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Appropriations

ECONOMIC RESEARCH SERVICE

Statement of Dr. Mary Bohman, 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 Economic Research Service (ERS) budget proposal for fiscal year (FY) 2017.

The mission of ERS is to inform and enhance public and private decision-making on a broad range of economic and policy issues related to agriculture, food, the environment, and rural development. ERS is a trusted resource for objective information, data, and unique economic and social science analysis on these topics. ERS shapes its research program and products to serve those who routinely make or influence public policy and program decisions. Key clientele include White House and USDA policy officials; program administrators/managers; the U.S. Congress; other Federal agencies; State and local government officials; and organizations, including farm and industry groups interested in public policy issues.

ERS develops its research program in coordination with the other USDA Research, Education and Economics (REE) agencies, other USDA agencies, and external collaborators. Our activities support the goals and objectives of the REE Action Plan by providing an economic perspective to USDA science research that addresses key priority issues, such as pollinators and bee health, human nutrition, and new and beginning farmers. Our proposed budget supports agricultural research investments that are critical to long-term U.S. economic growth and job creation.

Investment in effective delivery of our work products is a high priority. ERS continues to invest in making our information more accessible. For example, in 2015, ERS published 15 new data visualizations on the Agency website to provide users with interactive charts and graphics that are more meaningful and easier to use. As part of USDA's Open Data Initiative, ERS provides services that enable developers, bloggers, and other digital professionals to access the Agency's web content to build applications and provide ERS information on their sites.

ERS research that informs programs and policies touches the individual citizens who breathe the air, drink the water, live and work in rural towns, and plan their diets and food budgets. Our research, moreover, touches those who depend on school lunches, on the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and on Federal and State rural development programs. It benefits farm and rural businesses from small to large, as they are affected by policies and programs.

Addressing the Needs of Decision Makers

The Agency's research program both anticipates and responds to decision makers' information needs. We consult with stakeholders on an ongoing basis about research needs and conduct regular external evaluations of the quality and relevance of the Agency's programs. In FY 2015-16, we completed reviews of ERS's Food Access, Food Choices, and Nutrition Research Program and our Climate Change, Resources and Technology Research Program as part of our 5-year planned program review of all major ERS research topics. The goal was to obtain an objective, rigorous assessment of ERS research programs. Both review panels found that the programs developed exemplary records in conducting research and related activities that address the needs of stakeholders for timely, policy-relevant information. The panels rated both programs as "Excellent." The results of these reviews are being used to sharpen the focus and impact of ERS research.

At the request of ERS, the National Academies of Science's Center for National Statistics conducted a workshop in April 2015 on Rationalizing Rural Area Classifications. ERS currently maintains four geographic classification systems that divide U.S. territory along rural and urban dimensions. They were originally developed to facilitate rural research at ERS and elsewhere but have since been adapted for policy and program uses in various Federal agencies. A preliminary version of the final workshop report was released in November 2015. Beginning with insights derived from this workshop, ERS will assess these classifications in 2016 and make changes necessary to ensure their future validity and usefulness as research and policy tools.

ERS's research program anticipates the needs of decision makers so as to be available to respond to issues of the day. The examples that follow document how customers and stakeholders in USDA, Congress, related government agencies, and the public use ERS information to make decisions.

Monitoring Farm Sector Structure and Performance: ERS plays a leading role in monitoring the financial health of the farm sector, including the performance of farm businesses and the well-being of farm households. ERS develops and publishes estimates of farm income, assets, and debt for public use through our website. ERS provides updated income and balance sheet forecasts three times a year that reflect the most recent information available on production, prices, and quantities of crops, livestock, and other outputs and services generated from farms. The information is also used to generate statistics by other Federal agencies, such as Department of Commerce estimates of U.S. gross domestic product and income.

Monitoring and Analyzing the Situation and Outlook for Commodity Markets: The ERS commodity outlook program serves USDA stakeholders in the public and private sectors by delivering timely, independent, and objective information about agricultural markets. These reports and data products are among the most widely accessed ERS products and are especially important during periods of high volatility and market conditions that suggest the potential for financial stress. ERS is committed to maintaining a strong and vibrant commodity outlook program and has solicited input from stakeholders across industry and government to ensure that their needs are met. We are implementing a strategic plan based on this feedback and focused on the actions necessary to continue and strengthen this program.

Trade with Cuba: ERS examined the possible implications of removing trade and travel restrictions with Cuba and found that lifting the trade embargo could stimulate increased levels and a wider variety of U.S. agricultural exports to Cuba. The analysis shows that the United States is already one of Cuba's leading suppliers of agricultural imports (primarily chicken meat, corn, soybean meal, and soybeans) due to a loosening of the U.S. economic embargo in 2000 that allows for U.S. sales of agricultural products and medicine to Cuba. The executive actions announced in December 2014 and June 2015 could foster additional U.S. agricultural trade with Cuba, including increased U.S. exports of rice, wheat, nonfat dried milk, and other commodities, but a remaining prohibition on extending credit to Cuban buyers will likely limit the rate of growth. ERS published a report in June 2015.

China's Role in Global Agricultural Markets: China is the leading export destination for U.S. agricultural products and plays a major role in global agricultural markets. ERS maintains an

active program of research on China's agricultural policies and markets. A recent ERS study of China's cotton market found that its price support policies drove world cotton stocks to nearly double the average levels of the past half century, and global markets could now face a difficult transition if China attempts to reduce its accumulated stocks. ERS also published a study on China's livestock feed industry and found that modernization of China's livestock sector has helped to reduce trade barriers and present expanded opportunities for U.S. exports of grains and oilseeds. Ongoing ERS research explores how changes in consumption and production of livestock in China will affect U.S. export opportunities.

Food Access and Store Proximity: ERS investigated the relationship between households that live in low-income, low-food-access areas and their purchases of 14 major food groups that vary in dietary quality. About 10 percent of the U.S. population lives in low-income areas more than 1 mile from the nearest supermarket. The diet quality of these consumers may be compromised by their food environment. Some may be unable to reach supermarkets regularly or without effort, instead buying food from closer stores that offer less healthy food products. This analysis showed that households living in low-income, low-food-access areas have only slightly lower diet quality than other households due to similar food purchase patterns across income groups. Furthermore, this difference is partially alleviated when these consumers travel farther from their homes to purchase foods.

Use of Administrative Data Improves Understanding of SNAP Program Participation: ERS linked 2008-12 SNAP administrative records to data from the U.S. Census Bureau's American Community Survey (ACS) on the use of SNAP and other public assistance programs to provide better information on SNAP receipt than that which would be estimated by the ACS or SNAP records alone. SNAP benefits are based on a formula that adjusts the benefit amount a household receives based on monthly need. ERS assessed the extent to which SNAP reaches the poorest households, also known as benefit targeting, by estimating benefit receipt by annual household income relative to poverty. Estimates of SNAP targeting toward low-income households improve when using SNAP administrative records because of the added detail and accuracy of these data, including the ability to more closely reflect administrative SNAP units. These data informed decision makers about the effect of more accurate data on participation measures.

Food Loss: ERS provides estimates on the amount and value of food loss in the United States for more than 200 individual foods using our Loss-Adjusted Food Availability data. In 2010, an estimated 31 percent, or 133 billion pounds, of the 430 billion pounds of food produced was not available for human consumption at the retail and consumer levels. This amount of loss totaled an estimated $161.6 billion, as purchased at retail prices. The top three food groups in terms of the share of the total value of food loss at the retail and consumer levels are meat, poultry, and fish (30 percent), vegetables (19 percent), and dairy products (17 percent). Food loss data from ERS are used to support USDA and the Environmental Protection Agency efforts to reduce food loss and also provide a model for other countries' efforts to estimate food loss.

Managing Glyphosate Resistance: Glyphosate—the most widely used herbicide in the United States—is highly effective at controlling a variety of weeds, relatively inexpensive, and flexible in use. However, glyphosate's effectiveness is declining as weed resistance mounts, potentially reducing crop yields and increasing costs. ERS research published in May 2015 shows that reliance on glyphosate by many growers as the sole herbicide to control weeds is the primary factor underlying the evolution of resistant weeds, particularly in soybean production. The findings suggest that managing resistance—by using glyphosate in fewer years, combining glyphosate with one or more alternative herbicides, and avoiding glyphosate application in consecutive seasons—is a more cost-effective strategy than ignoring resistance.

FY 2017 Budget Request

The President's FY 2017 Budget request for ERS programs of $91.3 million represents a net increase of $5.9 million above the Agency's FY 2016 Enacted level. Funding is requested to continue ERS's highest priority core programs. These include research, data, and market outlook on the following: the extent to which investments in rural communities affect the capacity of rural economies to prosper in a changing global marketplace; production agriculture, domestic and international markets, trade, and Federal farm policies; the U.S. food and agriculture sector's performance in the context of increasingly globalized markets; economic issues related to developing policies and programs that respond to the need to protect the environment and the challenges of climate change while enhancing agricultural competitiveness; the Nation's food and nutrition assistance programs, the relationships among factors that influence food choices and

health outcomes, including obesity; and methodologies for valuing societal benefits associated with reducing food safety risks.

The request includes an increase of $4 million to conduct a second round of USDA's National Household Food Purchase and Acquisition Survey (FoodAPS). The first round successfully produced never-before-available data and information on food purchase patterns of Americans—in particular, households participating in SNAP and other low-income households—and the factors that influence their choices. The data currently supports 53 studies on areas of interest to policymakers, including the determinants of food choices by SNAP participants, the impact of SNAP benefits on participants' diet quality and food security, the affordability of healthy diets, and the role of the local food environment and other geographic factors driving food purchase and acquisition decisions of SNAP and non-SNAP households. With the additional funding, ERS and USDA's Food and Nutrition Service (FNS) jointly propose to collect more recent and more detailed information in a second round of FoodAPS. The effort will incorporate lessons learned from FoodAPS-1 and add additional representative populations. FoodAPS-2 will further strengthen the abilities of USDA and other policy organizations to examine the relationships between food and nutrition assistance programs and consumer food choices. For example, by expanding the sample sizes of participants in WIC and school meal programs, FoodAPS2 will be capable of investigating the differences in factors affecting diet quality and food demand among various participant groups and households at risk of nutritional deficits. This is critical given that many households participate in multiple programs and each program has different design features and targeted populations. In addition, by collecting SNAP information at the individual level, FoodAPS-2 will provide more detailed information about SNAP households with either non-SNAP members or multiple SNAP units, enabling comparison of their diet quality and food security with SNAP households in which all members are part of the SNAP unit.

The request also includes an increase of $626,000 to expand research on *Increasing Drought Resilience: Economic and Policy Drivers*. ERS will continue to build a strong evidence base on public and private drivers of farm-level water use and farmers' responses to drought incidence and risk. Recently published research analyzed the implications of changing temperature and water supply (both precipitation and irrigation water) for cropping allocations and shifts in irrigated and dryland crop areas in the United States. The analysis found that irrigated field crop acreage could

actually decline with long-term climate change as surface-water availability decreases and irrigated production becomes less profitable relative to dryland production. ERS has also provided the public and policymakers with information on how factors like groundwater pumping, commodity market adjustments, crop insurance, and changes in planted acreage are mitigating long-term drought impacts in California and elsewhere. The proposed funding will support analysis to examine the role of groundwater resources as another source of water for agriculture through an agreement with the U.S. Geological Service on groundwater modeling. A second goal is to provide more regionally specific results accounting for local variation in conditions and the institutions that govern farmers' access to water by funding university studies of aquifers, farmers' responses to drought, and the role of USDA programs in different regions.

Additionally, the budget requests an increase of $0.5 million to support the Department's activities related to new and beginning farmers and ranchers. Ongoing research using data from the Agricultural Resources Management Survey (ARMS) is examining the financial, demographic, and operational characteristics of beginning farmers and ranchers (BFRs), and how these characteristics differ from those of other operators. Based on the 2014 Tenure, Ownership, and Transition of Agricultural Land (TOTAL), ERS research is investigating the ownership and access to land for BFRs. Finally, research using administrative data and behavioral experiments is examining BFRs' uptake of microloans and the extent to which the program attracts new borrowers. The proposed funding will support cooperative agreements to focus on specific groups of beginning farmers, including minorities, veterans, and women. National surveys include only small numbers of responses from each of these groups, thus limiting the kinds of analysis that can be done. The planned research will target groups in different regions to better understand specific factors that determine the success of new and beginning farmers and to investigate the role of USDA programs. The results of this survey will assist the Department in developing programs to meet the needs of this important group of producers and help respond to an aging farm population.

Examples of Ongoing Research Proposed for Funding in FY 2017

ERS intends to look beyond the immediate horizon to conduct anticipatory research, the findings of which will be available when a topic "heats up." The research, data, and market analysis will continue to provide information to support and improve decision-making and problem solving. This research supports the REE Action Plan and is often planned in concert with USDA research

partners, such as research for metrics on climate smart agriculture and on new and beginning farmers and ranchers. Other ERS priorities for research that will deliver findings in 2017 and beyond include:

Food Safety: ERS is actively engaged in efforts to understand the economics of food safety and the market implications of new food safety regulations. ERS recently collaborated with USDA's National Agricultural Statistics Service (NASS) to collect detailed data from produce growers and post-harvest firms regarding food safety practices currently in use. These data will be analyzed by ERS to better understand the costs and market implications of the full implementation of the Food Safety Modernization Act (FSMA) and to explore the potential economic impacts of FSMA provisions on the fresh produce and animal feed sectors.

Rural Child Poverty: Rural child poverty began to rise after 2001 and accelerated after the recent recession. Today, over 1 in 4 rural children live in households with incomes below the poverty line, up from 1 in 5 at the turn of the century. Poor children are far more likely to become poor adults, and so this increase in poverty has long-term implications for the economic and social well-being of our Nation's rural population. ERS will analyze possible sources of rising child poverty, including higher unemployment and depressed wages among low-income workers, as well as changes in family structure and young adult education.

Rural Veterans: Nearly 4 million veterans reside in rural America, comprising over 10 percent of the rural adult population. They are an increasingly diverse group of men and women that face many challenges, including higher costs of accessing services and limited job opportunities relative to those residing in urban areas. At the same time, veterans possess high education and skill levels and are well situated to contribute economically to struggling rural communities. ERS has an ongoing agreement with the Census Bureau to link veteran administrative data with Census surveys. ERS will use the linked data to improve the understanding of veteran migration decisions and their potential contributions to rural human and social capital.

Dairy Structure, Price Risks, and Policy. In 2014, Congress undertook a major reorganization of dairy policy by creating a new program, the Dairy Margin Protection Program, which will provide participating farmers with financial protection against adverse movements in milk and feed prices, while eliminating two existing programs. The policy changes were carried out against a backdrop of increased price risks facing dairy farmers and ongoing structural changes of milk production

towards larger farms. Understanding how dairy policy affects markets and producer behavior is a critical component of the ERS outlook program, and we have research underway analyzing the potential effects of these new programs.

2014 Farm Act Risk Management Policies. The Agricultural Act of 2014 introduced new programs for assisting farmers in managing farm risk. ERS has research underway to estimate how the new Supplemental Coverage Option and the Stacked Income Protection Plan programs interact with other crop insurance programs in contributing to risk reduction for upland cotton producers. The Act also increased support under the Noninsured Crop Disaster Assistance Program (NAP) for crops ineligible for Federal crop insurance. Research to be published in FY 2017 will examine the impact of changes to NAP on producers' revenue and risk of loss. Another study will examine farmers' risk management options (particularly savings and Federal crop insurance) over time and evaluate how a farm's financial situation may affect the demand for crop insurance.

Conservation Compliance: For farmers to maintain eligibility for most agriculture-related Federal programs, conservation compliance requires them to implement approved conservation systems on highly erodible cropland and refrain from draining wetlands. The Agricultural Act of 2014 eliminated Direct Payments and Countercyclical Payments—which previously accounted for a large proportion of compliance incentives—but also created "shallow loss" programs and linked crop insurance premium subsidies to conservation compliance requirements. ERS will investigate the effectiveness of conservation compliance, the change in the incentive due to the Act, and the potential effectiveness of these incentives in protecting highly erodible cropland and wetlands.

Farmland Ownership, Land Acquisitions, and Land Use: Farm real estate values reached record highs in 2014, but forecasts indicate a slowing rate of appreciation, or possibly even a decline in land values caused in part by lower commodity prices and rising interest rates. The 2014 TOTAL survey, conducted by NASS and ERS, integrates data on farm finance and land ownership and will enable us to better answer a number of policy questions about the implications of these trends for both owners and renters. ERS research is currently applying TOTAL to policy questions about the composition and structure of farm operators and owners of agricultural land (including beginning farmers and ranchers), land acquisition and transfer plans of current landowners, and land management decisions by landlords and tenants concerning production, conservation, and risk management areas.

Trends in Retail Organic Price Premiums, 2004-2010: Organic foods are one of the most rapidly growing sectors in the retail food market. ERS plans to examine retail organic price data to estimate the organic price premium for 18 food product categories, including eggs, dairy, meats, fresh produce, grains, and a variety of processed foods. This analysis will provide a baseline from which to track how organic price premiums evolve as organic products continue to gain market share and will provide a documented methodology to calculate premiums with more recent years of data as those data become available.

Using Behavioral Economics to Help Consumers Buy Healthier Foods in Low-Income-Area Grocery Stores: This study will estimate the average Healthy Eating Index (HEI) scores, the amount of time spent shopping, the amount of time spent traveling to grocery stores, general knowledge of MyPlate, and food label use among individuals living in low-food-access areas. Researchers will then apply findings from behavioral economic studies to consumer food purchasing behavior to develop a set of possible strategies for increasing healthier food choices in grocery stores. For example, adding new signs, visual cues, and other nudges inside grocery stores might induce shoppers to increase purchases of healthier items, such as fruits and vegetables, and decrease the purchase of less healthful items. The results will provide a basis for possible expansion of successful policies to a wider array of retail outlets.

Effects of Expanded Categorical Eligibility, Income Volatility, and Other Policy Changes on SNAP: In the 2000s, many States expanded the definition of eligibility for SNAP to include individuals who qualified for noncash assistance from Temporary Assistance for Needy Families or related programs. These policies raised income limits and removed the asset limits in many States. Some analysts ascribe the large rise in SNAP caseloads between 2008 and 2013 to these policies, while others find that changes in unemployment explain most of the increase. This research will identify the sources of eligibility of SNAP participants using the Survey of Income and Program Participation (SIPP) 2008 panel linked to State-level SNAP administrative data. SNAP administrative data from New York, Texas, and Georgia will be linked to the SIPP to show which individuals in the SIPP sample truly participated in SNAP.

Mr. Chairman, this concludes my statement of ERS's budget recommendations for FY 2017. I will be happy to answer any questions that the Subcommittee may have.