

Chapter 9. The Outlying Areas

GENERAL INFORMATION

Historical Background

The 1969 Census of Agriculture was the seventh U.S. agricultural census taken in the Virgin Islands and Guam, the sixth for American Samoa, and the first for the Trust Territory of the Pacific Islands.

The first census of agriculture in the Virgin Islands, taken in 1917, was a special census authorized by the U.S. Secretary of Commerce. In 1930, the second census of agriculture was taken in conjunction with the population census. Thereafter, for the period covering 1940 to 1960, a census of agriculture was conducted every 10 years at the same time as the census of population. The first quinquennial census to be taken in the Virgin Islands took place in 1964. The 1969 Census of Agriculture of the United States included the Virgin Islands, again taken in conjunction with the 1970 Census of Population and Housing.

In 1920 the first census of agriculture was taken in Guam and American Samoa, together with the population census. Since then, the agriculture census has been conducted every 10 years with the population census for both areas. In addition, a quinquennial census in 1964 was taken in Guam for the first time as part of the 1964 Census of Agriculture for the United States.

The first agricultural census for the Trust Territory, taken in 1970 as part of the 1969 Census of Agriculture of the United States, was conducted at the same time as the 1970 Census of Population and Housing.

Legal Authorization

Title 13, United States Code—Census, served as the legal authorization for the taking of the census of agriculture in 1970 in the Virgin Islands, Guam, American Samoa, and the Trust Territory. Section 142, paragraph (a), provides for the census of agriculture to be taken in the Virgin Islands and Guam in October 1959, and each fifth year thereafter. Section 191 provides that the census data for the Virgin Islands, Guam, and American Samoa may be collected by the Governor (by the High Commissioner for the Trust Territory) or highest ranking Federal official, in accordance with plans prescribed or approved by the Secretary of Commerce.

Special Arrangements

Contracts were negotiated with the respective Governors of the Virgin Islands, American Samoa, and Guam, and with the High Commissioner of the Trust Territory, to conduct censuses of population, housing, and agriculture. The report forms, maps, instructions, training materials, and other necessary census materials were furnished by the Bureau of the Census. The recruiting and training of the census staff, the handling of appointments and payroll, the procurement of space and equipment, and the submission of regular reports on the progress of the enumeration were the responsibility of the governments of each of these areas.

Expenditures for the Censuses

The total expenditure for the 1969 Census of Agriculture in the outlying areas was \$52,000. This figure included the salaries of enumerators. (A percentage formula was used to determine what portions of enumerator salaries would be charged to the respective budgets of the census of agriculture and the 1970 Census of Population and Housing.)

Definitions and Explanations

For all of the outlying areas, all "places" were counted as farms in 1970 if they met any of the criteria given below for the census definition of a farm. The word "place" designated all land under the control of one person or partnership, exclusive of land used by the U.S. military services in Guam. Control may have been through ownership, management, rental, or cropping arrangement.

For the Virgin Islands, a farm was defined as any place on which any field crops or vegetables were harvested or gathered during the year 1969, or on which there was at the time of enumeration a combined total of 10 fruit or nut trees or plants or more, or any livestock, or 10 poultry or more. In addition, places of less than 3 acres were counted as farms if sales of agricultural products during 1969 amounted to at least \$100. For the 1964 census, the definition of a farm was the same as the 1969 definition given above.

For the 1969 Census of Agriculture in American Samoa, Guam, and the Trust Territory, the definition was the same as that for

the Virgin Islands except that only five poultry or more on hand were necessary for a place to qualify as a farm. (This definition of a farm was also used for the 1959 and the 1950 Censuses of Agriculture of American Samoa and Guam.) In all censuses of American Samoa, the enumerators were instructed to complete an agriculture report form for each Matai ("chief" of a tribe or group of people) who had title to land or claimed ownership of land, and for each person who was not a Matai but who was in charge of raising crops or kept livestock or poultry on privately owned land.

To avoid biases that might arise from varying interpretations of the definitions, the enumerators were not given the definition of a farm for any of the outlying areas in the 1969 census. Instead, they used a series of screening questions on the population and housing census forms to determine when an agriculture form was required. The actual census definition of a farm was used during the data processing operations to determine which places, in fact, constituted farms.

Dates to Which Data Apply

For the 1969 Census of Agriculture in the outlying areas, the data for all inventory items, such as the number of livestock and poultry on hand, equipment and facilities, the number of fruit and nut trees, and the land in farms, were recorded for the time of the enumeration (spring 1970). The production items, such numbers of livestock and poultry and their products sold, crops harvested or sold, farm expenditures, and value of sales, referred to calendar year 1969.

In all previous censuses for the outlying areas except 1964, data were collected in the spring, the inventory items were reported for the time of enumeration, and the production items were reported for the preceding calendar year. For 1964, however, the enumeration was conducted in November and December of 1964, and thus both the production and inventory items were for the same year.

PLANNING AND PREPARATORY OPERATIONS

Census Calendar

Census Bureau personnel met with representatives of the outlying areas in 1968 to discuss plans for the taking of the 1969 Census of Agriculture. From the discussions, a census time table was drawn up for the 1969 Census of Agriculture in the outlying areas as follows:

1969

1. Preparation of agriculture report forms (content and format)
2. Approval of agriculture report forms by the Budget Bureau (now the Office of Management and Budget)
3. Preparation of other material (enumerators' and crew leaders' training manuals, etc.)
4. Printing of report forms and other material

1970

1. Assembling of all material
2. Shipping of all material to the local offices
3. Organization of the four local offices
4. Recruitment and training of staff
5. Enumeration
6. Completion of census operation
7. Shipping of report forms to the Census Bureau facility in Jeffersonville, Ind.
8. Processing of the forms (by hand)
 - a. Editing
 - b. Coding
 - c. Tabulation

1971

1. Preparation of tables
 - a. Posting of historical data
 - b. Posting of 1970 data
2. Publication of tables

This schedule was followed as closely as possible. However, the publication of the results of the 1969 Census of Agriculture for the outlying areas was not completed until 1972.

Report Form Content

The agriculture report forms for the 1969 Census of Agriculture in the Virgin Islands, American Samoa, Guam, and the Trust Territory were prepared by the staff of the Census Bureau after consultation with the governments of the areas. For the Virgin Islands, Census Bureau personnel met directly with representatives of the Virgin Islands to discuss the selection of the proper inquires to reflect the current needs for agriculture information for that island group. For American Samoa, Guam, and the Trust Territory, a first draft of each report form was drawn up in Washington and sent to the respective outlying areas for their suggestions. The drafts were then returned to Washington where modifications were made to reflect the needs peculiar to each of the areas. The final form for the Virgin Islands contained a total of 85 inquiries; that for American Samoa, 53; that for Guam, 71; and that for the Trust Territory, 54.

The 1969 agriculture forms for the Virgin Islands and Guam were, in most respects, comparable to the forms used in 1964; for American Samoa the 1969 form was similar to the one used in 1960. Several new questions, however, were added to the forms for American Samoa and Guam. For American Samoa the additions related to land use, production for home use or sales, type of holding, dozens of chicken eggs sold, source and ownership of workpower used, and operator characteristics. For Guam the two new sections added to the agriculture form related to workpower and operator characteristics.

Tabulation Plans

The size of the outlying areas, the scope of the census, and the method of tabulating the results were factors considered in the tabulation program for the outlying areas. Prior to the enumera-

tion, a set of agriculture table outlines was prepared for each of the four areas. They were quite different from the table outlines for Puerto Rico and the U.S. agriculture censuses. Final table outline specifications determined by personnel of the Census Bureau in Washington, D.C., were designed to provide data of maximum utility to local officials while keeping the tabulation program for the four areas as similar as possible. (Copies of the table outlines were not sent to the three Governors and the High Commissioner for review and comment before the tabulation program became final as they had been in the past.)

All of the data from the 1969 Census of Agriculture for the Virgin Islands, American Samoa, Guam, and the Trust Territory were hand tabulated in Jeffersonville.

Map Preparation

The Governors' staffs for the Virgin Islands, American Samoa, and Guam supplied the pertinent information from which the Census Bureau prepared enumeration maps for each of these areas. The information included current district and county boundaries and a list of the districts, the counties within each district, and the names of all villages within each county. The Office of Territories of the Department of the Interior and the Office of the High Commissioner, Trust Territory of the Pacific Islands, supplied the Bureau with information needed to prepare the enumeration maps for the Trust Territory. In all cases, the information supplied by these areas was used to draw up the ED (enumeration district) delineations.

Instructions and Training Material

The *Enumerator's Reference Manual* described the enumeration methods and the duties and responsibilities of the enumerator in the outlying areas. This manual was similar to the one used in Puerto Rico, *The Enumerator's Handbook*.

Three other manuals served as supplemental training materials for the taking of the 1969 census in these areas. They were as follows:

1. *Guide for Training Enumerators in Agriculture*
2. *Standard Guide for Training*
3. *Supervisor's Reference Manual*

The portion of the "Standard Guide for Training" used for the 1970 Census of Population and Housing was the same for all of the outlying areas. However, the section for the 1969 Census of Agriculture was adapted to the distinctive needs of the individual areas being enumerated. The training material and guides used in the outlying areas were printed only in English.

These training materials were prepared by the Census Bureau in Washington. Upon completion of this work, the materials were sent to the printer who, in turn, mailed the manuals to the Bureau's Jeffersonville office. From there the materials were shipped to the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands.

THE ENUMERATION

Field Organization and Training

The field organization for each of the four outlying areas was basically the same, although the enumeration staff varied according to the population makeup of the particular areas. The composition of the field staff for the outlying areas was as follows:

Field staff	Virgin Islands	American Samoa	Guam	Trust Territory
Supervisor (Governor)	1	1	1	1
Assistant supervisor	4	2	4	6
Administrative clerks	1	1	1	7
Office clerks	4	3	→	20
Enumerators	100	85	126	212

The four area supervisors had the overall responsibility for all phases of the censuses in their districts and were ultimately responsible to the Director of the Bureau of the Census. Their responsibilities included:

1. Securing office space and equipment.
2. Recruiting, testing, and selecting competent office personnel, assistant supervisors, and enumerators.
3. Releasing publicity to inform the public of the census.
4. Training assistant supervisors and enumerators.
5. Supervising the preenumeration activities of assistant supervisors.
6. Supervising the enumeration.
7. Supervising all clerical operations in the census office.
8. Reporting enumeration progress and other pertinent information to the Census Bureau.
9. Taking necessary action to keep the census enumeration on schedule.
10. Performing other duties when necessary for the fulfillment of the above mentioned responsibilities.

In most cases, these duties were actually carried out by the assistant supervisors who devoted full time to the censuses. The assistant supervisors in each area were also directly responsible for the following:

1. Checking the maps of each enumeration district in his area.
2. Making two checks, "first review" and "final review," of each enumerator's work for completeness and accuracy.
3. Assisting with the training of enumerators.

4. Preparing assignments for the enumerators and distributing supplies and equipment.
5. Submitting periodic progress reports on the enumeration to the area supervisor.

The administrative clerks provided general clerical assistance to the supervisor, compiled reports, and distributed and controlled supplies.

The function of the office clerks was to review the completed report forms for completeness and consistency before they were forwarded to Washington for processing.

The assistant supervisors and enumerators received training prior to the taking of the censuses, but not at the same time for all of the outlying areas. The training program ran for about one week, with enumerators generally receiving a total of 18 hours of instruction. All training was presented according to procedures prepared by the Bureau of the Census. It included practice interviewing, practice filling of report forms, and detailed discussion of the instructions. For the Trust Territory of the Pacific Islands, some enumerators were trained via shortwave radios.

Timing of the Enumeration

The censuses in the Virgin Islands, American Samoa, Guam, and the Trust Territory were scheduled to begin on April 1, 1970, and end May 6, 1970; however, this schedule was not followed in all areas.

Time variations in both the training of assistant supervisors and enumerators and the commencement of the enumeration hinged primarily on two causes: (1) In most cases the materials needed for the training program and for the taking of the censuses arrived late in the outlying areas; and (2) varying types of recruiting problems occurred, the Trust Territory and Guam having the most acute cases. For example, in Guam officials found it difficult to find individuals who were able to work a total of 40 hours a week. This precipitated the hiring of individuals who could devote about 30 hours weekly. As a result, the training of the assistant supervisors on Guam did not take place until the period April 2 to 10, 1970; this forced an extension of the enumeration deadline from April 25 to May 16, 1970. Despite the fact that some enumeration materials were "air dropped" in the Trust Territory to facilitate delivery, most of the materials were shipped via mail boat, which took 6 weeks to make its circuit of the islands. Hence, the enumeration of the Trust Territory extended into the early summer months of 1970.

The Taking of the Census

For the taking of the census, the Virgin Islands were divided into 60 ED's; Guam, 122 ED's; American Samoa, 95 ED's; and the Trust Territory, 212 ED's. The ED's were clearly outlined on special maps prepared for the census. There were two types of ED's: (1) Those used in urban enumeration, which were usually made up of one block or more, depending on the number of people in each block, and (2) rural ED's, which were

usually bounded by roads, streams, or other natural boundaries, or sometimes, by boundaries which were not visible, e.g., county boundaries.

A "Yes" answer to any one of three questions which appeared in the population and housing form for the outlying areas meant that an agriculture report had to be filled out. The three questions for Guam, American Samoa, and the Trust Territory were identical. They were:

1. Is this house on a farm?
2. Were any crops or vegetables harvested from this place in 1969, or is there a combined total of 10 or more fruit and nut trees on this place?
3. Does this place have any livestock or five or more poultry?

For the Virgin Islands the questions were:

1. Is this house on a place of 3 acres or more?
 - a. If no, were there any sales from this place in 1969 of \$100 or more of agricultural products?
2. If 3 acres or more, were there any crops or vegetables harvested from this place in 1969, or is there now a combined total of 10 fruit or nut trees or plants or more?
3. Does this place have any livestock or 10 poultry or more?

To assure enumeration of all land used for agricultural purposes, instructions were given to enumerators to inquire about tracts of land on which no one lived.

To avoid enumeration of the same place by two enumerators or more, rules were established by the Census Bureau which enabled each enumerator to determine whether the responsibility for obtaining the agriculture report for a given place was his. If a place was entirely within the boundaries of one ED, the enumerator for that ED was required to obtain the report, regardless of where the person in charge of the operation lived. If a place overlapped two ED's, the enumerator for the ED in which the person in charge lived was responsible for obtaining the form. In these cases, he was to report on the form all the land that the person in charge operated, including the land outside his ED.

In cases where an enumerator dropped out of service, enumeration in his particular ED was temporarily halted. As soon as another enumerator had finished his assigned ED, he was transferred to the incomplete ED to complete the work. While this caused a delay in finishing the census, the method did not require constant recruitment and training of replacement enumerators and did allow those in charge to continue using the demonstrably better workers.

Some difficulties were encountered in the taking of the 1970 census in the outlying areas. For example, one unforeseen problem arose in the administrative and managerial portion of the agriculture census in the Virgin Islands, namely the hiring and paying of census employees. It was originally planned that only teachers would serve as enumerators. However, the officials

in charge of the census were forced, because of the lower salary rate decided upon, to hire also from the population at large.

Callbacks

In cases where an enumerator was unable to enumerate each farm at the time of his first visit, he listed the address and the best time for a return visit on his "Callback Record." (At times this information was obtained from neighbors.) To prevent callbacks from accumulating, enumerators made the return visits as soon as possible, often either on the same day as the initial visit or the following day. When callbacks were made and the information was obtained, the enumerator recorded this fact and the completion date in the callback record. The callback record served as a convenient indicator for the enumerator and assistant supervisor as to how many callbacks remained at any given time during the enumeration. Enumerators were asked to have no more than 10 callbacks outstanding at the end of any work day.

Field Review

It was the assistant supervisor's responsibility to conduct comprehensive reviews of the field work of each enumerator in order to ascertain whether the work was complete, consistent, and accurate, and to ensure that any discovered errors were corrected. A "first review," conducted during the first 4 or 5 days of the enumeration, was a consistency check in which the completed reports were compared with procedures in the enumerator's reference manual. In the "final review," conducted upon completion of the enumerator's assignment, the assistant supervisor checked every 10th population and housing report form and every 5th agriculture report form. If less than 10 forms were involved, all were reviewed.

DATA PROCESSING

All report forms were individually edited and coded by Bureau employees in Washington prior to the tabulation of the data. In the editing process, forms that did not represent farms, according to the census definition, were withdrawn from further processing. The remaining reports were then examined for

completeness and consistency. Errors in calculations and in units of measure, inconsistencies, and misplaced entries were corrected. Incomplete reports were adjusted on the basis of related information on the same report or on reports for nearby farms of similar type and economic class. When necessary, respondents were contacted by mail in order to complete or clarify certain entries on their reports. In certain instances, respondents in the Virgin Islands were contacted by telephone from Washington, D.C.

In the coding process for the Virgin Islands, Guam, American Samoa, and the Trust Territory, numerical codes were entered on all forms to classify farms by size in terms of total land operated and by tenure of the operator. For the Virgin Islands, numerical codes were also entered on all reports to classify farms by birthplace of operator, economic class, and by type of farm, and for the Trust Territory of the Pacific Islands by the age of the operator.

After the forms had been edited for the Virgin Islands, American Samoa, Guam, and the Trust Territory, the information was transferred by hand to tabulation sheets. Subject matter specialists at the Bureau of the Census examined the tabulations for reasonableness and consistency. When necessary they made corrections on the basis of a further reappraisal of the original reports before approving the data for publication.

PUBLICATION PROGRAM

Data on farms, farm characteristics, and farm products have been released in the reports of the 1969 Census of Agriculture under the general title, Volume I, *Area Reports*.

Data are presented for farms, land in farms, land use, size of farm, tenure and characteristics of farm operators, farm income and sales, farm expenses, machinery and equipment, livestock and poultry, and crops harvested. This volume contains a separate paperbound report for each outlying area.

The results of the census of agriculture for American Samoa, Guam, the Trust Territory, and the Virgin Islands are published in volume I in the following parts: *American Samoa, Part 54; Guam, Part 51; Trust Territory, Part 55; Virgin Islands, Part 53*. No unpublished data are available from the 1969 Census of Agriculture for the outlying areas.