

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

For release only by
the House Committee
on Appropriations

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

Mr. Chairman and Members of the Committee, I appreciate the opportunity to submit the proposed fiscal year (FY) 2005 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 2005 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. In addition, CSREES implements grants for organizations to better reach and assist disadvantaged farmers 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 broad portfolio of CSREES supports scientific discovery from idea to application. Formula and other base funds leverage dollars from other sources, provide the start-up funds needed for investigators to establish research programs and build the capacity to compete successfully in competitive programs, and allow for rapid responses to emerging problems. Competitively funded research from the National Research Initiative (NRI) supports individual investigators undertaking basic research aimed at generating new knowledge and supports integrated programs and activities focused on solutions to short- and intermediate-term problems. Research-based guidance is delivered through the Cooperative Extension System's educational efforts. Because these efforts occur primarily at universities, a very broad range of expertise is available to address increasing complex problems, and the research process contributes to an environment that prepares students to meet the ongoing needs of agriculture, the environment, human health and well-being, and communities. Funding for outreach and assistance for socially disadvantaged farmers encourages and assists those farmers by providing technical assistance and education for fuller participation in all USDA programs.

The FY 2005 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 five of the Department's strategic goals. Distinct performance criteria, including strategic objectives and key outcomes with identified annual targets, are defined for each program or activity. As part of an integrated budget and performance process, periodic portfolio reviews by external experts to monitor overall program progress, suggest alternative approaches, and propose management

improvements are planned. Although the overall budget supports the breadth of USDA's goals and objectives, the funding increase requested in the CSREES FY 2005 budget proposal emphasizes USDA Strategic Goal 3: Enhance Protection and Safety of the Nation's Agriculture and Food Supply, and Strategic Goal 4: Improve the Nation's Nutrition and Health.

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, dispersed strategically 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. The budget proposal requests an increase of \$22 million for a total of \$30 million to maintain the national diagnostic laboratory network and increase the number of State plant diagnostic laboratories linked with the National Agricultural Pest Information System. The network will continue its link with the Extension Disaster Education Network (EDEN) to disseminate information to producers and professionals at the county level, and to expand these activities to provide more current and timely educational resources.

As a benefit of the research and education information gained through the Animal and Plant Diagnostic networks in conjunction with dissemination efforts of EDEN, an influx of new knowledge will be used to fill gaps in addressing agrosecurity issues, and to educate students in increasing their risk assessment and mitigation skills in order to help manage large scale animal and plant disease outbreaks. CSREES proposes \$5 million for the Agrosecurity Education Program that will support educational and professional development for personnel in securing 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 also 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.

CSREES continues to provide new opportunities for discoveries and advances in knowledge through our programs such as the NRI and Integrated Research, Education, and Extension Competitive Grants. Funding for agricultural research, particularly for competitive or basic science programs, has lagged dramatically behind funding for other disciplines. The FY 2005 budget request of \$180 million for the NRI reflects the same underlying policy objectives of FY 2004, but in a way that is consistent with increasing overall constraints on the Department's budget. The NRI will continue to support current high priority programs with an emphasis on critical areas. Expanded partnerships with other Federal agencies on research topics of mutual interest will be possible. For example, we may be able to expand working relationships with the

National Institutes of Health and others on animal genomics. Current cooperation on the Bovine Genome Sequencing program will contribute to a working draft sequence (approximately 6-fold sequence coverage) of 90 percent of the bovine genome. Sequencing the bovine genome provides the gateway to studies of gene function and improved methods of selection of animals based on genotype. This knowledge will then be used to increase the efficiency and profitability of animal production systems by enhancing animal health and the quality and safety of food production. The goal of the NRI participation in the program is to assure the generation of high quality sequence data, that the assembly of the sequence reads into contiguous sequences, the annotation, and the deposition of all information into a publicly accessible, pre-existing database. We also will continue our partnership with the National Science Foundation on the Microbial Genome Sequencing program. The program supports high-throughput sequencing of the genomes of microorganisms that are of fundamental biological interest, and are important to the national interest, the productivity and sustainability of agriculture and forestry, or the safety and quality of the nation's food supply. The FY 2005 budget requests an increase of \$9 million in the NRI to support genomics research. Support of animal genomics will increase fundamental knowledge of the composition, organization, and function of the genome and increase the ability to genetically improve the productivity, efficiency, and quality of agriculturally important animals, including horses and aquaculture species. Research also will contribute to reducing adverse environmental changes, preserving genetic diversity of wild stock, addressing new and re-emerging disease and pest threats, and providing new and renewable products to meet consumer needs.

According to the President's Health and Fitness Initiative, HealthierUS, too many Americans are

overweight, have poor dietary habits, and do not exercise enough. Five chronic diseases associated with obesity – heart disease, cancer, stroke, chronic obstructive pulmonary disease (e.g. bronchitis, emphysema, asthma), and diabetes – account for more than two-thirds of all deaths in the United States. In addition to claiming more than 1.7 million American lives each year, these diseases hinder daily living for more than one out of every ten Americans, or 25 million people. More than 100 million Americans live with chronic disease, and millions of new cases are diagnosed each year. HealthierUS concluded that the health of Americans would improve with modest but regular better eating habits and physical activity. Under the NRI, an increase of \$7 million in NRI funding is proposed in FY 2005 to address nutrition, food choices, and the growing obesity epidemic. Research will focus specifically on investigating underlying causes of obesity, including physiological, environmental, cultural, social, and biological factors; factors controlling the onset of obesity; determining differences in obesity groups defined by race, age, gender, etc.; and developing and evaluating the weight loss potential of functional foods.

Also within the FY 2005 budget request is a proposed increase of \$6 million for the Expanded Food and Nutrition Education Program (EFNEP). This would restore funding to approximately the FY 2003 funding level. The EFNEP program reaches predominantly minority low-income youth and families with nutrition education that leads to sustainable behavior changes. EFNEP works with various partners in providing its services, which include collaborating with the National Institute of Health on the 5-A-Day program promoting increased consumption of fruits and vegetables, and the Centers for Disease Control and Prevention on their VERBtm program

sharing curriculum material directed at teaching young people about the importance of nutrition and physical activity. Increased funding also will allow EFNEP to move forward with efforts to add a physical activity focus to help combat the rising problem of obesity in children and adults.

CSREES continues to expand diversity and opportunity with activities under 1890 base and educational programs, and 1994 and Hispanic-Serving Institutions educational programs.

Funding for our 1890 base programs provides a stable level of support for the implementation of research and extension programming. 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. Sustained 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 more effectively reach underserved communities through sustained support for the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Program (OASDFR). CSREES will award competitive multi-year projects to support outreach to disadvantaged farmers and ranchers. 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.

Sustained support through our base programs, including formula funding for research and extension, is providing the foundation for the Federal/State partnership that links science and technology development directly to the needs and interests of people. The formula and other base programs provide discretionary resources that foster regional and national joint planning, encourage multi-State planning and program execution, and minimize duplication of efforts. Formula and other base funding is the foundation from which a competitive grant funded program can be built by developing institutional infrastructure, supporting preliminary studies to strengthen competitive proposals, and bridging gaps related to the scope and continuity of grant supported programs. These funds, along with matching funds from the States, assure responsiveness to emerging issues such as foot-and-mouth disease, E. coli, Salmonella, Listeria, sorghum ergot, potato late blight, Russian wheat aphid, and swine waste. For example, leveraging funds from the Hatch Act with other sources, researchers at Ohio State University are continuing work with bacteriocins, naturally occurring substances in foods that inhibit pathogens. The researchers found that a type of “good” bacteria in milk makes a bacteriocin that appears to inhibit E. coli and Salmonella. The researchers are working with a food packaging company to infuse bacteriocins into packaging material, making containers with a built-in, natural way to help keep food safe.

The 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 2005 budget provides a \$1.6 million increase in the Food and Agricultural Sciences National Needs Graduate Fellowship program. This program will prepare graduates to deal with emerging challenges in such areas as agricultural biosecurity to ensure the safety and security of our agriculture and food supply, new issues in natural resources, and human health and nutrition including problems related to obesity, such as diabetes, cardiovascular health, and osteoporosis. The International Science and Education Grants program (ISEP) will support the land-grant community and other campuses in their efforts to prepare students and help American agriculture to maintain our global competitiveness by internationalizing their agricultural programs. ISEP is designed to assist land-grant and other campus faculty in bringing world issues and awareness into their agricultural teaching, research, and outreach programs. 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 expanding their programs.

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. The scope of the NRI, and the Integrated Research, Education, and Extension Competitive Grants is broad enough 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 are within the program areas of the NRI, and earmarked food safety projects can be supported through the CSREES Integrated Food Safety program. In order to ensure the highest quality research for these national needs within available funding, the FY 2005 budget has therefore proposed to eliminate earmarked projects.

CSREES, in collaboration with university and other partners nationwide, continually meets the many challenges facing the food and fiber system. The programs administered by the agency reflect the commitment of the Administration to further strengthen the problem-solving capacity of Federally-supported agricultural research, extension, higher education, and outreach and assistance programs. In addition, we continue to enhance our responsiveness and flexibility in addressing critical agricultural issues.

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