

Frequently Asked Questions

About the 2022 Census of Agriculture

1. What is the Puerto Rico Census of Agriculture?

The Census of Agriculture is a complete count of Puerto Rico farms and ranches and the people who operate them. Even small plots of land – whether rural or urban – count if \$500 or more of agricultural products were produced and sold, or normally would have been sold, during the census year.

If your farm meets this benchmark and you have never received NASS surveys or censuses, you can sign up to be counted <u>online</u>.

The Census of Agriculture, conducted once every five years, looks at land use and ownership, producer characteristics, production practices, income, and expenditures.

2. Why is the Census of Agriculture important?

The Census of Agriculture provides the only source of uniform, comprehensive, and impartial agriculture data for every state and territory in the nation. Through the ag census, producers can show the nation the value and importance of U.S. and Puerto Rico agriculture and influence decisions that will shape the future of their industries.

3. What's new this census?

New data topics in the ag census reflect trends and changes in Puerto Rico agriculture and ensure that the census continues to provide relevant agricultural data. Several notable changes for 2022 include new questions about the use of precision agriculture, hemp production, hair sheep and updates to internet access questions.

4. Who uses Census of Agriculture data?

Census of Agriculture data are used by those who serve farmers and rural communities — federal, state and local governments, agribusinesses, researchers, trade associations, and many others.

 Ag producers can use Census of Agriculture data to make informed decisions about their own operations, from production practices to marketing.

- Companies and cooperatives use the data to determine where to locate facilities that will serve agricultural producers.
- Community planners use the information to target needed services to rural residents.
- Legislators use census data when shaping farm policies and programs.
- Students, educators, and researchers use the data as part of their ongoing studies, education, and research initiatives

• 5. How does NASS conduct the Census of Agriculture?

NASS will mail the 2022 Census of Agriculture questionnaires to ag producers in December to collect data for the 2022 calendar year. Producers can respond online or return their completed questionnaires by mail. Responses are due by February 6, 2023. NASS will send reminder notices to those who do not respond and may attempt to contact those producers for a personal interview. Response to the Census of Agriculture is required by <u>federal law</u>.

• 6. Does NASS keep the information provided by individual respondents private?

NASS is bound by law (Title 7, U.S. Code, and the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35) – and pledges to every data provider – to use the information for statistical purposes only, and to only publish aggregated data so that no individual or farm can be identified.

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Census Results

• 7. When will NASS release 2022 Census of Agriculture results?

NASS will release 2022 Census of Agriculture results in 2024. Detailed data will be available for the 2022 and earlier censuses in electronic formats for the United States as well as all states and counties and Puerto Rico. A full schedule will be available summer 2022 at www.nass.usda.gov/AgCensus.

• 8. Where can I find Census of Agriculture data?

You can find Census of Agriculture data online at www.nass.usda.gov/AgCensus. The information is also available through our searchable online database, Quick Stats, downloadable PDF Data Highlights, maps, and a variety of topic-specific products. Reports can be viewed at the local NASS field office in your area and at many depository libraries, universities, and other state government offices.

9. Will NASS publish all data?

No, not all data will be available. If publishing a particular data item would identify an operation (for example, if there is only one producer of a particular commodity in a county), NASS does not publish the information. In such cases, the data are suppressed and shown as "(D)," meaning "withheld to avoid disclosing data for individual operations." A dash represents zero, no data for that particular data item.

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Methodology

10. What is Methodology?

In statistics, methodology refers to the processes by which data are collected, analyzed, and summarized.

11. What methodology will NASS use to conduct the 2022 Census of Agriculture?

The 2022 ag census methodology is the same as that used in 2017. However, from one census to the next, NASS considers what enhancements to the methodology can improve the process. NASS uses capture-recapture methodology, an accepted statistical methodology, to account for undercoverage (farms not reached in the original mailing), nonresponse (people not returning their census questionnaires), and misclassification (whether an operation is correctly classified as a farm or not). The methodology is documented thoroughly in <u>Appendix A</u> of the ag census.

12. How does NASS account for those who did not respond to the 2022 Census?

The importance of response to any statistical census and survey cannot be understated. NASS collects data directly from the ag producers themselves - every response is important and makes data stronger. To account for farmers who do not participate in the ag census, NASS uses capture-recapture methodology to correct for nonresponse. As part of this process, the census responses are compared to data collected in the area frame survey. Statistical models are developed based on matching information from this survey with information from the census. These models take into account the size of a farm (in terms of both land area and sales of agricultural products), the age of an operator, the type of farm, and a number of other features. Using these models, NASS can adjust for nonresponse, to develop accurate and reliable estimates for U.S. agriculture.

13. Can I be sure the data are accurate?

The source of ag census information is farmers, ranchers, and other producers who are closest to the information. However, errors can occur on the response forms. NASS reviews

all submitted responses and follows-up on entries that look inaccurate. NASS may contact a producer to verify information or compare information to existing known data, all to ensure the most accurate information.

NASS then uses statistical methodology to correct for undercoverage (farms not reached in the original mailing), nonresponse (people not returning their census questionnaires), and misclassification (whether an operation is correctly classified as a farm or not). The uncertainty these adjustments introduce causes the exact numbers to be unknown. However, the uncertainty can be quantified. This measure of relative reliability is known as the coefficient of variation. In the ag census results, NASS will publish a measure of uncertainty with all estimates at the national, state, and county level, increasing transparency and data usability.

14. What is coefficient of variation and what does it mean for this Census of Agriculture?

The coefficient of variation (CV) provides a measure of uncertainty of an estimate. The lower the CV, the higher the reliability of the estimate. For the ag census, it means that those using the data can assess the comparable reliability of the census estimates. By publishing the CV, NASS is increasing transparency and data usability down to the county level.

15. Can I compare 2022 Census data with previous years' results?

Yes, the numbers are comparable. The results of each Census of Agriculture represent U.S. agriculture at a point in time. Comparing the results from two or more censuses can reveal trends as well as changes and new developments in the industry. Throughout each ag census cycle, NASS evaluates its processes, applies new technologies, and makes improvements in its methodology so that all agricultural operations in the nation can be accounted for.

After the 2012 Census of Agriculture, NASS convened an expert panel of data users and stakeholders to ensure that the Census of Agriculture measures the full contributions of all persons involved in U.S. farm operations and agricultural production. For comparisons, the 2017 Census of Agriculture publication included a bridge table between the 2012 and 2017 data items. The 2022 demographic tables will only show data for all producers. There will be no data for principal or primary producers for 2022. Since 2017 and 2022 Census of Agriculture data are comparable, no bridging tables will be published in 2022.

• 16. How do you explain numbers that seem out of line or inaccurate?

NASS has extensive quality control measures in place to assure the most accurate and useful data available. Statistically valid procedures are in place to collect, analyze, summarize, and report the results of NASS surveys as well as the Census of Agriculture.

The reported information is checked against other known administrative data and double checked if it looks incorrect. Staff working in each state who have local knowledge analyze and review the data as well. Since these data are statistical estimates, NASS publishes the coefficient of variation as a measure of the uncertainty associated with each estimate. With that measure, people can better understand and use the data.

• 17. What does a "significant change" mean?

The traditional five percent level of significance is used to determine whether an observed change from 2017 to 2022 is statistically significant. Each comparison between a 2017 and a 2022 ag census estimate uses statistical methods that account for the uncertainty of each estimate. However, there is a difference between statistical significance and practical significance. Some changes that are not statistically significant may be of high practical importance; other changes that are statistically significant may be inconsequential in practice. The data user must assess the practical significance of a change.

18. Where can I learn more about the methodology?

Appendix A of the 2022 Census of Agriculture explains the methodology NASS uses to collect, analyze, summarize, and report the information in depth. You can learn more about the statistical method used to correct for undercoverage (farms not reached in the original mailing), nonresponse (people not returning their census questionnaires), and misclassification (whether an operation is correctly classified as a farm or not) by reading Capture-Recapture in the 2012 Census of Agriculture: A Beginner's Guide.

• 19. Who can I contact if I think there might be a problem with the data?

If you have a concern about state- or county-level data, please contact your USDA NASS regional office (www.nass.usda.gov/Statistics_by_State/RFO/index.php). If your concern is about national-level data, please contact nass@usda.gov or call 800-727-9540. You will be directed to the appropriate subject matter expert. Special tabulations are considered when requested data are not published elsewhere. Finally, if you want to make an official request to correct data, please follow the instructions posted online at www.nass.usda.gov/About_NASS/Information_Quality_Guidelines/

20. Where can I see if corrections have been made to the ag census publications?

NASS posts corrections to its reports online at <u>Statistical Release Corrections</u>. The page provides the report name, a description of the correction, and the notification date.