COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

Statement of
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Before the
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies

Madam Chairwoman and Members of the Subcommittee, I appreciate the opportunity to present the President's fiscal year (FY) 2009 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 2009 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 quickly and efficiently deliver critical knowledge through innovative systems. The world looks to USDA's partnership with the land-grant university system and other institutions as a model for developing and using knowledge in an effective and expeditious way to address the challenges facing the food, agricultural, and human sciences.

The FY 2009 CSREES budget request continues to align funding and performance objectives 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. An external review of all major programs has been completed. Using the Office of Management and Budget's Program Assessment Rating Tool, the programs received an "effective" or "moderately effective" score. CSREES is working to implement the recommendations of the reviews in planning and managing its programs, and will continue to conduct external reviews on a rotating basis.

The President's FY 2009 budget proposes to expand and continuously recompete the Hatch Act multi-State/multi-institutional allocations, and establish a similar, separately authorized, program for McIntire-Stennis Cooperative Forestry (McIntire-Stennis) funds. This initiative for multi-State/multi-institutional programming sustains the matching requirements and the leveraging of Federal funds, and allows institutions to focus on program strengths they identify and sustain through linking local issues to broad national goals. To ensure the continuity of projects, the program is designed to allow five year projects, including the orderly completion of current multi-State projects. This will support the important goal of targeting research to the highest quality projects to meet critical national and regional needs.

CSREES will continue to distribute a portion of the Hatch Act and McIntire-Stennis funds on the basis of the formula. The requested \$139 million of Hatch Act funding will support research at the State Agricultural Experiment Stations related to producing, marketing, distributing, and utilizing crops and resources; enhancing nutrition; and improving rural living conditions. In addition, funds will support other research topics such as water and other natural resources, crop

and animal resources, people and communities, and competition and trade. The \$19 million of McIntire-Stennis program funding will support forestry, natural resources, and ecosystem management related research at State designated college and university forestry programs.

CSREES proposes to eliminate funding for the Animal Health and Disease Research Program. Alternative funding from the National Research Initiative (NRI) program could be used to support aspects of this program. For example, three major projects addressing animal diseases, Avian Influenza, Johne's, and Porcine Reproductive and Respiratory Syndrome, as well as new, multi-institutional work to develop veterinary reagents have been funded under the NRI. In addition, under the President's Food and Agriculture Defense Initiative, funding is being used to expand the veterinary diagnostic system to include university-based laboratories, to work in collaboration with national laboratories to survey, monitor, and respond to outbreaks of animal diseases.

Through the NRI program, CSREES continues to support research, education, extension, and integrated activities that address key problems of national, regional, and multi-State importance in biological, environmental, physical, and social sciences relevant to agriculture, food, the environment, and communities. To address these problems, the NRI program will offer new opportunities such as efforts in bioenergy/biofuels development, disaster resilience, and the long term integrated project in agroecosystems. The FY 2009 budget requests \$256.5 million for the NRI program.

CSREES is committed to supporting the development of bioenergy/ biobased fuels and processes to efficiently convert renewable plant products to fuel in an economically, socially, and environmentally sustainable manner. Recent NRI supported research efforts in renewable energy

holds great promise for discovering domestic and sustainable alternatives. For example, through the establishment of the Oklahoma State University, University of Oklahoma, and Mississippi State University Consortium, an ethanol gasification-bioconversion process that utilizes all of the plant biomass, including lignin, is being developed. It is expected that this method will be more cost efficient than other methods of ethanol production, because the process uses all portions of a variety of biomass and feedstock material that includes grasses, crop residues, and processing plant by-products. In another example, researchers at Purdue University in Indiana are mixing soybean methyl esters (i.e. biodiesel fuel) with jet fuel, quantifying the physical properties and measuring turbine jet engine combustion performance and emissions. The project has developed a fractionation technology that removes the saturated components to produce workable fuel blends with existing jet fuels.

In 2009, in support of the Bioenergy Initiative, NRI funding in the amount of \$19.2 million is requested to support interdisciplinary research projects that include genomics and genetics, basic and applied plant sciences, novel methods of biological and chemical conversion of biomass, social and economic impacts on rural communities, as well as education and extension. New research will be solicited to: develop new and sustainable agricultural feedstocks; improve biocatalysts for biomass conversion; improve the understanding of the impact of the biofuel production on the agricultural ecosystem components including soil fertility and water use; determine the impact of a renewable fuels industry on the economic and social dynamics of rural communities; and reduce the overall cost of converting agricultural feedstocks to biofuels through the development of valuable co-products from the bioenergy process. CSREES will continue to leverage its bioenergy effort through coordination with key interagency committees and collaborations such as those with the Department of Energy, National Science Foundation, National Aeronautics and Space Administration, Environmental Protection Agency, and the National Institutes of Health.

Under the NRI, funding will be used to identify factors that enhance the resiliency of rural communities and families impacted by disasters. Activities include studies on the effects of communication networks, economic structure, governance, and family systems on the survival and the speed of recovery from disasters. Research conducted will address economic and social consequences of alternative disaster recovery approaches; identify cost-effective communication methods to alert and educate people; and be used to prepare communities for emergency response and disaster recovery.

The NRI will support efforts to study, design, manage, and optimize long-term agroecosystems using an integrated approach. The supported long term integrated project in agroecosystems will examine agriculture as a part of an interactive system that provides food security, economic viability, ecological goods and services, resource conservation, and increased production. Long-term systems-level analyses will identify strategies to increase the economic success and environmental sustainability of agriculture.

CSREES proposes \$45.13 million for integrated research, education, and extension activities for programs that focus on water quality, food safety, organic transition, and pest management programs (which includes the pest related programs and methyl bromide) and that these programs be administered through the NRI rather than the current 406 authority.

Within the integrated activities, CSREES requests funding for the National Integrated Pest Management Initiative to broaden the program beyond food cropping systems to include forest, urban (ornamentals and turf) and livestock pest management and production issues related to ecosystem management. Additionally, funding support is requested for priorities within the National Integrated Water Program to support projects that address water and wastewater reuse, conservation, as well as water quality for agriculture, rural, and urbanizing watersheds. Also, CSREES partnering with the Food Safety and Inspection Service and the Food and Drug

Administration will support the Integrated Food Safety Initiative to provide the public with access to resources, information, training, and education designed to meet the public health needs as related to food safety issues.

CSREES, through cooperative efforts with the Animal and Plant Health Inspection Service, is expanding its efforts for agricultural security utilizing a unified Federal-State network of public agricultural institutions. The 19 key animal and plant laboratories, strategically located in States around the country including New York, Louisiana, Georgia, Texas, Wisconsin, Iowa, Colorado, California, Washington, Arizona, Florida, Michigan, North Carolina, Indiana, and Kansas are identifying and responding to high risk biological pathogens in the food and agricultural system. The FY 2009 budget requests \$14.3 million in support of the Food and Agriculture Defense Initiative. This request includes \$2.3 million to address the Asian Soybean Rust Pest Information Platform for Education and Extension. Funding will be used to maintain and enhance pest risk management tools for Asian Soybean Rust and other pathogens of legumes.

CSREES proposes \$2 million for the Agrosecurity Education Program to help universities to develop and deliver programs that address agro- and bio-security issues. 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.

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. CSREES requests \$6.7 million for the Institution Challenge Grants Program. The increase of \$1.3 million will be used to establish a

Biobased Products and Bioenergy Academic Center of Excellence. The center will create and deliver multidisciplinary undergraduate and graduate level education, research, and extension programs and curricula that will address issues relevant to the national bio-economy. The FY 2009 budget sustains support for most of the other higher education programs.

To build on specific international initiatives, and in support of the Administration's commitment to the U.S./India Agricultural Knowledge Initiative, CSREES proposes \$2 million for the International Science and Education program. CSREES believes it is positioned to play a central role in expanding partnerships with scientists in India. 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 proposes \$62.3 million for the Expanded Food and Nutrition Education Program (EFNEP) which uses experiential learning to improve the diets of low-income families and youth to reduce their risk of obesity and other nutritional problems. The FY 2009 budget maintains the current general provision which provides that each institution eligible for EFNEP funds will receive at least \$100,000 for program activities.

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 2009, the budget requests funds totaling \$72.4 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.

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 \$7 million for the OASDFR program.

CSREES is requesting funds to support eXtension through the New Technologies for Agricultural Extension (NTAE). The NTAE will expand access, understanding, and usefulness of the valuable information and education that Cooperative Extension has to offer in order to meet the changing needs of the Nation. With financial and personnel support from the System, complemented by Federal funds, we will be able to expand deployment of Communities of Practice (composed of experts from the land-grant universities and their partners) to develop high quality content for eXtension. The FY 2009 budget proposal includes \$3 million for the NTAE Program.

To ensure the highest quality research that addresses national needs within available funding, the FY 2009 budget proposes to eliminate earmarked projects. By allocating funding to a predetermined list of projects, earmarks reduce the ability of program administrators to allocate funding based on merit. Peer-reviewed competitive programs that meet national needs are a more effective use of Federal 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.

The FY 2009 budget proposes changes in the general provisions including increasing the amount provided from the NRI that may be used for competitively-awarded, integrated grants from "up to 26 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. The proposed 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 continue to apply for CSREES grant programs. This is especially important in implementing the growing number of jointly funded programs CSREES supports with other Federal science agencies.

CSREES, in collaboration with university and other partners nationwide, seeks to provide innovative and timely responses to 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 emerging problems facing the Nation.

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