

1982 Census of Agriculture

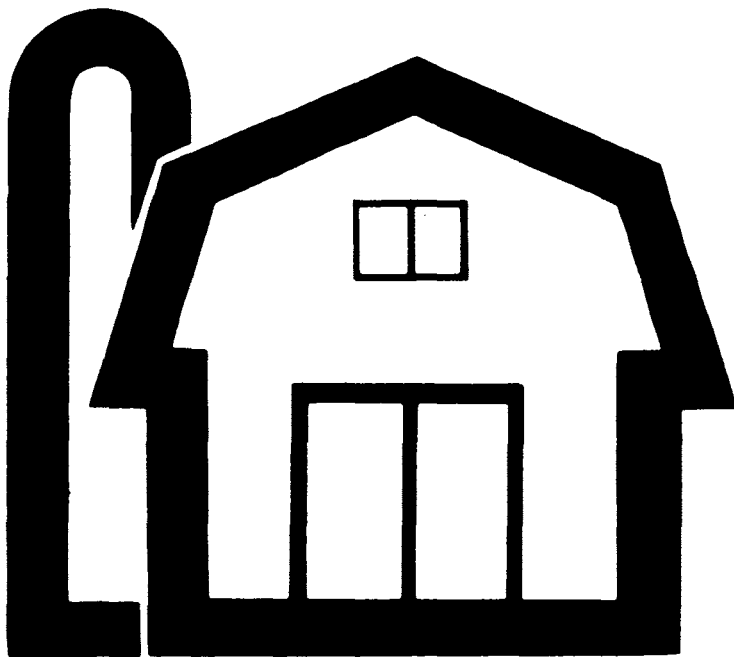
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Volume 2

SUBJECT SERIES

Part 4

History



The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.

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CHAPTER 1.

Introduction

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BACKGROUND INFORMATION

The census of agriculture provides a periodic statistical picture of a vital sector of the Nation's economy. While much of the same *kind* of information collected in the census is gathered by other Federal or State agencies in periodic or occasional surveys, the agriculture census is the only source of data comparable, county by county, and State by State, on a national basis. Further, the census publications are the only statistical files that provide such data while classifying farms by size, type, tenure, type of organization, and market value of farm products sold.

The first census of agriculture was concluded in 1840, as part of a decennial census program that collected data on manufacturing, agriculture, and mining, as well as on population. The agriculture census remained part of the decennial program until 1925, when a mid-decade enumeration covering various economic areas—including agriculture—was added. Thereafter, the precise year of each agriculture census was subject to some adjustment, although it usually followed a 5-year, or quinquennial, cycle. Through 1940 the agriculture censuses were taken concurrently with the other economic enumerations, but subsequent changes in the time schedule for the censuses caused a divergence of the reference years. In the 1950's, the agriculture census reference years were altered from years ending in "0" and "5" to those ending in "4" and "9," and by the early 1970's the economic censuses were being conducted for years ending in "2" and "7." In 1972, the Bureau of the Census and the Department of Commerce recommended that the economic and agriculture censuses cover the same reference year, and thus provide a greater degree of data comparability among the various censuses. In 1976, Congress enacted legislation (Public Law 94-229) incorporating this recommendation, and the intercensal periods following the 1974 and 1978 agriculture censuses were shortened to 4 years each. The 1982 Census of Agriculture, the 22d such enumeration, was carried out simultaneously with the other economic censuses. (For more information on reference and enumeration dates, see App. B, "Historical Background".)

1982 CENSUS OF AGRICULTURE

An Overview of the Census Operation

Data collection—The 1982 Census of Agriculture can be divided into three principal phases—data collection, processing, and publication. The 1969 and later agriculture censuses were carried out primarily by mail. For the 1982 census, report forms were mailed to approximately 3.6 million addresses in the last week of December 1982, with the request that they be completed and mailed back to the Bureau. There were seven followup mailings to nonrespondent addresses between January 1 and July 1, 1983. Large nonresponse cases (those believed to have \$200,000 or more in sales during the census year) were selected for telephone followup.

The 1982 census enumerated 2,240,976 farms with an average of 440 acres each. The market value of all agricultural products sold was over \$131 billion for 1982.

Data processing and publication—The data from the report forms were entered on computer tape at the Bureau's Jeffersonville, IN, facility. After transmission to the main computer facility at Bureau headquarters in Suitland, MD, the data were edited, processed, and tabulated on a flow basis; tabulations for States and counties were completed and published over a period of several months. The first preliminary State and county reports were released in August 1983, and all were published by May 1984. The final reports were issued over a period of several months beginning in February 1984. Computer data tapes for the the data file for each State were prepared and released as the comparable printed reports were published, and microfiche copies of all published reports were available within 6 months after the release of the printed volumes.

Legal Authority

The census of agriculture is carried out by the Bureau of the Census, an agency of the U.S. Department of Commerce. The Bureau's operations are governed by the provisions of Title 13, United States Code, which directs the censuses be taken and at what intervals, establishes certain administrative procedures, and describes the duties of various officials.

Chapter 1 (Administration) of Title 13 covers basic administrative practices within the Bureau and establishes procedures for (1) the collection and treatment of census and survey data, (2) the authorization of appropriations, and (3) the qualifications and duties of census supervisors and other employees. Section 5 makes the Secretary of Commerce responsible for preparing the census report forms and for determining the number and kind of inquiries included. Section 9 requires that the data collected in the census remain confidential and forbids the "use of the information furnished . . . for any purpose other than the statistical purposes for which it was supplied . . ." This section also restricts access to census report forms to sworn Department of Commerce or Bureau of the Census employees, and

forbids publication of any information that would identify any individual person or establishment.

Chapter 5 (Censuses) establishes the type, frequency, and geographic scope of the censuses to be carried out by the Bureau; and section 195 authorizes the use of sampling to carry out the provisions of Title 13 (excluding its use in determining population for purposes of apportionment of congressional representation).

Sections 221 and 224 of chapter 7 (Offenses and Penalties) require response to the censuses and establish penalties (a fine of \$100 for individuals and \$500 for organizations) for non-compliance. Section 214 prescribes the penalties (a fine of not more than \$5,000, or imprisonment of up to 5 years, or both) for any employee or staff member who publishes or otherwise communicates to any person other than sworn Department or Bureau employees any data covered by the confidentiality provisions of the census law.

Scope and Reference Dates

General information—The 1982 Census of Agriculture was a basic census program; that is, it restricted data collection activities to the enumeration of all farms and ranches. Budget constraints did not permit inclusion of the extensive follow-on survey program that had been done after the 1974 and 1978 censuses, nor the area-segment sample survey that had been part of the 1978 census. Further, language in the Bureau's appropriation bills since 1980 forbade the expenditure of funds for a census of agricultural services or a survey of farm finance. (A separate census of agricultural services was introduced in the 1969 Census of Agriculture and was carried out again as part of the 1974 and 1978 programs.)

Scope of the 1982 census—The traditional basis of the census of agriculture is the operating unit—generally the individual farm. The 1982 census covered all farms in the 50 States, Puerto Rico, Guam, and the Virgin Islands of the United States. (See "Definition of a Farm" below for information on what constituted a farm for census purposes.) Data were collected from all farms on:

- Acreage
- Crops
- Fruits and nuts
- Vegetables
- Nursery and greenhouse products
- Value of sales
- Land use
- Irrigation and source of irrigation water
- Livestock and poultry
- Type of organization
- Characteristics and occupation of operator
- Year operator began operating farm

A sample of approximately 1 in 5 of all respondents was asked to provide data on:

- Uses of commercial fertilizers or lime
- Use of insecticides, herbicides, nematicides, other pesticides, or other chemicals
- Machinery and equipment
- Interest expense
- Expenditures for energy
- Selected production expenses
- Estimated current market value of land and buildings

Reference periods and dates—Reference dates for the 1982 Census of Agriculture varied depending on the area involved.

Area	Inventory data	Production data
United States	Dec. 31, 1982	Calendar year 1982
Puerto Rico	July 1, 1983	12 months ending June 30, 1983
Guam	Date of enumeration	Calendar year 1982
Virgin Islands of the United States	Date of enumeration	Calendar year 1982

LEGISLATION AFFECTING THE CENSUS

The 1982 Census of Agriculture was the first agricultural enumeration since 1950 carried out concurrently with the economic censuses. As noted above, Public Law 94-229, in 1976, shortened the interval between the two censuses following the 1974 enumeration to 4 years to bring the agriculture and economic censuses into conjunction without interrupting the data series of the agriculture censuses.

The scope of the census of agriculture also was changed in 1976, with Public Law 94-521—sometimes known as the "mid-decade census law" because its main provisions required a population "census" during the period *between* the decennial censuses of population and housing. This law had a direct influence on the census of agriculture through modifications it made to the language of several sections of Title 13. Section 191, paragraph (a) of the census statute was altered specifically to include the Commonwealth of the Northern Mariana Islands (as distinct from the Trust Territory of the Pacific Islands) in all censuses of agriculture.¹

DEFINITION OF A FARM

The census first established a definition of a farm for the 1850 census, when any place that had \$100 or more in value of sales of agricultural products qualified. The definition has been changed over the years, with acreage requirements added or deleted, or with various changes in the value of sales needed to qualify (see App. B, "Historical Background," for details), but two general criteria always have applied: (1) the land involved must be used for or associated with agricultural operations, and (2) it must be operated under the day-to-day control of one individual or management (partnership, corporation).

To be a farm (for census purposes the terms "farm" and "ranch" are interchangeable), the agricultural operation must be involved in the production of livestock, poultry, or animal specialties and their products; and/or the production of crops, including fruits, and greenhouse or nursery products. The census and farm counts are made on the basis of the individual operating unit, but the land comprising the "farm" need not make up a single contiguous tract; i.e., several separate pieces of land may be a single farm provided they are operated as a single unit. In cases where the land of a single farm was located in two or more counties, the data for the farm were tabulated with the principal county's data.

¹The Trust Territory and American Samoa have been included only in agriculture enumerations carried out during, or close to, the decennial censuses of population and housing. The Northern Marianas were enumerated for agriculture census purposes as part of the 1980 Census of Population and Housing. (The agriculture data were collected in April 1980 and were published as part of the 1978 Census of Agriculture program.) The Northern Marianas remained part of the Trust Territory through the 1982 Census of Agriculture and hence were not part of that census program.

For the 1982 Census of Agriculture, a farm was defined as any place that met the above criteria with respect to agricultural operations and individual control, and that had, or normally would have had, \$1,000 or more in total value of sales of agricultural products during the reference year. The definition of a farm for Puerto Rico and in the outlying areas involved different minimum sales or acreages, or specified inventories of livestock or poultry. For details of the definitions used in these areas, see chapters 7 (Puerto Rico) and 8 (outlying areas).

USES OF AGRICULTURE CENSUS DATA

Billions of dollars of investment capital, potential sales of various products, and government tax funds are at least partially dependent on the availability of accurate information on agriculture in the United States. With these facts in mind, it is obvious that the accuracy and completeness of the census of agriculture are of vital importance, both to the individual farmer and to data users who rely on these statistics for a clear view of an essential part of the American economy.

Some of the major users of census of agriculture data are the following:

- The U.S. Department of Agriculture (USDA) uses agriculture census data to (1) establish benchmarks or comparisons for many of its periodic sample estimates and projections; (2) aid in administering marketing orders, tracking marketing patterns, and promoting the sale of agricultural products; (3) provide background information for improved operation and evaluation of community and conservation programs; (4) measure distribution and production volume of various plants and animals to aid in the control and eradication of pests and diseases; and (5) identify economic trends in the agriculture sector.
- Other U.S. Government agencies use agriculture census data on production, sales, and size and type of farm as part of the framework for such composite measures as the gross national product, farm income estimates, and indexes of productivity and price levels. Data from the census also are used to (1) develop risk/benefit analyses of certain chemicals undergoing regulatory review, (2) prepare studies and reports on trade and tariff matters, and (3) perform studies for, and answer requests from, Congress.
- Administrative and legislative bodies at *all* levels of government use the census data in developing farm and rural programs and in analyzing the results of such programs.
- Private businesses, farm cooperatives, and commodity and trade associations rely on the census data as an aid in locating new plants, service and distribution facilities; allocating research resources; forecasting markets; selecting marketing areas; and in activities aimed at providing better service to the farm community.
- Farm and agriculture-oriented news media use census data to provide technical background for news stories and feature articles, to determine their share of a specific market, and to identify types of agricultural operations they wish to reach.

ORGANIZATION OF THE BUREAU OF THE CENSUS

The Bureau of the Census is organized under a Director and a Deputy Director, with five associate directors responsible for specific areas of the Bureau's overall activities. Until April 1983 there were six associate directors, supervising operations in

demographic fields, economic fields, statistical standards and methodology, field operations, administration, and information technology. Subordinate to the associate directors were seven assistant directors, responsible for demographic censuses, international programs, economic and agriculture censuses, administration, statistical research, data processing, and computer services.

In April 1983 the Bureau was reorganized, primarily to consolidate administrative and data processing activities. The offices of the associate directors for administration and information technology were abolished, and an associate director for management services position was created. At the same time, the post of assistant director for statistical research was abolished, while the areas for data processing and computer services were taken over by an assistant director for automatic data processing, and two new assistant directors were appointed, for communications and for economic surveys.

The Director's staff is responsible for supervising the activities of the various divisions and offices that comprise the Bureau. These units can be divided into several broad functional categories: (1) subject matter (e.g., Agriculture, Population), (2) data collection and processing (Data Preparation, Systems Support), (3) statistical services (Statistical Research, Center for Survey Methods Research), (4) administrative services (Budget, Personnel), and (5) communications and public services (Public Information, Data User Services).

The 1982 Census of Agriculture was carried out by the Agriculture Division under the overall supervision of the Associate Director for Economic Fields and the Assistant Director for Economic and Agriculture Censuses. Other Bureau divisions made major contributions to the census, especially the Field Division, which operated the Bureau's 12 regional offices and trained and supervised the field interview staffs; the Data Preparation Division in Jeffersonville, IN, which handled mailing, much of the telephone followup, and most of the clerical processing of the report forms; and the various divisions concerned with automated data processing and publication services. A list of the key personnel and divisions that took part in the census, as well as charts of the Bureau's organization during the census period, are included in appendix C.

EXPENDITURES

Planning for the 1982 Census of Agriculture began in 1980, while the 1978 census processing was in full swing. As noted earlier, significant cuts in funding for the Bureau compelled a general reduction in the scale of the 1982 census compared with its predecessor. Nevertheless, resources were made available for improvements in the quality of the census mailing list, while new computer facilities and preparatory work enabled the Bureau to process and publish the data much more quickly than in earlier censuses. Total expenditures for the 1982 Census of Agriculture were \$57.4 million. Expenditures for each fiscal year in which funds were earmarked for the 1982 agricultural census program were as follows:

Fiscal year	Expenditures
Total	\$ 57,462,000
1980	911,000
1981	2,772,000
1982	10,915,000
1983	22,812,000
1984	13,785,000
1985	6,267,000