

National Agricultural Statistics Service

Priorities for the 117th Congress and 2021-2025 Administration

The National Agricultural Statistics Service (NASS) is the USDA federal statistical agency providing accurate, objective, and comprehensive data on US agriculture. Its several hundred annual products influence the commodities markets and are routinely used by producers, policymakers, the food and agriculture industry, and consumers.

NASS needs support to carry out its strategic plan, which include

- Improving the accuracy and reliability of their data while also reducing respondent burden;
- Developing new and expanded products;
- Transitioning from traditional survey data collection to in-depth integration of survey data with alternative sources and methods.
- Modernizing its IT infrastructure

USDA should also affirm and strengthen protections to ensure objective and reliable data.

Opportunity: Provide statistics that cover the diversity of the critical agricultural sector, focusing on objective, timely and local data while minimizing reporting burden on the industry.

In the last decade, we have witnessed dramatically increased demand for data and remarkable technological advances, both of which are improving the efficiency of the US food and agriculture enterprise. At the same time, we have seen the importance of agricultural commodities in U.S. trade negotiations, and the impact of the agricultural labor force on the U.S. economy. Accurate, timely and objective data is critical to maintain the effective and efficient functioning of this sector and to provide safe and affordable food for our dinner tables. The National Agricultural Statistics Service (NASS) is integral to these objectives with its myriad timely and reliable products spanning the rich diversity of American agriculture.

Policymakers in the public and private sector, as well as the American people more generally are demanding more timely economic data and specific to their community. At the same time, they are confronted with an ever-increasing amount of data—e.g., from precision agriculture and satellite images—from an expanding number of public and private sources. NASS is optimally situated to help with both. NASS has been the trusted source for reliable and objective data on American agriculture for

nearly a century. With sufficient support, NASS could further elevate its products to better meet the demands of its data users while also reducing reporting burden.

One example of the enormous opportunities available for NASS is its proposed pilot project to obtain early-season crop and acre-inundation estimates. Accurate early-season data greatly enhance the smooth functioning of the agricultural market and trade systems. They also can give early quantification of disruption caused by more frequent natural disasters such as flooding, drought and fires. The current methods rely on surveys sent to farmers during one of the busiest times of their year and may also miss crops planted late because of wet fields. NASS has been using satellite imagery for years at resolution of 30 meters. If the image resolution were increased to three to ten meters (realistic with technological advances), NASS could achieve more accurate and timely early-season-crop and soil-plant-ability estimates with less reliance on survey responses from farmers. This method would also allow weekly if not daily updates. The higher the resolution, the sooner crop identification and assessment is possible. The crop information could include both the type of crop and an assessment of growth to date. Funding of approximately \$10 million over a few years will provide NASS the access to higher-resolution imagery and the research necessary to ensure accurate, reliable, and timely data.

Another opportunity is an updated picture of the structure of U.S. agriculture from the upcoming 2022 Census of Agriculture. This periodic effort provides a complete count of U.S. farms and ranches and the people who operate them. It includes even small plots of land - whether rural or urban - growing fruit, vegetables or some food animals count if \$1,000 or more of such products were raised and sold. There has been a movement toward both larger farming enterprises and an even greater number of small farms serving local needs. The Census provides information about all of these changes.

International Assistance: NASS is recognized as the world leader in the field of agricultural statistics, helping to establish and improve agricultural statistics systems in countries around the world since the end of World War II. The need for this help is high as the world-wide pandemic and increasing incidents of natural disasters threaten regional food production. The next few years provide an important opportunity to refocus on the technical assistance and training (on a reimbursable basis) in all aspects of statistical surveys and data systems. Improved agricultural data systems can provide more and better information to address these issues. The benefits of such assistance extend beyond serving the interests of the various countries. By helping other countries improve their agricultural statistics systems, USDA's ability to assess world food and fiber production is also improved.

Challenges

While NASS has the vision, expertise, and capability to take advantage of burgeoning data availability and other technological and methodological advances, it lacks the resources to fully do so. To maintain the data quality using alternative data, NASS must undertake research to ensure that products incorporating the more diverse data sources meet the standards of the products derived from the more traditional survey methods.

NASS's IT infrastructure also needs modernizing. The agency has many systems and platforms that are incompatible, making its data collection, storage, and analysis inefficient. Further, it could revamp its

data collection instruments to make it easier for respondents to provide data. One area in which IT resources are particularly beneficial and cost-effective is developing an automated edit and imputation system for the core components of the agricultural surveys and censuses. Such a system would reduce and almost eliminate the need for analyst review and editing – a major time-consuming and cost component in the process of producing agricultural and economic statistics.

Priorities

- Support NASS research efforts to be able to integrate data from multiple sources without compromise product quality.
- To ensure reliability and timeliness of NASS products, improve and modernize NASS IT infrastructure to allow NASS to phase out its legacy system and take advantage of such advances as cloud computing.
- Support one-stop service portal for farmer reporting by building a dashboard for farmers to respond to surveys, access reports, a see area-specific data from one website.
- Support NASS' implementation of its strategic plan with its strategic goals to “foster a diverse workforce to meet current and emerging needs”; “proactively strengthen relationships with data users, providers, and partners”; and “operate as a strategic, integrated, efficient organization built on sound management practices and methodological principals.”
- Support NASS pilot project to use high-resolution satellite imagery to provide more accurate and timely early-season-crop and soil-moisture estimates without burdening farmers.
- Support the 2022 Census of Agriculture.
- Support the reinstatement of the Agricultural Labor Survey which was suspended in September 2020.
- Support an emphasis on international assistance (on a reimbursable basis) to help reestablish the technical help that NASS can provide to strengthen agricultural information systems in developing countries, which in turn can help stabilize world food supplies and world trade.
- Ensure the statistical independence and integrity of NASS products by affirming and strengthening NASS autonomy protection to ensure NASS statistics remain objective, reliable and timely.

Endorsing Organizations

American Statistical Association

Council of Professional Associations on Federal Statistics (COPAFS)

Resources

- [NASS 2020-2025 Strategic Plan](#)
- [Principles and Practices for a Federal Statistical Agency: Sixth Edition](#). National Academies of Sciences, Engineering, and Medicine. 2017.
- [Improving Crop Estimates by Integrating Multiple Data Sources](#), National Academies of Sciences, Engineering, and Medicine. 2017.
- [Using Models to Estimate Hog and Pig Inventories: Proceedings of a Workshop](#), National Academies of Sciences, Engineering, and Medicine. 2019.
- [Improving Data Collection and Measurement of Complex Farms](#), National Academies of Sciences, Engineering, and Medicine. 2019.

- [Data and Research to Improve the U.S. Food Availability System and Estimates of Food Loss](#), National Academies of Sciences, Engineering, and Medicine. 2015.

For other federal statistical agency priorities, please visit <https://www.amstat.org/ASA/Science-Policy-and-Advocacy/home.aspx#resources> or <https://copafs.org/activities-initiatives/>. For any questions on these documents, or to have your organization added as an endorsing or supporting organization, please contact Steve Pierson (pierson@amstat.org) or Paul Schroeder (paul.schroeder@copafs.org.)