferan, Administrator
Before the
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration and Related Agencies

Mr. Chairman and Members of the Committee, I appreciate the opportunity to present the President's fiscal year (FY) 2007 budget for the Cooperative State Research, Education, and Extension Service (CSREES), one of the four agencies in the Research, Education, and Economics (REE) mission area of the United States Department of Agriculture (USDA).

The CSREES FY 2007 budget proposal is just over \$1 billion. CSREES, in concert with the Secretary of Agriculture and the intent of Congress, works in partnership with the land-grant university system, other colleges and universities, and public and private research and education organizations to initiate and develop agricultural research, extension, higher education, and related international activities to advance knowledge for agriculture, the environment, human health and well-being, and communities. In addition, CSREES implements grants for organizations to better reach and assist disadvantaged farmers and ranchers in accessing programs of USDA. These partnerships result in a breadth of expertise that is ready to deliver solutions to problems facing U.S. agriculture today.

The FY 2007 CSREES budget request aligns funding and performance with the USDA strategic goals. CSREES manages its many budget elements in support of research, education, extension, and outreach programs as part of a cohesive whole supporting all six of the Department's strategic goals. The Agency defines distinct performance criteria, including strategic objectives and key outcomes with identified annual targets. As part of an integrated budget and performance process, CSREES conducts periodic portfolio reviews by external experts to

monitor overall program progress, suggest alternative approaches, and propose management improvements.

In support of the Administration's commitment to ensure that Federal funds are used to support the highest quality research, the FY 2006 Budget proposed to increase overall funding for competitive peer reviewed research and reduce funding for formula grant programs that do not allocate funds based on a competitive process. Extensive analysis of the stakeholder response to the proposal indicated that primary concerns included the lack of consultation with affected universities and stakeholders, loss of matching funds, program continuity and length of awards, sustaining breadth of capacity in agricultural science and education nationwide, providing responsiveness to State and local issues, and leveraging and sustaining partnerships across institutions.

In response to the concerns, CSREES proposes a new initiative that supports the Administration's belief that the most effective and flexible way to fund research projects is through peer reviewed competitive awards that address national issues, while at the same time, responds to stakeholder concerns and still retains overall funding at enacted levels. CSREES recognizes that multi-state programs have been an effective part of the portfolio of work funded through the Hatch formula, assuring focused, non-duplicative, collaborative, problem-solving science. This program lends itself to national peer review. To achieve the goals of expanding competitiveness and peer review, we propose an approach that would expand and continuously recompute the multi-state awards of the Hatch Act program; and establish a similar, though separately authorized, program for McIntire-Stennis Cooperative Forestry (McIntire-Stennis) funds.

In FY 2007, CSREES is proposing to distribute a portion of the Hatch Act and the McIntire-Stennis formula programs to nationally, competitively awarded multi-state/multi-institutional projects based on high priority national topics decided by CSREES in consultation with our land

grant partners. This new plan for multi-state programming sustains the matching requirement and the leveraging of Federal funds. It also allows institutions to focus on program strengths they identify and sustain through linking local issues to broad national goals. The Agency is eager to work with the agricultural experiment station and university forestry research communities to develop an implementation plan for the expanded multi-state/multi-institutional effort.

CSREES also will continue to distribute a portion of the Hatch Act and McIntire-Stennis funds on the basis of the formula. The requested \$177 million of Hatch Act funds will support research at the SAES related to producing, marketing, distributing, and utilizing crops and resources; enhancing nutrition; and improving rural living conditions. Funds will support research topics such as water and other natural resources, crop and animal resources, people and communities, competition and trade, and human nutrition. In addition, \$22 million of the funding requested for the McIntire-Stennis program will continue to support research related to timber production, forest land management, wood utilization, and the associated development of new products and distribution systems. Both the Hatch Act and McIntire-Stennis programs allow five year projects supporting the goal of continuity.

CSREES proposes to eliminate funding for the Animal Health and Disease Program. Alternative funding from the National Research Initiative (NRI) program could be used to support aspects of this program. Recent, large Coordinated Agricultural Project (CAP) grants have supported animal disease issues, such as Johnes Disease and Avian Influenza.

CSREES continues to provide new opportunities for discoveries and advances in knowledge through the NRI program. The FY 2007 budget request of \$247.5 million for the NRI is a strong statement of the importance that the Administration places on competitively awarded grants to advance knowledge for agriculture.

The NRI will continue to support current high priority programs with an emphasis on critical issues. For example, under the NRI CAP, multi-million dollar awards support multi-year large-scale projects to promote collaboration, open communication, and coordinated activities among individuals, institutions, States, and regions to address priority issues of national importance.

Under the NRI Animal Biosecurity Program, CSREES is investing funds to support three animal disease CAPs. CAP awards for Avian Influenza (\$5 million/3 years with 18 States involved), Porcine Reproductive and Respiratory Syndrome (\$4.4 million/3 years with 16 States involved), and Johne's Disease (\$4.4 million/3 years with 21 States involved) are working to accelerate research discoveries and the translation of basic and applied research into significant outcomes that diminish the impact and threat from these diseases. These projects provide a strategic framework of objectives that integrate research, education, and extension specialists representing academia, producers, veterinarians, pharmaceutical and other biologics companies, federal agencies, state partners, and international institutions.

Under the Applied Plant Genomics Program in the NRI, CSREES supports two CAPs –rice (\$5 million/4 years representing 12 States) and wheat (\$5 million/ 4 years representing 17 States.) Activities under these CAPs are working to bridge the gap between cereal grain genomics and traditional breeding practices. The Project Directors for the CAPs recently met to discuss facilitating synergistic activities across the CAPs that will provide lasting benefits to U.S. agriculture through improved varieties. Also discussed was how the U.S. public breeding programs can capitalize on advances in genomics. The Agency also continues support for a CAP focused on food safety at North Carolina State University.

Expanded partnerships with other Federal agencies on research topics of mutual interest will be possible with the increase in the NRI funding. For example, research on plant genomics, in particular sequencing of the soybean genome, will be supported through a partnership with the

U.S. Department of Energy. The research collaboration will substantially contribute to advances in soybean breeding, with great potential to improve the environmental and nutritional quality of the plant, leading to improved efficiency of production, reduced environmental impact, and healthier foods.

The NRI also will support research on animal genomics. Substantial public investment in the Human Genome Project has led to technologies, practices, and knowledge which enable cost-effective research in animal genomics. The considerable similarities of the genomes of livestock species, fish, and birds to that of human will reduce the need for whole genome sequencing. An increase of \$5 million in the NRI to support domestic animal genomics including bioinformatics is requested.

CSREES proposes that \$42.3 million from the Integrated Activities account for programs that focus on water quality, food safety, methyl bromide, organic transition, and pest-related programs be administered through the NRI. This transfer is proposed as a means to streamline the CSREES budget portfolio. Funding for these programs will be sustained at the FY 2006 levels.

Under the NRI, an increase of \$1 million is requested for genomics and biomass/biofuels that focus on the functional genomics and bioinformatics of microorganisms to increase the efficiency of biological conversion of pulp and paper products to bioenergy and biobased products and the development of new products including biologically-based fuels. These efforts will tap into the power of genomics to provide insights into new approaches for converting low value, agricultural feedstocks to high value fuels and products.

An increase of \$12 million is proposed to address emerging issues in food and agriculture biosecurity under the NRI. The requested funding will support research, education, and

extension activities on emerging pathogens and antibiotic production for animal protection and biosecurity, and on microbial forensics of food safety pathogens.

In FY 2007 an increase of \$3 million is proposed under the NRI for ecology and economics of biological invasions. The requested funds will support projects that couple the economic predictions of costs of prevention and control with ecological processes that govern the entry, spread, and damage by invasive species.

Under the NRI, an increase of \$3 million is proposed in FY 2007 for plant biotechnology and water security. The funds will support research on methods of modern molecular biology to improve the water use-efficiency of crops, managed forests, and horticulture plants.

In continuing and expanding our efforts for agricultural security and in support of the President's Food and Agriculture Defense Initiative, CSREES, through cooperative efforts with the Animal and Plant Health Inspection Service, has established a unified Federal-State network of public agricultural institutions to identify and respond to high risk biological pathogens in the food and agricultural system. The network is comprised of 13 State animal diagnostic laboratories and 6 plant diagnostic laboratories, strategically located around the country. These 19 key laboratories are developing a two-way, secure communications network with other university and State Department of Agriculture diagnostic laboratories throughout their respective regions. The diagnostic laboratories are responsible for identifying, containing, and minimizing the impact of exotic and domestic pests and pathogens that are of concern to the security of our food and agricultural production systems. For example, the National Animal Health Laboratory Network (NAHLN) with its 12 founding laboratories in New York, Louisiana, Georgia, Texas, Wisconsin, Iowa, Colorado, Washington, California, Arizona, North Carolina and Florida continued efforts to enhance national preparedness against foreign animal disease appearing in the U.S. by conducting activities related to Avian Influenza (AI). AI is one of the new high-consequence

animal pathogens covered by the NAHLN protocols. In its efforts to increase the ability to respond to outbreaks, NAHLN increased the number of laboratories that can run the real time polymerase chain reaction for AI using a standardized assay and protocol. Annual proficiency testing is required of individuals conducting testing to ensure quality results. The budget proposal requests an increase of \$2.1 million for a total of \$12 million to maintain the current level of diagnostic capabilities across the nation.

CSREES proposes \$5 million for the Agrosecurity Education Program to support educational and professional development for personnel so strengthen our national capacity to secure the Nation's agricultural and food supply. The program will develop and promote curricula for undergraduate and graduate level higher education programs that support the protection of animals, plants, and public health. The program is designed to support cross-disciplinary degree programs that combine training in food sciences, agricultural sciences, medicine, veterinary medicine, epidemiology, microbiology, chemistry, engineering, and mathematics (statistical modeling) to prepare food system defense professionals. Also proposed is \$2.3 million for the Asian Soybean Rust Program. The funds will provide stakeholders with effective decision support for managing diseases of legume crops, particularly soybean rust, to continue surveillance of sentinel plots.

CSREES continues to expand diversity and opportunity with activities under 1890 base and educational programs, and 1994, insular areas, and Hispanic-Serving Institutions educational programs. In FY 2007, the budget requests an increase of approximately \$1.2 million for both the research and extension 1890 base programs. Funding for our 1890 base programs provides a stable level of support for the implementation of research and extension programming that is responsive to emerging agricultural issues. Funding for the 1994 Institutions strengthens the capacity of the Tribal Colleges to more firmly establish themselves as partners in the food and agricultural science and education system through expanding their linkages with 1862 and 1890

Institutions. Proposed funding for the Resident Instruction Grants for Insular Areas Program will be used to enhance teaching programs at higher education institutions located in U.S. insular areas that focus on agriculture, natural resources, forestry, veterinary medicine, home economics, and disciplines closely allied to food and agriculture production and delivery systems.

Continued funding for the Hispanic-Serving Institutions promotes the ability of the institutions to carry out educational training programs in the food and agricultural sciences. This proven path of research, extension, and educational program development rapidly delivers new technologies into the hands of all citizens, helping them solve problems important to their lives.

CSREES also will continue to effectively reach underserved communities through increased support for the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers (OASDFR) Program. CSREES will fund competitive multi-year projects to support outreach to disadvantaged farmers and ranchers by providing grants to educational institutions and community-based organizations to support these groups. Funds for the OASDFR program will encourage and assist socially disadvantaged farmers and ranchers in their efforts to become or remain owners and operators by providing technical assistance, outreach, and education to promote fuller participation in all USDA programs. CSREES requests an increase of about \$1 million for the OASDFR program.

The CSREES higher education programs contribute to the development of human capacity and respond to the need for a highly trained cadre of quality scientists, engineers, managers, and technical specialists in the food and fiber system. The FY 2007 budget provides a \$.8 million increase in the Food and Agricultural Sciences National Needs Graduate Fellowship program. This program prepares graduates to deal with emerging challenges in such areas as agricultural biosecurity to ensure the safety and security of our agriculture and food supply, natural resources and forestry, and human health and nutrition, including problems related to obesity such as diabetes and cardiovascular health. Other higher education programs will provide important and

unique support to Tribal Colleges, the 1890 Land-Grant Colleges and Universities, and the 1862 Land-Grant Universities as they pilot important new approaches to expand their programs.

CSREES is requesting funds to accelerate and innovate the New Technologies for Agricultural Extension (NTAE) to establish an eXtension network which will offer Americans unparalleled access to scientifically-derived and unbiased information, education, and guidance. The FY 2007 budget proposal includes a \$1.5 million increase for the NTAE Program to allow the Cooperative Extension System to make available research-based education offered through eXtension to a technology conscious nation.

To ensure the highest quality research which addresses national needs within available funding, the FY 2007 budget proposes to eliminate earmarked projects. Peer-reviewed competitive programs that meet national needs are a much more effective use of taxpayer dollars than earmarks that are provided to a specific recipient for needs that may not be national. Based upon its broad scope, including the expanded integrated authority, and proposed funding increase, alternative funding from the NRI could be used to provide a peer-reviewed forum for seeking and assessing much of the work funded through earmarks. For example in the past four years, CSREES supported research in animal identification and/or animal tracking under earmarked projects which fit within the scope of the NRI. In addition, earmarked projects for human nutrition and food safety also could fit within the program areas of the NRI.

The FY 2007 budget proposes changes in the general provisions including increasing the amount provided for the NRI that may be used for competitive integrated activities from up to 22 percent to up to 30 percent. Also proposed is the elimination of the cap on indirect costs for competitively awarded grants. In the past indirect cost rate caps have resulted in recipients' inability to recover legitimate indirect costs, thus penalizing recipients who choose to do business with CSREES. This elimination allows full indirect cost recovery under competitive

awards and places CSREES competitive programs on an equal footing with other Federal assistance programs, so that top scientists will be more likely to apply for CSREES grant programs.

CSREES consulted widely in the development of program goals and budget priorities for FY 2007. In discussions with the land-grant university system, forestry researchers, and others, stakeholders expressed their concerns over the approach to expand competitive research grant programs. The President's FY 2007 budget proposal addresses their concerns, and is consistent with the view that the most effective use of taxpayer dollars is through competitively awarded grants that meet National goals. CSREES, in collaboration with university and other partners nationwide, continues to enhance its responsiveness and flexibility in addressing critical agricultural issues. This proposal provides support for research, extension, higher education, and outreach and assistance activities in the food, agricultural, and human sciences that can make a difference in solving problems facing the Nation.

Mr. Chairman, this concludes my statement. I will be glad to answer any questions the Committee may have.