Introduction

HISTORY

The 2017 Census of Agriculture is the 29th Federal census of agriculture and the fifth conducted by the U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). The U.S. Department of Commerce, Bureau of the Census conducted the census of agriculture for 156 years (1840-1996). The 1997 Appropriations Act contained a provision that transferred the responsibility for the census of agriculture to NASS.

The history of collecting data on U.S. agriculture dates back as far as President George Washington, who kept meticulous statistical records describing his own and other farms. In 1791, President Washington wrote to farmers requesting information on land values, crop acreages, crop yields, livestock prices, and taxes. Washington compiled the results on an area extending roughly 250 miles from north to south and 100 miles from east to west which today lies in Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia, where most of the young country's population lived. In effect, Washington's inquiry was an attempt to fulfill the need for sound agricultural data for a nation that was heavily reliant on the success of agriculture. Such informal inquiries worked while the Nation was young, but were insufficient as the country expanded.

In 1839, Congress appropriated \$1,000 for "carrying out agricultural investigations, and procuring agricultural statistics." The first agriculture census was taken in 1840 as part of the sixth decennial census of population. As the country expanded and agriculture evolved, the decade between censuses became too long an interval to capture the changes in agricultural production. After the 1920 census, the census interval was changed to every five years resulting in a separate, mid-decade census of agriculture that was conducted in 1925, 1935, and 1945. The agriculture census continued as part of the decennial census through 1950. From 1954 to 1974, the census was taken for the years ending in 4 and 9. In 1976, Congress authorized the census of agriculture for 1978 and 1982 to adjust the data reference year so it coincided with other economic censuses. This adjustment in timing established the census of agriculture on a 5-year cycle collecting data for years ending in 2 and 7.

USES OF CENSUS DATA

The census of agriculture provides a detailed picture of U.S. farms and ranches every five years. It is the leading source of uniform, comprehensive agricultural data for every State and county or county equivalent. Census of agriculture data are routinely used by agriculture organizations, businesses, State departments of agriculture, elected representatives and legislative bodies at all levels of government, public and private sector analysts, the news media, and colleges and universities. Census of agriculture data are frequently used to:

- Show the importance and value of agriculture at the county, State, and national levels;
- Provide agricultural news media and agricultural associations benchmark statistics for stories and articles on U.S. agriculture and the foods we produce;
- Compare the income and costs of production;
- Provide important data about the demographics and financial well-being of producers;
- Evaluate historical agricultural trends to formulate farm and rural policies and develop programs that help agricultural producers;
- Allocate local and national funds for farm programs, e.g. extension service projects, agricultural research, soil conservation programs, and land-grant colleges and universities;
- Identify the assets needed to support agricultural production such as land, buildings, machinery, and other equipment;
- Create an extensive database of information on uncommon crops and livestock and the value of those commodities for assessing the need to develop policies and programs to support those commodities;
- Provide geographic data on production so agribusinesses will locate near major production areas for efficiencies for both producers and agribusinesses;

- Measure the usage of modern technologies such as conservation practices, organic production, renewable energy systems, internet access, and specialized marketing strategies;
- Develop new and improved methods to increase agricultural production and profitability;
- Plan for operations during drought and emergency outbreaks of diseases or infestations of pests;
- Analyze and report the current state of food, fuel, and fiber production in the United States; and
- Make energy projections and forecast needs for agricultural producers and their communities.

LEGAL AUTHORITY

The 2017 Census of Agriculture is required by law under the "Census of Agriculture Act of 1997," Public Law 105-113 (Title 7, United States Code, Section 2204g). The law directs the Secretary of Agriculture to conduct a census of agriculture every fifth year. The census of agriculture includes each State, Puerto Rico, Guam, the U.S. Virgin Islands, the Commonwealth of Northern Mariana Islands, and American Samoa.

FARM DEFINITION

The census definition of a farm is any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. The definition has changed nine times since it was established in 1850. The current definition was first used for the 1974 Census of Agriculture and was used in each subsequent census of agriculture. This definition is consistent with the definition used for current USDA surveys. The farm definition used for each U.S. territory varies. The report for each territory includes a discussion of its farm definition.

DATA COMPARABILITY

Most commodity data are comparable between the 2017 and 2012 censuses. Changes were made to the 2017 census that affect the comparability for some data items. Demographic data, for the 2017 Census of Agriculture, are not fully comparable to 2012 and earlier census data due to terminology and definition changes. Dollar figures are expressed in current dollars and have not been adjusted for inflation or deflation. In general, data for censuses since 1974 are not fully comparable with data for 1969 and earlier censuses due to changes in the farm definition. See Appendix B, General Explanation and Census of Agriculture Report Form, Data Changes for a detailed discussion of these changes.

REFERENCE PERIOD

Reference periods for the 2017 Census of Agriculture were similar to those used in the 2012 Census of Agriculture. Reference periods used were:

- Crop production is measured for the calendar year, except for a few crops such as avocados, citrus, and olives for which the production year overlaps the calendar year. See Appendix B, General Explanation and Census of Agriculture Report Form for details.
- Livestock, poultry, and machinery and equipment inventories, and market value of land and buildings are measured as of December 31 of the census year.
- Crop and livestock sales, other farm-related income, direct sales income, income from federal farm programs, Commodity Credit Corporation loans, Conservation Reserve, Farmable Wetlands, Conservation Reserve Enhancement, and Wetlands Reserve Program participation, farm expenses, chemical and fertilizer use, irrigated acreage, and hired farm labor data are measured for the calendar year.

TABLES AND APPENDICES

Chapter 1. Table 1 shows State-level historical data through the 1987 census and tables 2 through 52 show detailed State-level data usually accompanied by historical data from the 2012 census. Tables 53 through 70 show detailed producer and farm operation data for the 2017 census only. Tables 71 through 77 show detailed State-level data cross-tabulated by several categories for the 2017 census only.

Chapter 2. County-level data are presented in 57 tables in 2 different table formats - county and county summary. Most tables include 2012 historical data. County tables include general data for all counties within the State. The county names are listed in alphabetical order in the column headings. County summary tables provide comprehensive data for all counties reporting a data item.

Appendix A. Provides information about data collection and data processing activities and discusses the statistical methodology used in conducting and evaluating the census. Table A summarizes coverage, nonresponse, and misclassification adjustment for selected items for the State. Table B provides reliability estimates of State totals for selected items. Table C summarizes coverage, nonresponse, and misclassification adjustment for selected items at the county level. Table D provides total number of American Indian or Alaska Native farm producers both on and off reservations by county.

Appendix B. Includes definitions of specific terms and phrases used in this publication, including items in the publication tables that carry the note "see text." It also provides facsimiles of the report form and instruction sheet used to collect data.

RESPONDENT CONFIDENTIALITY

In keeping with the provisions of Title 7 of the United States Code, no data are published that would disclose information about the operations of an individual farm or ranch. All tabulated data are subjected to an extensive disclosure review prior to publication. Any tabulated item that identifies data reported by a respondent or allows a respondent's data to be accurately estimated or derived, was suppressed and coded with a 'D'. However, the number of farms reporting an item is not considered confidential information and is provided even though other information is withheld.

SPECIAL EFFORTS DIRECTED AT MINORITIES

NASS implemented several activities to improve coverage of minority farm producers. These activities included, but were not limited to:

- Obtaining mail lists from organizations likely to contain names and addresses of minority farm producers;
- Conducting pre-census promotion activities that targeted women, American Indian and Alaska Native, Asian, Black and African American, and Hispanic, Latino, or Spanish origin farm producers.

SPECIAL STUDIES AND CUSTOM TABULATIONS

Special studies such as the 2018 Irrigation and Water Management Survey and the 2018 Census of Aquaculture are part of the census program and provide supplemental information to the 2017 Census of Agriculture in the respective subject area. Results are published on the internet.

Custom-designed tabulations may be developed when data are not published elsewhere. These tabulations are

developed to individual user specifications on a costreimbursable basis and shared with the public. Quick Stats, NASS's online database that allows data users to build customized queries, should be investigated before requesting a custom tabulation.

All special studies and custom tabulations are subject to a thorough disclosure review prior to release to prevent the disclosure of any individual respondent data. Requests for custom tabulations can be submitted via the internet from the NASS home page, by mail, or by e-mail to:

> Data Lab National Agricultural Statistics Service Room 5305A, Stop 2054 1400 Independence Avenue, S.W. Washington, D.C. 20250 – 2054 or Datalab@nass.usda.gov

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual farms.
- (H) Coefficient of variation is greater than or equal to 99.95 percent or the standard error is greater than or equal to 99.95 percent of mean.
- (IC) Independent city.
- (L) Coefficient of variation is less than 0.05 percent or the standard error is less than 0.05 percent of the mean.
- (NA) Not available.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- cwt Hundredweight.
- sq ft Square feet.