

**Testimony of Deputy Under Secretary for Research, Education, & Economics  
Scott Hutchins  
U.S. Department of Agriculture before the Biotechnology, Horticulture, and Research  
Subcommittee of the House Agriculture Committee  
Agricultural Research and 2018 Farm Bill Implementation**

Good morning. Chairwoman Plaskett, Ranking Member Dunn and members of the Subcommittee. Thank you for the opportunity to speak to you all today to discuss agricultural research and implementation of related provisions in the 2018 Farm Bill. The Research, Education, & Economics (REE) Mission Area at the United States Department of Agriculture (USDA) is an incredible team and powerful force for the good of U.S. Agriculture – we have fantastic success stories to tell. I appreciate the opportunity to share a few of those with you today, as well as inform you on the progress we have made in the implementation of the 2018 Farm Bill.

The REE Mission Area is comprised of the Office of the Chief Scientist (OCS) and four agencies: the Agricultural Research Service (ARS), the Economic Research Service (ERS), the National Agricultural Statistics Service (NASS), and the National Institute of Food and Agriculture (NIFA). Each of these entities provides services that are critical to the well-being of the American agriculture system - provider of the most affordable, abundant, and safe supply of food and fiber in the world.

**ARS**

The Agricultural Research Service is USDA's primary intramural research agency. ARS has approximately 2,000 scientists and post-doctoral researchers and 6,000 additional staff supporting around 690 research projects at over 90 locations. These researchers produce an immense output of scientific and technical knowledge. ARS scientists produced over 4,500 peer-

reviewed journal articles in 2018 alone. Without a doubt, ARS has and continues to produce a wide range of scientific breakthroughs that benefit U.S. agricultural producers and consumers. Recent innovations from ARS scientists include nonwoven cotton gauze that could usher in next-generation wound dressings that quickly stanch bleeding and promote healing, a rotating cross-arm trellis and cane-training system for the floricanefruiting blackberry to help growers overcome environmental challenges, produce more fruit, and reduce labor costs, and a test strip for major foodborne pathogens that reduces testing time from 24-72 hours to about 30 minutes.

### **ERS**

The Economic Research Service continues to be a trusted source of high-quality and objective economic research to inform and enhance public- and private-sector decision making. ERS research covers a range of topics which fit generally into six buckets: Agricultural Economy, Food and Nutrition, Food Safety, Global Markets and Trade, Resources and Environment, and Rural Economy. ERS reports provide information to decision makers across the Federal government and external stakeholders.

ERS reports provide significant insight on agricultural markets. Notably, these include in-depth analyses of commodity markets such as the outlook of livestock, dairy, and poultry and the outlook for sugar and sweeteners, both of which will be released today. Upcoming reports will provide information on food prices, livestock and meat domestic production, and an annual report on fruit and tree nuts.

### **NASS**

The mission of the National Agricultural Statistics Service is to provide timely, accurate, and useful statistics for U.S. Agriculture. They conduct hundreds of surveys every year and

produce reports on the entire agricultural sector, including production and supplies of food and fiber, prices paid and received by farmers, farm labor and wages, farm finances, chemical use, and changes in the demographics of U.S. agriculture.

Earlier this year, we were proud to have the opportunity to provide NASS's largest and most visible report, the Census of Agriculture. Conducted every five years, the Census provides a complete count of U.S. farms, ranches, and the people who operate them. The Census also looks at ownership, operator characteristics, production practices, income, and expenditures. Highlights from the 2017 Census include:

- One in four producers is a beginning farmer with 10 or fewer years of experience;
- 36 percent of all producers are female, and 56 percent of all farms have at least one female decision maker;
- 96 percent of farms and ranches are family owned; and
- Farms with Internet access rose from 69.6 percent in 2012 to 75.4 percent in 2017.

## **NIFA**

The National Institute of Food and Agriculture is USDA's extramural research agency, providing funding and leadership to support research, education, and extension programs that address national agricultural priorities. NIFA primarily does this through competitive and formula grants.

Competitive grants are comprised of different grant programs with the largest being the Agriculture and Food Research Initiative (AFRI). With AFRI grants, researchers across the

country are able to conduct research and find solutions to problems that face producers. For instance:

- Clemson University researchers are using new nutrient-management drone and camera technology to save up to \$54 per acre on cotton production;
- Researchers at the University of Missouri have found that zinc plays a key role in promoting fertility in male livestock. In addition to improving in vitro fertilization and artificial insemination in livestock, the research provides a quick and accurate evaluation of livestock fertility;
- Fellow entomologists at my Alma Mater, Auburn University, have discovered a wasp that may help soybean producers and other farmers in the Southeast rid their fields of the invasive pest known as the kudzu bug, enabling them to produce more crops and see higher yields; and
- Researchers at Kansas State University are using the gene editing tool CRISPR to improve the wheat genes that control several yield component traits, such as seed size and the number of seeds per plant.

Formula grants go to land-grant universities to support them in conducting agricultural research and extension. While much of this funding is used to support research projects that address critical areas of need, formula funding is also used to support the basic research and extension infrastructure needed to disseminate knowledge and provide training to individuals in a variety of ways.

One example of this is at North Carolina State University, where extension professionals and volunteers provided 13,000 educational programs to 1.9 million residents. Their efforts improved

the health and well-being of 115,000 North Carolinians through food and nutrition programs, prepared more than 263,000 youth through 4-H programs, and provided \$300 million of economic impact to the state.

NIFA's extension work also provides help to millions of family caregivers, more than 80 percent of whom feel they don't have the information or training they need. With a NIFA formula grant, Family & Consumer Sciences educators from Oklahoma State University Cooperative Extension have developed a comprehensive health education curriculum that includes lessons in proper nutrition, aging and finances, and prevention of elder abuse and exploitation.

NIFA also supports workforce development, including the 4-H organization. In 2018, NIFA-funded programs supported 104,149 students through recruitment, retention, curriculum development, and faculty development. Through 4-H, NIFA supports a new generation of community and agricultural leaders.

### **Office of the Chief Scientist**

In addition to serving as Deputy Under Secretary, I oversee the Office of the Chief Scientist. The Office of the Chief Scientist supports scientific prioritization and coordination across the entire Department and convenes the USDA Science Council. The council facilitates cross-Departmental scientific coordination and collaboration and ensures that research supported by and scientific advice provided to the Department and its stakeholders are held to the highest standards of intellectual rigor and scientific integrity.

We are fully committed to supporting research that ensures U.S. producers will be able to adapt to changes in climate and continue to develop and advocate for a wide range of sustainable

intensification practices. For example, ERS researchers recently published a study that examined the potential effects of climate change on risk management. USDA has no policy, no practice, and no intent to minimize, discredit, de-emphasize, or otherwise influence the rigorous climate-based science of any agency or partner institution. We support the work done by our scientists in this area of our research. Tools such as USDA's Climate Hubs and the Long-Term Agroecosystem Research (LTAR) Network communicate climate research *directly* to the producers these changes most directly impact. Additionally, the National Climate Hub Coordinator compiles a quarterly report that provides information on publications, outreach events, and technical support.

### **2018 Farm Bill Implementation**

REE held a stakeholder listening session on March 21, 2019, to begin the process of Farm Bill implementation with all REE leadership present. While each of the four REE agencies and the Office of the Chief Scientist were included in the Farm Bill, the vast majority of the provisions pertain to NIFA. Thus far, NIFA has:

- Published the Request for Applications (RFA) for the Organic Agriculture Research and Extension Initiative (OREI) and is in the process of finalizing awards;
- Published the updated matching requirements chart and indirect cost chart on its website and sent an update to stakeholders so that they are informed of the changes the 2018 Farm Bill made to NIFA's many grant program requirements;
- Published the RFA for the Beginning Farmer and Rancher Development Program (BFRDP) component of the Farming Opportunities Training and Outreach and is in the process of finalizing awards;

- Published a Federal Register Notice regarding new Non-Land-Grant Colleges of the Agriculture certification process. NIFA currently has certified 39 Non-Land-Grant Colleges of Agriculture using the updated definition;
- Published the RFA for the 1890s scholarship program, which was championed by Representative Scott, with applications due on November 2019. NIFA's goal is to ensure that these funds are available for 1890 land-grant institutions to begin awarding scholarships for the next academic school year; and
- Provided guidance to 1890 land-grant institutions regarding the change to carryover of funds for extension at these institutions.

### **ERS/NIFA**

In August 2018, Secretary Perdue announced that the Department would be relocating the Economic Research Service (ERS) and the National Institute for Food and Agriculture (NIFA) outside of the National Capital Region. The relocation to the Kansas City region was principally completed on September 30, 2019. We believe this decision ultimately will improve USDA's ability to attract and consistently retain highly qualified staff with training and interests in agriculture, as well as place these important USDA resources closer to many of our stakeholders. A short driving distance from multiple land-grant and research universities, Kansas City is a vibrant urban center in the heartland of America and a growing agricultural hub. It is also already home to a considerable Federal workforce, including a significant presence of USDA employees and the Kansas City 'Ag Bank' Federal Reserve. Anticipated savings from this move over the long-term will allow more funding for research of critical needs, like rural prosperity and agricultural competitiveness, and for programs and employees to be retained in the long run,

even in the face of tightening budgets. It is important to note that the headquarters of both agencies will remain in the National Capitol Region.

As a part of this move, all employees were offered the ability to retain their position, were offered relocation assistance, and are receiving the same base pay as before in tandem with the locality pay for the new location. Additionally, the Department has utilized available resources and authorities to assist with transition for those who declined to relocate with their roles. For example, 149 employees have found new employment within the Federal Government in the National Capital region and, of these, 123 are remaining within USDA.

The work of NIFA and ERS is essential, and ERS and NIFA leadership, under the direction of the REE Mission Area, are working diligently to finalize this transition efficiently and with minimal disruption to our employees and mission critical work.

Both agencies have utilized a robust set of continuity tools, including detailees, reemployed annuitants, and temporary extensions of relocation dates and both agencies are focused on hiring for vacant positions. Together, these agencies have over 100 active recruitments in process and continue to onboard new talent in Kansas City. With the talent pool in the Kansas City region and our aggressive hiring strategy, we fully anticipate that our new employees, along with the expertise of our relocating employees, will provide the same excellent level of work for which ERS and NIFA have been known.

We are confident that we will be successful, exceeding even the high benchmarks previously established for both ERS and NIFA.

In conclusion, thank you for allowing me the opportunity to highlight some of the fantastic research being done in the Research, Education, & Economics mission area, provide an



update on the status of REE Farm Bill Implementation and address some specific topics of interest. Thank you for your continued support of this vital aspect of the services USDA provides in our quest to ***“Do Right and Feed Everyone.”*** I look forward to answering your questions, and I thank you for the support that this Committee has always shown for Agriculture research and innovation.