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Introduction

Under the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), USDA is required to conduct a Capacity Assessment of the coverage, quality, methods, effectiveness, and independence of the Department’s evaluation, research, statistics, and analysis functions. The Capacity Assessment is intended to establish a baseline of existing evidence-building capacity, identify gaps, and recommend areas for improvement to strengthen USDA’s ability to build and use evidence to inform decision-making. USDA will also use the Capacity Assessment to determine priority areas in which evidence should be bolstered to inform future budget requests.

Stakeholder Engagement

Throughout FY 2021, OBPA conducted a number of stakeholder engagement activities to inform the development of the Capacity Assessment. USDA’s internal stakeholders were organized into the following standard hierarchy to ensure that all levels were appropriately engaged and to provide clarity around roles and responsibilities:

- **Strategic Direction:** Responsible for setting the Department’s strategic direction (Secretary, Deputy Secretary, and Sub-Cabinet officials);
- **Departmental Operations:** Responsible for supporting strategic implementation efforts in alignment with the Department’s strategic goals and objectives (staff offices such as OBPA, Human Resources, Office of the Chief Information Officer, etc.); and
- **Mission Delivery and Performance:** Responsible for aligning agency strategic directions and resources with the Department-wide strategic directions and for delivering statutorily required missions, functions, programs, projects, etc. (all USDA Mission Areas and Agencies).



OBPA convened the Evidence Act Working Group (EAWG) to collaborate on the Capacity Assessment and other Evidence Act deliverables. The EAWG was a cross-functional team that included representation from across USDA Mission Areas and Agencies and served as the conduit between OBPA and Mission Area and Agency leadership. OBPA regularly engaged with the EAWG through a series of interactive workshops to appropriately scope the Capacity Assessment and solicit feedback on draft materials.

In addition to coordination with the EAWG, OBPA conducted a number of interviews with USDA senior leaders with subject matter expertise in statistics, evaluation, research, and data. Interviewees included the Chief Evaluation Officer, Chief Data Officer, Statistical Official, and Deputy Chief Economist. These leaders were asked to provide their insights on USDA’s current evidence-building capacity, including where in the Department evidence building practices are strongest, what areas would most benefit from strengthening evidence-building capacity, and which specific programs require additional investment to fill existing evidence gaps. OBPA then conducted additional interviews with Agency-level Assistant Evaluation Officers, members of the EAWG, and other experts in evidence functions to supplement this information.

Capacity Assessment Structure

In accordance with the Evidence Act and relevant guidance from the Office of Management and Budget (OMB), the *Capacity Assessment Findings* section of this document covers:

- The extent to which the evaluations, research, and analysis efforts and related activities of the Department support the needs of various divisions within the Department;
- The extent to which the evaluations, research, and analysis efforts and related activities of the Department achieve an appropriate balance between needs related to organizational learning, ongoing program management, performance management, strategic management, interagency and private sector coordination, internal and external oversight, and accountability;
- The extent to which the Department uses methods and combinations of methods that are appropriate to Departmental divisions and the corresponding research questions being addressed, including an appropriate combination of formative and summative evaluation, research, and analysis approaches;
- The extent to which the evaluation and research capacity is present within the Department to include personnel and agency processes for planning and implementing evaluation activities, disseminating best practices and findings, and incorporating employee views and feedback; and
- The extent to which the Department has the capacity to assist Departmental staff and program offices to develop the capacity to use evaluation research and analysis approaches and data in the day-to-day operations.

The *Capacity Assessment Inventory* section contains a list of the highest-priority activities and operations of the Department that are currently being evaluated and analyzed, as identified by the Mission Areas and Agencies.

For the purposes of this inaugural Capacity Assessment, OBPA focused its efforts on establishing a baseline understanding of how well the Department is positioned to create and leverage evidence to support strategic decisions (i.e., how the Department meets its mission(s), including how programs, policies, and regulations function both individually and in combination) over operational decisions (i.e., human resources, grant-making procedures, financial systems and tracking, and internal processes).

Concepts and Principles

In its [Memorandum M-19-23](#), OMB directs agencies to assess their evidence activities across five dimensions: coverage, quality, methods, effectiveness, and independence. For the purpose of the Capacity Assessment, USDA used the following definitions for these dimensions, which are adapted from [OMB Circular A-11 Section 290: Evaluation and Evidence-Building Activities](#):

- *Coverage*: Describes the evidence activities that are happening and where in the Department the activities are occurring.
- *Quality*: Describes the extent to which data and other information used in the course of conducting evidence activities are of high quality with respect to utility, objectivity, and scientific integrity.

- *Methods*: Describes the techniques, systems, and processes used in evidence generation. Methods may vary by evidence type; however, all methodologies should include an appropriate level of rigor and take an empirically proven approach.
- *Effectiveness*: Describes the extent to which evidence activities are meeting their intended outcomes, including serving the needs of stakeholders and being disseminated appropriately.
- *Independence*: Describes the extent to which the activities being carried out are free from bias and inappropriate influence.

Capacity Assessment Findings

In conducting the Capacity Assessment, OBPA identified 12 recommendations for strengthening evidence-building capacity in research, evaluation, statistics, and other forms of analysis. These recommendations, if implemented, would serve to improve the coverage, quality, methods, effectiveness, and independence of USDA’s evidence functions. In the near term, USDA’s Evidence Act Designated Officials will work to prioritize these recommendations for implementation based on leadership priorities and resource availability.

RESEARCH

Consideration	Coverage	Quality	Methods	Effectiveness	Independence
Build cross-cutting research partnerships	✓			✓	
Improve employee training on and awareness of research tools and information		✓			

EVALUATION

Consideration	Coverage	Quality	Methods	Effectiveness	Independence
Stand up a centralized evaluation office or offices	✓	✓	✓	✓	✓
Incorporate evaluation into program design	✓	✓		✓	
Ensure adherence to the USDA Evaluation Policy	✓	✓	✓	✓	✓
Foster an organizational culture that values evaluation	✓	✓	✓	✓	✓

STATISTICS

Consideration	Coverage	Quality	Methods	Effectiveness	Independence
Streamline data collection methods and reduce burden on customers			✓		
Increase programming language proficiency among statisticians		✓	✓		
Centralize information technology structures to improve data access		✓	✓		
Foster a collaborative learning environment for statistical staff	✓	✓	✓	✓	✓

OTHER ANALYSIS

Consideration	Coverage	Quality	Methods	Effectiveness	Independence
Strengthen the use of performance data in decision-making				✓	
Leverage the Data Science Workbench to improve analytical functions		✓	✓		

The findings below are intended to move USDA to a higher level of maturity with respect to its evidence-building activities. The dimension(s) of evidence – coverage, quality, methods, effectiveness, and independence – that the recommendations could improve if implemented are noted throughout the document. The Evidence Act Designated Officials may consider using the Capacity Assessment results to guide resource allocations to strengthen capacity in the most critical areas of need. Through these efforts, USDA can take steps towards improving and enhancing its evidence-building activities, increasing stakeholder buy-in and understanding of the benefits of evidence for strategic decision-making, and facilitating a robust learning culture Department-wide.

Research

The Office of the Chief Scientist provides leadership and coordination to ensure that research supported by and scientific advice provided to the Department and external stakeholders is held to the highest standards of intellectual rigor and scientific integrity. The Office of the Chief Scientist strives to inform policy and programmatic decisions within the Department by providing the best available scientific advice and input; establishing appropriate linkages between USDA and other scientific organizations in government (U.S. and abroad), academia, and industry; and ensuring the dissemination of scientific research and science performed by the Department to policy makers and decision leaders across the spectrum of policymaking Nationally and internationally.

The Research, Education, and Economics Mission Area is dedicated to creating a safe, sustainable, competitive U.S. food and fiber system, as well as building strong communities, families, and youth through integrated research, analysis, and education. It is the home to USDA leadership responsible for advancing scientific knowledge related to agriculture through credible scientific research, economic data, statistical analysis, and scientific guidance. Of the five Agencies under this Mission Area, four are primarily responsible for research activities, described below:

- The Agricultural Research Service is USDA’s chief scientific in-house research Agency. It has a workforce of approximately 8,000 employees, including 2,000 scientists and post-doctoral fellows in more than 90 research locations. The Agricultural Research Service’s research mission is to find solutions to agricultural problems that affect Americans every day from field to table and includes about 660 research projects within 15 National programs. The primary research focus areas of the Agency include animal production and protection; crop production and protection; natural resources and sustainable agricultural systems; and nutrition, food safety, and quality. The Agency produces an annual Report on Science, a compendium of research accomplishments over the previous year that demonstrate the Agency’s impact on the food we eat, the water we drink, and the air we breathe. The Agency positions itself strategically to address agricultural challenges by gathering input from customers and stakeholders and conducting research that addresses programmatic research goals throughout five-year cycles. The 2020 Annual Report on Science can be found [here](#).
- The National Institute of Food and Agriculture is USDA’s primary extramural research, education, and extension Agency, providing leadership and funding for programs that advance agriculture-related sciences. The Agency invests in and supports initiatives that ensure the long-term viability of agriculture and applies an integrated approach to ensuring that groundbreaking discoveries in agriculture-related sciences and technologies reach the people who can put them into practice. Through partnerships with the Land-Grant University System and government, private, and non-profit organizations, National Institute of Food and Agriculture programs can provide solutions to those who need them.
- The Economic Research Service (ERS) anticipates trends and emerging issues in agriculture, food, the environment, and rural America and conducts economic research to inform public and private decision-making. ERS provides statistics on food security, farm income, and agricultural productivity and contributes to the work of USDA’s World Agricultural Outlook Board.
- The National Agricultural Statistics Service (NASS) is responsible for ensuring the quality, objectivity, and transparency of the statistical information and analysis provided by the REE

Mission Area. NASS and ERS are USDA’s two federal statistic agencies responsible for this effort.

USDA has additional research authorities in divisions of the Food Safety and Inspection Service, Natural Resources Conservation Service, Food and Nutrition Service, and Animal and Plant Health Inspection Service, and Marketing and Regulatory Programs. These researchers contribute funding, human capital, and collaborative expertise to USDA science efforts.

CONSIDERATIONS FOR BUILDING RESEARCH CAPACITY

USDA has identified several recommendations to strengthen research functions to support evidence-based decision-making:

- **Build cross-cutting research partnerships:** Mission Areas and Agencies may consider building relationships across the Department to facilitate collaborative and cross-cutting research efforts. In particular, USDA could prioritize new research partnerships or building on existing efforts that focus on supporting the priorities of the Secretary and the Administration, such as advancing equity, climate, and customer experience.

If implemented, this recommendation would improve the coverage and effectiveness of USDA’s research functions.

- **Improve employee training on and awareness of research tools and information:** Results from the [2020 Federal Managers Survey: Results on Government Performance and Management Issues](#) from the Government Accountability Office (GAO) showed that USDA has opportunities to improve the research-related capabilities of its program-level staff in a number of dimensions including increasing employee awareness of research tools and information; strengthening program staff knowledge and skills needed to collect and analyze information for research; and facilitating access to research performed by external partners such as other Federal agencies, academic researchers, and think tanks.

If implemented, this recommendation would improve the quality of USDA’s research functions.

Evaluation

USDA engages in a range of evaluation activities to support operational effectiveness, rulemaking, and decision-making. As USDA does not have a centralized evaluation office, most evaluation activities are planned and conducted on an individual basis by Mission Areas and Agencies according to their established planning processes. Through data calls related to the Department's FY 2023 Evaluation Plan and budget submission, as well as stakeholder interviews, OBPA determined that many Mission Areas and Agencies have an opportunity to improve their capacity for conducting high-quality and rigorous program evaluations. The list below reflects the Mission Areas and Agencies whose evaluation work is reflected in the USDA Learning Agenda and FY 2023 Evaluation Plan (note that it is not a comprehensive listing of all evaluation work across USDA):

- The Food and Nutrition Service within the Food, Nutrition, and Consumer Services Mission Area conducts a variety of studies, evaluations, and related activities that respond to the needs of policymakers and managers and help ensure that nutrition assistance programs achieve their goals effectively. The Office of Policy Support leads the development and execution of FNS's Research and Evaluation Plan (the Agency's FY 2021 Research and Evaluation Plan can be found [here](#)).
- Rural Development has a robust evaluation function that focuses on the impact of programs to improve the economy and quality of life in rural America. Many ongoing evaluations focus on building infrastructure (e.g., Community Facilities, broadband) and providing clean water, as well as ensuring equitable program access for historically disadvantaged and underserved communities.

A selection of the Department's program evaluation activities is documented in its Annual Evaluation Plan, which describes the significant evaluations USDA plans to undertake in the coming fiscal year. The FY 2022 Evaluation Plan can be found [here](#).

CONSIDERATIONS FOR BUILDING EVALUATION CAPACITY

USDA has identified several recommendations to strengthen evaluation functions to support evidence-based decision-making:

- **Stand up a centralized evaluation office or offices:** Mission Areas and Agencies, especially those whose evaluation capacity is less mature, could benefit from having an independent evaluation office to assist with evaluation planning, design and implementation. Such an office could be situated under a staff office such as OBPA, Office of the Chief Economist (OCE), or the Office of the Chief Scientist and support the evaluation needs of the Department enterprise-wide; alternatively, multiple offices could be established at the Mission Area and Agency level. By centralizing the planning and management of evaluations under one entity, the Department could maximize efficient use of its resources and support the lower-maturity Mission Areas and Agencies in improving their evaluation capacity.
If implemented, this recommendation would improve the coverage, quality, methods, effectiveness, and independence of USDA's evaluation functions.
- **Incorporate evaluation into program design:** When designing a new program or modifying an existing one, program managers should consider future data collection needs for conducting evaluations. Further, program managers and staff could use logic models to articulate the intended outcomes and impact of programs and strengthen overall program

readiness for evaluation. Developing or describing the theory of change can also be helpful for identifying data and evidence needs.

The Department may also consider building provisions into its grant programs that require grantees conduct evaluations or access to data so that evaluations may be conducted by a third party. This approach could help USDA embed institutional learning into program design and development and would likely require additional resources (e.g., staff, training, funding) to implement.

If implemented, this recommendation would improve the coverage, quality, and effectiveness of USDA's evaluation functions.

- **Ensure adherence to the USDA Evaluation Policy:** The USDA Evaluation Policy establishes best practices and requirements for all evaluations conducted across the Department. It gives USDA employees, partners, and stakeholders a common framework for conducting evaluations and defines the core standards and principles by which evaluators must abide. Mission Areas and Agencies should identify opportunities to align internal policies and procedures to the Department-wide Evaluation Policy and educate staff on how to implement the policy as needed.

If implemented, this recommendation would improve the quality, methods, effectiveness, and independence of USDA's evaluation functions.

- **Foster an organizational culture that values evaluation:** Evaluation is often misunderstood as a mechanism for highlighting inefficiencies or performance issues within programs. The GAO 2020 *Federal Managers Survey: Results on Government Performance and Management Issues* indicated that USDA could expand opportunities for program managers to participate in evaluation training. Increased education and training on a variety of topics such as the benefits of evaluation for improving program outcomes, using evaluation to inform decision-making, and generating and using data for evaluations could facilitate a shift toward a learning-positive culture among program staff and managers. This cultural transformation can be supported by Agency and Departmental leadership championing efforts to strengthen evaluation capacity and exemplifying a commitment to building and using evidence in their decision-making.

If implemented, this recommendation would improve the coverage quality, methods, effectiveness, and independence of USDA's evaluation functions.

Statistics

USDA’s statistical capabilities primarily reside in four agencies: NASS, ERS, the Foreign Agricultural Service (FAS), and the Agricultural Marketing Service. Collectively, these four Agencies contribute to the [USDA Economics, Statistics, and Marketing Information System](#), which contains more than 2,100 publications on international agriculture and related topics.

NASS and ERS are two of the thirteen Federal statistical Agencies which collect, analyze, and disseminate statistical information. Under OMB Statistical Policy Directives, these Agencies are responsible for the quality, objectivity, and transparency of statistical information and analysis. NASS is the primary statistical Agency for USDA and conducts hundreds of surveys every year and prepares reports covering virtually every aspect of U.S. agriculture. 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. producers are only a few examples. NASS is committed to providing timely, accurate, and useful statistics in service to U.S. agriculture by:

- Reporting the facts needed by people working in and depending on American agriculture;
- Providing objective and unbiased statistics on a preannounced schedule that is fair and impartial to all market participants;
- Conducting the Census of Agriculture every five years, providing the only source of consistent, comparable, and detailed agricultural data for every county in America;
- Serving the needs of data users and customers through a network of State field offices and cooperative relationships with universities and State Departments of Agriculture; and
- Safeguarding the privacy of farmers, ranchers, and other data providers, with a focus on confidentiality and data security.

ERS conducts statistical analyses that inform and enhance public and private decision-making on economic and policy issues related to agriculture, food, the environment, and rural America. To accomplish this mission, ERS economists and social scientists develop and disseminate a broad range of science-based economic and statistical information to the public. The suite of ERS data and statistical products encompasses estimates, forecasts, economic and statistical indicators, and data compiled from diverse sources where ERS adds value in the form of recompilation and/or subject matter expertise. ERS disseminates its information to key stakeholders and the public through an array of outlets, including the [ERS website](#). ERS’ policies and procedures for publishing research and data, designed to ensure that the Agency provides high quality and objective analysis, include:

- *Data Product Quality*: ERS ensures that quality standards are embedded in data products for purpose, utility, objectivity, transparency, integrity, and accessibility;
- *Error Correction*: In the event that a substantive error is detected in a disseminated information product, ERS will make a correction; and
- *Scientific Integrity*: ERS is committed to upholding the protections and responsibilities outlined in USDA’s [Scientific Integrity Policy](#), which protects scientific findings from suppression or alteration and ensures the quality and accuracy of data and analysis.

FAS has a global network of nearly 100 offices covering approximately 180 countries. These offices are staffed by agricultural attachés and locally hired agricultural experts who are the eyes, ears, and voices of U.S. agriculture around the world. FAS’ network of global contacts and long-standing relationships with international groups contribute to the Agency’s unique market intelligence capacity. FAS analysts provide objective intelligence on foreign market conditions, prepare

production forecasts, assess export opportunities, and track changes in policies affecting U.S. agricultural exports and imports.

The Agricultural Marketing Service produces a variety of statistical reports on topics including organic foods; cotton and tobacco; dairy and milk products; fruits, vegetables, and specialty crops; livestock, meats, poultry, eggs, grain, and hay; organic; and local and regional foods. The Agency also maintains several National and program-level databases.

CONSIDERATIONS FOR BUILDING STATISTICAL CAPACITY

USDA has identified several recommendations to strengthen statistical functions to support evidence-based decision-making:

- **Streamline data collection methods and reduce burden on customers:** The [USDA Data Strategy for FY 2021 – 2023](#) notes that data are often collected manually from the Department’s customers, such as farmers and ranchers, through surveys and other resource-intensive methods. The Department has already undertaken efforts to reduce the burden of the data collection process, such as the development of a tool by NASS that will leverage multiple data sources and integrate existing systems to reduce process steps and timelines for data collection and reporting. USDA may consider identifying additional opportunities to ensure that data can be gathered once and shared accordingly to provide accurate information back to customers in a more expeditious and meaningful manner.

If implemented, this recommendation would improve the methods of USDA’s statistical functions.

- **Increase programming language proficiency among statisticians:** The USDA Office of the Chief Data Officer recently conducted a data skills assessment and associated gap analysis, surveying more than 1,200 employees across the Department to identify gaps in data skills and management. The need for programming language proficiency was identified as the second-most critical skill for Departmental staff. As the Department continues to adopt open-source tools, statisticians will increasingly require skills in statistical languages such as Python and R to meet the demand for statistical products from USDA and its customers. One Mission Area has procured licenses for an asynchronous training software tool that can tailor Python and R trainings to analysts’ current knowledge, experience, and interest in programming languages. Expanding on such initiatives to broaden programming language expertise will enable USDA to conduct more effective and efficient statistical analyses.

If implemented, this recommendation would improve the quality and methods of USDA’s statistical functions.

- **Centralize information technology structures to improve data access:** According to the data skills gap analysis referenced above, the management of IT processes has been historically decentralized at USDA, which has created siloed legacy systems and technologies that impede data access and degrade data quality. Manual workarounds are often used to compensate for limitations in the existing legacy applications, increasing the need for historic program knowledge across staff. Such issues can limit staff’s ability to respond quickly to emerging issues or perform robust statistical analysis, due to the amount of time spent mitigating data access challenges. USDA will consider bolstering ongoing efforts to make data more accessible, available, and usable in the Enterprise Data Analytics Platform and Toolset and other central platforms to eliminate data siloes and facilitate more efficient statistical activities.

If implemented, this recommendation would improve the quality and methods of USDA’s statistical functions.

- **Foster a collaborative learning environment for statistical staff:** The NASS Human Capital Plan notes that employees have expressed a desire for non-classroom development and increased collaboration across NASS to learn from one another. USDA has established two communities of practice, the Advanced Analytics Community of Practice and the Data Visualization Community of Practice, to raise the collective awareness and knowledge levels of staff. Continuing to provide opportunities to share best practices, challenges, and successes related to statistical analysis could be an effective way to improve skill development across NASS and other USDA agencies.

If implemented, this recommendation would improve the coverage, quality, methods, effectiveness, and independence of USDA’s statistical functions.

Other Analysis

The OCE is the focal point for economic and policy-related research and analysis for USDA. OCE aims to inform public and private decision makers by providing unbiased information and data-driven analyses of current and emerging issues impacting agriculture. OCE comprises five sub-offices, four of which serve various roles related to economic and policy analysis, such as economic intelligence and the commodity outlook for U.S. and world agriculture; weather assessments and real-time yield intelligence; risk assessments and cost-benefit analysis of regulations; development and coordination of USDA policy on pest management; and assessments on energy, environmental markets, and climate change.

- The OCE Immediate Office conducts economic and policy analysis and advises the Secretary on the economic impacts of market developments, program changes, legislative proposals, key U.S. trade initiatives, and agricultural labor issues. Immediate Office staff also coordinate sustainable development and Food Loss and Waste activities of the Department. OCE economists within the Office support USDA policy decision-making by analyzing the impact of proposals and coordinating a response among USDA Agencies. Requests for analyses related to proposed changes in USDA programs, policies, and legislation come from the Secretary, other Administration officials, and members of Congress.
- The Office of Risk Assessment and Cost-Benefit Analysis reviews major regulations proposed by USDA to ensure that they are based on sound scientific and economic analysis. The Office also sponsors the [Science, Policy, and Risk Forum](#), a series of four or more annual seminars that feature prominent speakers on risk assessment and the intersection of risk assessment and economic analysis to build capacity in risk analysis. The seminars address emerging issues in risk assessment or economic analysis, new methodological techniques, or other special topics of interest. The Office also occasionally hosts full- or half-day workshops on topics such as cost-benefit analysis.
- The Office of Pest Management Policy develops and coordinates USDA policy on pesticides, biotechnology, integrated pest management, and related topics. Specifically, the Office provides the Environmental Protection Agency and other Federal agencies with the most accurate data available to help assure that pesticide regulatory decisions are based on modern, realistic agricultural practices; reviews and responds to proposed pesticide risk mitigation strategies; conducts surveys and analyzes available data to answer pest management-related research questions; and communicates with stakeholder groups regarding pest management-related regulatory decisions and policies.
- The Office of Energy and Environmental Policy serves as a focal point for the Department's energy, environmental markets, and climate change activities, conducting analyses and assessments to ensure that USDA and the people we serve are positioned to meet future challenges and opportunities. The Office coordinates policy analysis, long-range planning, research priority-setting, and response strategies for addressing energy development and environmental policy.
- The Farm Service Agency within the Farm Production and Conservation Mission Area manages the Farm Loan Program Risk Assessment, the primary tool that USDA uses for ongoing review and oversight of field office farm loan program operations. This assessment examines the Farm Loan Programs using a data-driven, risk-based approach and provides the framework for assessing program management and oversight of State Offices and program delivery by Service Centers. The Federal crop insurance program is also

periodically evaluated and adjustments are made based upon evidence from these evaluations.

CONSIDERATIONS FOR BUILDING ANALYTICAL CAPACITY

USDA has identified several recommendations to strengthen analytical functions to support evidence-based decision-making:

- **Strengthen the use of performance data in decision-making:** The [FY 2020 Management Challenges](#) report included a challenge related to strengthening program performance and performance measures, noting that “agencies do not always have adequate reviews or controls in place to supply the metrics necessary to [assess] programs.” This challenge was echoed in the GAO 2020 *Federal Managers Survey: Results on Government Performance and Management Issues*, in which USDA scored significantly lower than the government-wide average in a number of categories related to performance measurement, including using performance information to identify problems, understanding measure definitions, and communicating performance information. USDA may consider expanding its efforts to integrate performance information into analytical functions to support decision-making.

If implemented, this recommendation would improve the effectiveness of USDA’s other analytical functions.

- **Leverage the Data Science Workbench to improve analytical functions:** USDA is in the process of launching a Data Science Workbench that provides an expandable suite of tools for performing analytics and data science processing (e.g., Python, ESRI, etc.), enabling Agencies to perform complex analytics in a scalable cloud environment. The Workbench allows users from across the Department to harness data from disparate sources to address questions on program performance, evaluation, and research, improving business outcomes and decision-making. The Workbench offers easy, widespread access to standardized tools in an expandable suite, facilitates learning and adoption of analytics practices, and empowers leaders and employees across USDA to make data-driven decisions.

If implemented, this recommendation would improve the quality and methods of USDA’s other analytical functions.

Capacity Assessment Inventory

OBPA developed the Interim Capacity Assessment in the fall of 2020 using a survey and Capacity Assessment template with criteria outlined in OMB guidance and best practices from other Federal agencies. In collaboration with the Mission Areas and Agencies, OBPA conducted a Department-wide assessment that consisted of three components:

- *Evidence Inventory*: Comprehensive collection of all evidence-building activities broken down by type of evidence (policy analysis, program evaluation, foundational fact-finding, performance measurement, and other), alignment to USDA FY 2018 – 2022 strategic goals, and audience;
- *Resources*: Number of full-time employees and funding invested in evidence-building activities; and
- *Evidence Maturity Model*: Mission Areas’ assessment of their level of maturity in evidence-building activities based on an evidence maturity model adapted from the U.S. Department of Health and Human Services.

The findings of the Interim Capacity Assessment indicated that the Department is currently operating at a low level of maturity on most dimensions. This score was consistent with the results of the recent *GAO 2020 Federal Managers Survey: Results on Government Performance and Management Issues*, in which USDA scored lower than the government-wide average for “evidence-building capacity and actions to enhance it.”

In preparing the final iteration of the Capacity Assessment, OBPA determined that this prior methodology for building an evidence inventory was highly resource-intensive and did not necessarily result in meaningful data that could be effectively leveraged by USDA staff. For example, Agencies under the Research, Education, and Economics Mission Area required multiple months to compile hundreds of data points that captured all ongoing studies and analyses. Furthermore, it was unclear how the aggregated data from across the Department could be utilized, if at all, by Mission Areas and Agencies.

In order to make the list of activities (e.g., programs, initiatives, etc.) and operations (e.g., administrative and support tasks) being analyzed and evaluated across USDA as useful and relevant as possible, OBPA focused the scope of the inventory to those activities that align to the FY 2022 – 2026 Strategic Plan. OBPA collaborated with responsible offices and programs to document the current evidence base, including ongoing studies and analyses, supporting each strategic objective. The purpose of this approach was to ensure that the inventory provided practical, applicable information to the Mission Areas and Agencies that improves evidence-building capacity and supports implementation of the USDA Strategic Plan over the next four years. As such, the inventory may be revisited on an annual basis or other regular cadence and updated as needed to reflect the ongoing evidence activities associated with the implementation strategies in support of the Department’s strategic goals and objectives. This inventory is not comprehensive of all ongoing evaluations and analyses but represents the highest-priority or most critical activities as identified by Mission Area and Agency leadership.

Agency	Activity or Operation	Main Research Question	Brief Summary of Methods	Strategic Goal
FNS	Using Robotic Process Automation or Related Technology in SNAP Eligibility Processes	How does the use of Robotic Process Automation improve the efficiency of Supplemental Nutrition Assistance Program application processing?	See the USDA Learning Agenda for more information.	4
FNS	Assessment of Mobile Technologies for Using SNAP Benefits	To what extent do mobile technologies affect participant access to Supplemental Nutrition Assistance Program benefits?	See the USDA Learning Agenda for more information.	4
FNS	Understanding the Relationship Between Poverty, Well-Being, and Food Security	What are the key factors associated with variations in food security rates in persistent-poverty counties?	See the USDA Learning Agenda for more information.	4
FSA	Farm Loan Program Risk Analysis	At the borrower level, what economic factors influence borrower demand for Farm Loan Program loans, delinquencies, and other risks?	See the USDA Learning Agenda for more information.	3
FSA	Major Programs Including the Wildfire and Hurricane Indemnity Program Plus and the Market Facilitation	What are the impacts of new farm bill and other significant regulations on the distribution of program benefits and the overall costs to the Federal government?	Methods will include cost-benefit analysis, as well as additional quantitative analysis using spreadsheets, SAS, mapping, and other tools. Primary data sources are administrative data from FSA and NRCS.	1
FSA	Conservation Reserve Program and Major NRCS Conservation Programs	FSA has developed a portfolio of research questions related to its CRP program and major NRCS conservation programs, including the Environmental Quality Incentives Program, Agricultural Conservation Easement Program, Conservation Stewardship Program, and Regional Conservation Partnership Program.	FSA is conducting analyses of alternative strategies for discretionary National program decision-making associated with the CRP and various NRCS conservation programs. Methods will include quantitative analysis using spreadsheets, SAS, mapping, and other tools using FSA and NRCS administrative data. The CRP monitoring and evaluation work involves \$2 million in annual agreements with USGS, ARS, universities, and others.	1
FSA	Agriculture Risk Coverage and Price Loss Coverage Programs	What are the government cost impacts to changing the Agriculture Risk Coverage and Price Loss Coverage yield cascade? What types of yields should be used in situations where missing county yields are an issue (e.g., plug yields)?	FSA will perform quantitative analysis using spreadsheets, SAS, mapping, and other tools to identify alternative strategies for National program decision-making associated with the Agriculture Risk Coverage and Price Loss Coverage programs.	3
FSA	Major FSA Programs	What are Commodity Credit Corporation 10-year baseline projections for major FSA programs? What are the most appropriate valuations for various types of livestock for	FSA will conduct quantitative analysis using spreadsheets, SAS, mapping, and other tools to inform decision-making and maintain and enhance high-quality program implementation. Primary data sources are administrative data from FSA and NRCS.	3

		<p>implementing the Livestock Indemnity Program in any given year?</p> <p>What are the most appropriate feed coefficients to use in the Dairy Margin Coverage program's calculation?</p>		
FSA	Agricultural Foreign Investment Disclosure Act Work	Can systems be streamlined so that they are easier to use, reduce resource needs, and improve the timeliness of data delivery?	Over the past year, FSA staff have developed an Access database to track foreign investment in U.S. agriculture (acquisition and disposition of land by foreign country of owner, U.S. State, and type of land [crop, forest, pasture, etc.]). Prior to this database being developed, these data were handled by a cumbersome system that involved multiple databases and processes. With one simplified system residing in Access, program staff were able to develop and deliver two reports to Congress (as required by law) this past year, eliminating the lag in data reporting. FSA will continue the refinement of data collection and systems for in-house consolidation of Agricultural Foreign Investment Disclosure Act work.	3
FSA	FSA and RMA Programs Related to the Hemp Market	What are key data and information needed to understand the current State of the hemp market, and what data should USDA be collecting in order to support FSA and RMA programs?	FSA will coordinate with NASS and AMS on data development and statistical activities as laws change or new issues emerge related to the hemp market. Efforts will focus on various FSA and RMA programs, including crop insurance, the Non-insured Crop Disaster Assistance Program, Farm Storage Facility Loan program, and FSA credit programs.	3
NRCS	Climate Change Mitigation Assessment Initiative	How can USDA better focus the Conservation Reserve Program (CRP) toward climate outcomes to further USDA's goal of addressing climate change?	<i>See the USDA Learning Agenda for more information.</i>	1
APHIS	Zoonotic Disease in Animals	How should APHIS prioritize future surveillance activities for zoonotic diseases in animals?	APHIS will develop a science-based policy framework for how to best identify and address zoonotic disease challenges in livestock and other farmed animals. The Agency will pilot projects for surveillance of SARS-CoV-2 in farmed wildlife (e.g., mink) and conduct evaluations of policy alternatives from full quarantine to depopulation.	2
APHIS	Climate Suitability Maps for Priority Pests in Pest Detection and Response Programs	<i>How can APHIS address the impact of climate change on the spread of pests and diseases?</i>	APHIS will evaluate how to address climate change impacts on its programs. This includes the development of technologies and tools to identify and mitigate impacts of invasive species, pests, and diseases. Other methods will include scientific literature and peer review, geospatial analysis, risk analysis, and predictive modeling.	2

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APHIS	Zoonotic Disease Engagement, Investigation, and Response	How can APHIS continue working with cross sector partners on impactful National and international One Health strategies and policies for Zoonotic Disease Engagement, Investigation, and Response?	APHIS will carry out a National Animal Health Laboratory Network pilot project to monitor antimicrobial resistance profiles in animal pathogens. Methods include formative program evaluation, risk analysis, geospatial analysis, strategic foresight, and process and performance reviews	2
APHIS	Plant Pest and Disease Response	What phytosanitary treatment and/or strategy will provide effective protection in place of fumigation with methyl bromide?	APHIS will develop a plan for integrating more environmentally friendly treatments into its plant pest and disease response and import/export risk mitigation measures. Methods will include risk analysis and scientific literature and peer review.	2
AMS	AMS Transportation Services Division and Climate-Related Disruptions to Transportation Networks	What transportation related disruptions exist as a result of climate impacts and to what extent do they occur across various modes (e.g., ocean, rail, trucking, etc.)?	Through one or more cooperative agreements with university partners, existing data and literature on this topic will be analyzed through a variety of qualitative and quantitative methods.	1
AMS	USDA American Rescue Plan Investments	What is the impact of these types of investments on outputs (i.e., trainings delivered, food business plans developed, new food products developed), outcomes (e.g., job creation, new market channels, alignment of stakeholder groups, and viable food businesses), and ultimately supply chain impact (e.g., increased competition, increased access to local and regional food products, increased small food business activity, increased representation, and diversity in the food system)?	AMS will use standardized performance metrics for grant programs as a local/regional investment measure for summary analyses and, if Centers are established, develop a standard reporting rubric to indicate both outputs and outcomes (also for summary analyses). Evaluation strategies, such as social network analysis and/or ripple effects mapping, may be used to gauge the connectedness of grants and/or the regional supply chains over time and related impacts on speed of or impact of outcomes, if any.	2
AMS	AMS Fair Trade Practices Program / Packers & Stockyards Division	What methods or approaches is AMS using to support Fair and competitive markets for livestock, meat, and poultry?	AMS will monitor market prices and conduct investigations of alleged unfair and/or anti-competitive conduct in the livestock, meat, and poultry industries.	3
AMS	Organic Transition Initiative	How does technical assistance for both transitioning farmers and organic professionals correlate with the number of certified organic operations and compliance metrics across the industry?	AMS is assessing its Organic Transit Initiative to facilitate the transition to organic, including conservation practices and climate-smart agriculture. Methods include tracking geographic and audience-based distribution of technical assistance resources against growth in organic metrics and compliance statistics.	3
AMS	National Organics Program	How does the publication of the Organic Livestock and Poultry Standards and Strengthening Organic Enforcement impact organic market growth and visibility into organic imports?	AMS is assessing growth in the organic industry as a result of rulemaking activities, using Organic Integrity Database and data from the Customs and Border Protection Import system.	3

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AMS	Local Purchase Assistance Cooperative Agreement Program	<p>Can State and Tribal government agencies more effectively procure agricultural products that support local and regional food systems, socially disadvantaged producers, and underserved communities?</p> <p>Does the program foster relationships between local/regional suppliers, socially disadvantaged producers, and underserved communities that will continue after the program ends?</p>	AMS will use quarterly performance reports and a final report submitted by recipients that will measure the ongoing success of the Local Purchase Assistance Cooperative Agreement Program and the percentage of those relationships that will continue into the future.	4
AMS	AMS Staff Recruitment and Selection Practices	<p>What barriers exist to expand program access to underserved and underrepresented communities?</p> <p>What are the key factors associated with successful recruitment and retention of a diverse and inclusive workforce?</p>	AMS will assess Agency-wide implementation of programs and services related to participant access, ease of use, and program integrity to increase diversity, equity and inclusion in areas with less than desired participation rates in the AMS workforce and increase program participation and use by underserved populations. Additionally, AMS will engage with cross-Departmental partners, including FPAC New and Beginning Farmer Coordinator, the Office of Partnerships and Public Engagement, and the Office of Tribal Relations.	6
AMS	Program Administration / HR Personnel Grading Policies and Office of Personnel Management Policies	<p>Can AMS Grading and Auditing duties be completed with relevant experience?</p> <p>Does requiring undergraduate degrees impact AMS' ability to fill Grading and Auditing positions?</p> <p>Do AMS Grading and Auditing positions fall in line with positions of similar grade/duty/responsibilities in the labor market?</p>	AMS will conduct a review of position descriptions and scope and complexity of duties, as well comparative and statistical analyses of USDA as compared to similar positions in the labor market.	6
FS	Timber Removal Impact	<p>What are estimates of timber removals and their consequential impact on the forests and economies of various regions?</p> <p>What are the locations, size, and types of mills in a given State?</p>	Forest Service conducts Nationwide statistical surveys of mill owners to determine how much land they own and where.	1
FS	U.S. Forests Status and Trends	Are U.S. forests sustainable in ecological, social, and economic dimensions and in comparison to forests in other nations?	Forest Service will review individual reports compiled by experts for 64 indicators of forest sustainability, based on a variety of datasets, covering topics ranging from biodiversity conservation to forest fires to the many benefits derived from forests.	1

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FS	Alternative Harvesting Scenarios	<p>Where should Forest Service invest in removing woody biomass from the landscape to achieve the greatest return on investment in terms of wildfire risk reduction?</p> <p>What are the trade-offs between harvesting and hazardous fuels mitigation treatments to reduce fire risk?</p>	<p>Forest Service conducts modeling to inform trade-offs in where to invest in land treatments and resource treatments.</p>	1
FS	Private Landowners	<p>How might Forest Service better understand private forest owners to improve collaboration?</p> <p>Are underrepresented owners being served in an equitable way?</p>	<p>Forest Service conducts Nationwide statistical surveys of individual forest owners and is working to expand the survey to corporate owners.</p>	1
FS	Wildfire Suppression Operations	<p>What risk-based factors influence management decisions with respect to wildfire suppression operations?</p>	<p>Methods include in-person field testing and record reviews.</p>	1
FS	Wildfire Suppression Operations	<p>Are fuel management treatments implemented broadly enough, as well as sited correctly?</p>	<p>Methods include remote sensing-based disturbance detection techniques, events data vetted by LANDFIRE personnel, and cleaned by overlapping all the data sources and types to create a single unique event per year and location.</p>	1
FS	Effective Funding Allocation	<p>Is allocating program funding using the current allocation formula the most effective use of program resources?</p> <p>What activities are being implemented based on the recommendations in Forest Stewardship Management Plans?</p>	<p>Methods include compiling geospatial and tabular accomplishments on an annual basis report on 19 different metrics as well as monitoring for implementation based on a statistical sample of Forest Stewardship Management Plans.</p>	1
FS	Changes in Forest Inventory	<p>Is the Forest Service sustaining the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations?</p>	<p>Methods include a Nationwide statistical survey to collect quantitative data (e.g., trees, biomass, or carbon by species; forest type; biomass of dead and dying material, soil carbon estimates, forest floor carbon; invasive species; and forest land area).</p>	1
FS	Assessment of Natural Resources	<p>What are the status and trends in these resources?</p> <p>How is climate change expected to impact these resources?</p> <p>What issues should be tracked for each of these resources?</p>	<p>The Resources Planning Act Assessment includes analyses of forests, rangelands, wildlife and fish, biodiversity, water, outdoor recreation, wilderness, urban forests, and the effects of climate change on these resources. Scientists integrate findings and create projection models in the various resource areas and write peer-reviewed summaries of status and trends. The final assessment summarizes results for each resource area.</p>	1

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		What are and how can rural and urban forestry opportunities mitigate the buildup of atmospheric carbon dioxide and reduce the risk of global climate change?		
FS	Analysis of the Northwest Forest Plan	<p>What is the best available science to inform an assessment of effects of the Northwest Forest Plan on old-growth forest ecosystems, including with respect to wildlife habitat?</p> <p>What is the best available science to inform how old-growth forest ecosystems, including wildlife habitat and other ecosystem services, Tribal values related to timber harvest, and socioeconomic well-being, could be balanced with timber outputs?</p>	Methods include qualitative and quantitative data collection, including interviews; scientific literature review; collaboration between 50 scientists from Forest Service Research & Development, other Federal agencies, universities, and Tribes; and public input from stakeholders.	1
FS	Recreation - National Visitor Use Monitoring	What is the recreational use of National Forest System lands?	For each ORV, the park resources experts determined at least one measurable indicator to track its condition.	5
FS	National Work Environment Survey	How well does the workforce meet the intentions of the Forest Service Code and Commitments?	Methods include a confidential survey open to USDA Forest Service Federal employees.	6
FS	Job Corps	Forest Service has developed a portfolio of research questions related to its Job Corps program.	Methods include in-person reviews at Job Corps centers conducted according to the Policy Requirement Handbook; surveys of students at graduation and six and 12 months post-graduation assessing employment status and salary; Data collection on conservation work performed by students and subsequent conservation job placements; and cost-benefit analyses.	6
FS	Fire Risk Reduction and Resilience Index	What information is needed to measure and index fire risk, reduction, and resilience?	Using the ongoing work in Research & Development, Forest Service will identify data needed to measure risk, risk reduction, and resilience in firesheds.	1
RD	USDA Broadband Programs	What are the impacts of the broadband programs on broadband availability, use, and on economic (property values, household income, and employment) and social (population growth, healthcare access and availability, and telemedicine) outcomes?	See the USDA Learning Agenda for more information.	5
RD	USDA Water and Environment Programs	What is the impact of the Water and Environment Program on water quality, property values (residential, agricultural,	See the USDA Learning Agenda for more information.	5

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		and commercial property), income and earnings, poverty, and population growth across the rural-urban continuum?		
RD	USDA Community Facilities Program	What is the impact of Community Facilities funding on rural hospital closings? What are the impacts of Community Facilities funding on education (i.e., school quality)?	See the USDA Learning Agenda for more information.	5
RD	USDA Single Family Housing Program	What is the impact of Single Family Housing Section 502 Direct Loans on measures of housing affordability and stability in recipient tracts or counties? What is the impact of Single Family Housing Section 502 Direct Loans on recipient home values?	See the USDA Learning Agenda for more information.	5
RD	USDA Rural Development Programs	What is the collective impact of RD program investments on the socioeconomic well-being of rural communities?	See the USDA Learning Agenda for more information.	5
RD	USDA Rural Development Programs	What rural communities are underserved by RD field-based programs? Where are the concentrations of need in rural communities by State?	The Strategic Investment Mapping Tool can be used by RD State Directors or Program Directors to understand the present and historical location of investments in each program or all programs. This tool can also be utilized to target underserved areas to assure RD programs and funds are being equitably distributed. The drivetime and office location layers identify potential gaps in service coverage. Program specific layers will aid the user in better understanding the economic climate and natural resources in their State or region.	5
RD	USDA Rural Development Programs	Which rural communities are most at risk from COVID-19 shocks/disruptions (e.g., sudden outbreaks shutting down local industry)? Where are the rural borrowers who are facing, or may face, significant economic challenges caused by the pandemic?	The COVID-19 Economic Risk Assessment Dashboard was developed to increase Rural Development decision-makers' awareness of the relative sensitivity of the counties our programs serve to the economic impact of COVID-19. This data will help identify areas of heightened economic and portfolio vulnerability during the pandemic months and enable decision-makers to respond more quickly to the needs of rural communities.	5
RD	USDA Rural Development Rural Utilities Program	How do RD infrastructure investments reduce greenhouse gas emissions?	RD will explore how it can measure and capture, post project completion, the impact of dollars invested on reducing greenhouse gas emissions without creating an unnecessary burden on recipients.	5

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OCS	Pollinator Health and Habitat Conservation	How can OCS understand and identify forward-thinking strategies to ensure pollinator resiliency in the face of heightened climate-induced stressors and forage declines?	OCS supports research and programmatic advancements that aim to understand and identify forward-thinking strategies to ensure pollinator resiliency in the face of heightened climate-induced stressors and forage declines. OCS will establish a new pollinator subcommittee within the National Agricultural Research, Extension, Education, and Economics Advisory Board.	1
ERS	Climate and Agricultural Research	What is the intersection between productivity and climate change? How can ERS improve climate change models and needed data?	ERS will conduct and publish multiple analyses and reports on various aspects of the intersection between productivity and climate change. The Agency will also conduct foundational work to enhance the scope and dimensions of data used in models to examine the sub-national impacts of climate change.	1
ERS	Carbon Sequestration and Woody Biomass	How can the U.S. expand carbon sequestration and woody biomass supply on limited new land?	ERS will hold a workshop and draft a report on how the U.S. can expand carbon sequestration and woody biomass supply on limited new land.	1
ERS	Economic Impact of Citrus Greening and Import Competition on U.S. Citrus	What are the various tools, methods, and data for understanding citrus greening and its impact on U.S. agriculture?	ERS will draft reports on tools, methods, and data on various aspects of citrus greening and its impact on U.S. agriculture.	1
ERS	Supply Chain Issues, Distribution of Tariffs, and Shipping Containers	What is the role of financing in the meat and poultry processing industry? What are the short-run effects of retaliatory tariffs on different types of U.S. farms and the distribution of Market Facilitation Program payments? What is the shipping container market's impacts on supply chains?	ERS will produce case studies on the role of financing in the meat and poultry processing industry; draft a report on the short-run effects of retaliatory tariffs on different types of U.S. farms and the distribution of MFP payments; and draft a report on the shipping container market and impacts on supply chains.	2
ERS	Research on Nutrition Security and Food Assistance Programs	ERS will develop research questions to understand the declines in WIC participation, the role of social, economic, and policy contexts in local communities, particularly broadband availability and adoption and participation in WIC.	ERS will draft reports on the declines in WIC participation and the role of social, economic, and policy contexts in local communities (e.g., broadband availability and adoption) and participation in WIC. The Agency will also produce data products and draft a report on Inequitable Food Retail Access and Nutritional Food Insecurity.	4
ARS	Developing New Products and Uses from Food Byproducts and Waste	<i>To be determined.</i>	ARS conducts research to support USDA programs that target local food production, development of new products, protection from animal and plant disease, and keeping our food safe. ARS will implement research to develop new products and uses from food byproducts and waste and transfer technologies to farmers and food processors.	2

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ARS	High-Impact, Strategic Innovations for NRCS and Other USDA Agencies	<i>To be determined.</i>	ARS supports NRCS, FSA, and other USDA Agencies' climate mitigation and adaptation efforts by quickly moving technologies and innovative practices from the testbed into practice. The Agency will initiate new research targeting high-impact, strategic new innovations that are needed by NRCS and other USDA Agencies.	3
ARS	Technologies and Strategies to Detect and Reduce Food-Borne Pathogens and Toxins	Research on new technologies and strategies to detect and reduce food safety pathogens and toxins	ARS conducts research to support USDA programs that target local food production, development of new products, protection from animal and plant disease, and food safety. Food Safety National Program research will focus on new technologies and strategies to detect and reduce food-borne pathogens and toxins.	4
ARS	FSIS and FDA Activities to Reduce <i>Salmonella</i>	<i>To be determined.</i>	ARS will establish an Interagency Agreement with FSIS to address <i>Salmonella</i> illness; conduct priority research to address <i>Salmonella</i> foodborne illness; and participate in FSIS, Food and Drug Administration, and Association of Food and Drug Officials activities as subject matter expert to identify next steps to reduce <i>salmonellosis</i> to reach 2030 Healthy People Goals.	4
NASS	Interactive Portal for Data Providers	What is the demographic profile of farm producers?	The Census of Agriculture is critical in understanding the demographic profile of farm producers. NASS will ease reporting barriers to provide a more complete profile of the farming population; integrate this portal with Farmers.gov; determine and implement authentication process; and conduct end-to-end data collection activities for a pilot survey and demonstrate the integration of existing data collection systems.	3
NIFA	Agriculture and Food Research Initiative	NIFA will identify research questions to create better markets and drive innovation in technologies and products that support economic growth.	The Agriculture and Food Research Initiative will support projects to create more and better market opportunities in the following program area priorities in the Foundational and Applied Science RFA: Economics, Markets and Trade (\$8 million); Food Safety and Defense (\$6 million); Novel Foods and Innovative Manufacturing Technologies (\$8 million); Mitigating Antimicrobial Resistance Across the Food Chain (\$4 million); Diseases of Agricultural Animals (\$13 million); and Agricultural Biosecurity (\$6 million).	3
NIFA	Nutrition Security and Food Safety Programs	NIFA will identify research questions to advance USDA's goal to tackle food and nutrition insecurity.	NIFA is investing in research, education, extension, and innovation to advance USDA's goal to tackle food and nutrition insecurity.	4

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NIFA	Research, Education, Extension, and Innovation Through Climate-Specific Program Areas	How can NIFA advance innovation on new crop and soil management systems, environmental monitoring, or breeding?	NIFA is investing in long-term climate change research through a National system of Agricultural Research Stations, supported with Hatch Act and Multistate Research Programs funding for 1,862 universities and Evans Allen funding for 1,890 universities.	1
OCS	Environmental Justice and Economic Opportunity for Disadvantaged Communities	What metrics can be used to track the benefits of climate and environmental science programs for disadvantaged communities?	OCS-REE will catalog all climate and environmental science programs supporting disadvantaged communities and identify metrics to track the benefits of such programs.	5
OCS	Centralized USDA Research/Researcher Tool	<i>To be determined.</i>	USDA will combine Agency data in a Department-wide tool that is standardized, automated, searchable, dashboard-oriented, user-friendly, and high-quality; supports reporting on foreign influence, public access compliance, impact tracking, and topical queries; fosters synergy and reduces duplication; and links to publicly available research products.	6
FAS	Nontariff Measures and U.S. and Global Agricultural Trade: Developing A Framework for Analysis	<i>To be determined.</i>	An FAS cooperative agreement with Virginia Tech and University of Nebraska will develop a model for assessing the costs, and potential gains, from non-tariff measures restricting U.S. exports. A model that allows FAS to better quantify the impacts of different policy options will improve decision-making.	3
FAS	Global Market Review	<i>To be determined.</i>	FAS will identify where to focus capabilities to meet both Agency and Departmental strategic goals, as well as how FAS can allocate resources and activities around the globe that maximize exports for U.S. agriculture. Fifteen commodity teams will be formed to bring the entire FAS Agency knowledge to bear when discussing high priority markets for U.S. exporters based on macro, trade, and demographic indicators, as well as policy expertise.	3
FAS	McGovern-Dole Program	FSA has identified a portfolio of research questions related to the McGovern-Dole program.	This research is primarily a desk review, funded by the U.S. Agency for International Development and focused on countries in Africa. The researchers are using McGovern-Dole program monitoring data collected by implementing partners, combined with third-party data sources.	3

Acronyms and Abbreviations

AMS	Agricultural Marketing Service
ARS	Agricultural Research Service
APHIS	Animal and Plant Health Inspection Service
CRP	Conservation Reserve Program
EAWG	Evidence Act Working Group
ERS	Economic Research Service
Evidence Act	Foundations for Evidence-Based Policymaking Act of 2018
FAS	Foreign Agriculture Service
FNS	Food and Nutrition Service
FPAC	Farm Production and Conservation
FSA	Farm Service Agency
FSIS	Food Safety and Inspection Service
FY	Fiscal year
GAO	Government Accountability Office
NASS	National Agricultural Statistics Service
NRCS	Natural Resources Conservation Service
OBPA	Office of Budget and Program Analysis
OCE	Office of the Chief Economist
OCS	Office of the Chief Scientist
OMB	Office of Management and Budget
SNAP	Supplemental Nutrition Assistance Program
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children