

Chapter 8.

Census of Agriculture in Outlying Areas

INTRODUCTION

General Information

Historical background—For census purposes, the “Outlying Areas” of the United States include American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands. The 1978 Census of Agriculture was the ninth such enumeration on Guam and the Virgin Islands while the agricultural enumeration conducted as part of the 1980 Census of Population and Housing was the seventh agriculture census of American Samoa and the second for the Northern Mariana Islands. (The latter were part of the Trust Territory of the Pacific Islands until July 1981.)

Censuses of agriculture on Guam were taken in conjunction with the decennial censuses of population from 1920 through 1960. In 1964, a change in title 13 required inclusion of the Virgin Islands and Guam in each census of agriculture of the United States. The first census of agriculture in the Virgin Islands was carried out in 1917, shortly after their acquisition from Denmark, and the second in 1930, after which agricultural enumerations of the Virgin Islands were part of the decennial censuses. In 1964, the islands were included in the quinquennial census.

The 1980 Census of Agriculture was the seventh such enumeration for American Samoa. The first agricultural census was taken there in 1920; since then one has been conducted every 10 years, in conjunction with the censuses of population. The Northern Mariana Islands were first enumerated for agricultural purposes as part of the 1970 Census of Population and Housing, but the agricultural data were released as part of the publication program for the 1969 Census of Agriculture. The Census Act does not require that all of these territories be included in the quinquennial enumerations, hence they were omitted from the 1974 program and were not subject to an agricultural enumeration until the 1980 decennial census got underway.

Legal authorization—Title 13, United States Code—Census, contains the legal authority for the collection of agricultural data in the outlying areas. Section 142, paragraph (a) directs the taking of a census of agriculture in 1979, in 1983, and in every fifth year thereafter. Section 191, paragraph (a) requires the inclusion in the census of the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, the Commonwealth of

Puerto Rico, “and as may be determined by the Secretary [of Commerce], such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty.” Paragraph (b) of section 191 authorizes the Secretary of Commerce to use data collected by the Governors or other highest Federal official (if the data are collected in accordance with plans prescribed or approved by the Secretary) for censuses taken in the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, or areas or possessions not specifically designated in paragraph (a).

Special arrangements—Contracts were made in January 1978 with the Governors of Guam and the Virgin Islands, and in December 1979 with the governments of the Northern Mariana Islands and American Samoa, for the conduct of the census of agriculture in their jurisdictions. The report forms, training materials and instructions, and other necessary census materials were provided by the Bureau of the Census. An official of the government of Guam received training at the Bureau of the Census as project manager for the census on Guam, while personnel from Bureau headquarters trained the project manager for the census in the Virgin Islands. Since the agriculture enumeration in the Northern Mariana Islands and American Samoa was carried out as an adjunct to the 1980 Census of Population and Housing, the decennial census staff conducted the agricultural census as well. The recruiting and training of the local field and office staffs, the supervision of appointments and payrolls, and other local administrative matters were the responsibility of the respective territorial governments. Bureau employees were assigned to the staffs of the census supervisors for American Samoa and the Northern Mariana Islands to serve as advisers.

Farm definition and reporting periods—The definitions of a farm used for the censuses on Guam and the Virgin Islands were the same as those employed in the 1974 enumeration. For the Virgin Islands, a farm was defined as a “place” of three acres or more on which any field crops or vegetables were harvested or gathered during the 12-month period between July 1, 1977 and June 30, 1978, or on which there was a combined total of 10 or more fruit or nut trees or plants, any livestock, or 10 or more poultry at the time of enumeration. Places of less than three acres were counted as farms if their sales of agricultural products between July 1, 1977 and June 30, 1978 amounted to at least \$100, or if they could normally be expected to produce

agricultural products in sufficient quantity to provide sales amounting to at least \$100. On Guam a farm was defined as a place on which any crops, vegetables, or fruits were harvested or gathered during 1977, or on which there was any livestock or 15 or more poultry at the time of enumeration. In the Northern Mariana Islands and in American Samoa, a farm was defined as any place that had 15 or more poultry (chickens, ducks, guineas, etc.); 5 or more livestock (cattle, hogs, goats, etc.); a combined total of 10 or more fruit or nut trees or plants; or any place of 100 square meters or more on which root or field crops or vegetables were harvested for sale during 1979.

The reference dates for the various data items for each of the areas were as shown below.

CENSUS OF AGRICULTURE ON GUAM AND IN THE VIRGIN ISLANDS

Census Schedule

The reduction of the intercensal period from 5 years to 4 years following the 1974 Census of Agriculture meant that the 1977 Economic Censuses on Guam and the Virgin Islands were underway as preparations began for the 1978 Census of Agriculture in those areas. The Bureau took advantage of this circumstance by bringing forward the agricultural enumeration schedules for the islands as far as could be done without interfering with the other economic censuses, and utilizing the office and administrative arrangements made for the economic operations as far as possible for the agricultural enumeration. On Guam, the agricultural census office was established in Agana, in the rented office space vacated by the economic census office. In the Virgin Islands, the office was established at the Virgin Islands Department of Agriculture research station outside Charlotte Amalie.

The planning for the 1978 census began in 1977, when initial contacts with the territorial governments were made and a ten-

tative schedule of census activities was drawn up. The proposed schedules for Guam and the Virgin Islands are given below. (The census was carried out with very little deviation from this schedule; the only significant change involved a 2-month postponement in completion of development work on the report form for Guam.)

Census Schedule		
Activity	Virgin Islands	Guam
Development of report form.	2/78	1/78
Printing of report forms	4/78	3/78
Development of farm list.	5/78	3/78
Preparation of training and enumeration materials	5/78	3/78
Assembly of materials and shipment	5/78	3/78
Organization of field office and recruiting of staff	6/78	4/78
Training	6/78	4/78
Enumeration.	8/78	4/78
Processing of the report forms.	3/79	3/79
Publication.	4/80	4/80

Map Preparation

Maps used by the central census offices, crew leaders, and the enumeration staff were prepared at the Bureau's Jeffersonville, Ind., facility. Preliminary versions were drawn up in early 1978, using the 1974 census maps as primary references, and were referred to the respective territorial governments for review and correction. While relatively few changes were necessary with respect to the Virgin Islands maps, those for Guam required updating because of the extensive military reservations on the island. Data from the Defense Mapping Agency were used to make the necessary corrections.

Census Reference Dates

Data item	Virgin Islands	Guam	Northern Mariana Islands	American Samoa
Acres (land in farms)	Enumeration Day	Enumeration Day	Enumeration Day	Enumeration Day
Fruit, nut, and tree crops	Enumeration Day	Enumeration Day	Enumeration Day	Enumeration Day
Fishery—sale.	(X)	Last 12 months	Last 12 months	Last 12 months
Livestock and poultry on place	Enumeration Day	Enumeration Day	Enumeration Day	Enumeration Day
Livestock and poultry sold	Last 12 months	Last 12 months	(X)	(X)
Chicken eggs sold	Last 12 months	Last 12 months	Last 12 months	Last 12 months
Equipment and facilities	Enumeration Day	Enumeration Day	Enumeration Day	Enumeration Day
Crops harvested (acres, production)	Last 12 months	Last 12 months	Last 12 months	Last 12 months
Land use	Last 12 months	Last 12 months	Last 12 months	Last 12 months
Expenses	Last 12 months	Last 12 months	(X)	(X)
Sales of agricultural products.	Last 12 months	Last 12 months	(X)	(X)
Hired workers.	Last 12 months	Last 12 months	(X)	(X)

X Not applicable.

Training and Reference Materials

The duties of each member of the census staff and the enumeration and processing procedures for the operation in Guam and the Virgin Islands were contained in the *Procedures Manual*, form A25 ((G) for Guam and (VI) for the Virgin Islands). The A25 manuals served as the principal guides for the recruiting and training of the census staffs and for the overall conduct of the enumeration.

The particular duties of the various members of the census staffs were explained in a series of reference manuals. The project managers and their assistants received the *Supervisor's Reference Manual*, form A20, for their own use, and used the *Training Guide*, form A15, for the courses they conducted for their field enumeration staffs. The enumerators each received an *Enumerator's Reference Manual*, form A10, which explained their duties and gave detailed instructions for conducting interviews and filling out the report forms and other documents. Since much of the initial review of the report forms was to be done in the census offices, copies of *Clerical Instructions for Reviewing, Editing, and Coding Questionnaires*, form A21, were provided to the office staffs.

All of the materials were in English and were prepared and printed or reproduced by the Census Bureau at its Suitland headquarters.

Staffs and Training

The organization of the census staffs for Guam and the Virgin Islands was essentially identical, although the field enumeration staff for Guam was larger than its counterpart in the Virgin Islands. The composition of the two staffs was as follows:

Staff	Guam	Virgin Islands
Total	22	10
Project manager/census supervisor . .	1	1
Assistant manager/supervisor	2	1
Office clerical staff	4	2
Enumerators	15	6

The project managers were responsible to the Director of the Bureau of the Census for the conduct of the census in their respective territories. Their specific duties included most of the administrative arrangements for establishing the census offices and carrying out the enumeration.

The notices announcing vacancies on the census staffs were posted on Guam and in the Virgin Islands a month before the training classes for the employees were to begin. With the exception of the project manager on Guam, the territorial governments did not assign people to temporary duty with the enumeration operation; instead, all candidates for jobs were given written tests by the project managers, and were notified if they had been hired. All employees had to be American citizens, and while there was no official requirement that any be bilingual, the practical problems involved, particularly on Guam,

meant that facility with the local language was needed and was taken into account in the assignment of enumeration areas.

The project manager for Guam came to Bureau headquarters in March 1978 to receive his supervisor's training, while a Bureau staff member went to the Virgin Islands to carry out the supervisor's training course there on June 26, 1978. The enumerators' training courses and the assistant project manager's training on Guam were carried out on April 3-5 and June 28-30 on Guam and in the Virgin Islands, respectively.

Taking the Census

General information—Each enumerator was given an assignment map, a form A5 *Record Book*, and a supply of agricultural report forms before the enumeration began. The assignment map covered the area each enumerator was to cover, with the boundaries outlined in heavy orange lines, and showed the principal ground features and roads. The A5 *Record Book* contained three forms the enumerators were to use daily: the A2 Listing Sheets, the A3 Enumerator's Daily Report, and the A4 Daily Record of Progress. The A2 Listing Sheet served as a record of the enumerator's canvass, and contained a series of screening questions which the enumerator was to ask in order to determine whether or not a place was an agricultural operation. (Some of the A2 sheets contained prelisted names and addresses of farm operators, compiled from 1974 records and/or local Department of Agriculture listings.) The A3 daily report was a card that the enumerator completed each day. The number of A1's completed, callbacks made, and so on, were listed, and the card was submitted to the crew leader so that the enumerator's area could be monitored. The A4 progress record was a further aid in this, in that each enumerator used it to keep track of the number of A1's completed each day as well as provide a running total for the assignment.

Enumeration areas and enumeration districts—Each enumerator was assigned a district or area and made responsible for its complete enumeration. Guam was divided into 20 enumeration districts (ED's), corresponding to the island's election districts. These ED's were grouped for census purposes into 13 enumeration areas (EA's), each containing about 120 farms. Each enumerator was assigned one EA. The Virgin Islands were divided into six ED's, four on St. Croix and one each on St. Thomas and St. John. Each enumerator was assigned one ED.

Methods of enumeration—Enumerators interviewed each head of a household in the assigned ED or EA, asking a series of screening questions to determine whether or not the household was engaged in agricultural operations that met the census definition of a farm.

To insure complete coverage of each ED and to reduce duplication, rules were established for enumerating farms on, or overlapping, ED boundaries, and farms operated by persons not living in the same ED as the agricultural operation. If a farm overlapped an ED boundary, the enumerator in whose ED the household operating the farm was located was responsible for its enumeration. If a farm was completely within an ED but was operated by someone living elsewhere, the case was referred to the crew leader for the ED in which the operator lived for assignment to the appropriate enumerator.

In the Virgin Islands, the enumeration was carried out using prelists of the agricultural operations prepared from 1974 census data and information supplied by the Virgin Islands Department of Agriculture. Enumerators were also to visit any households not listed that appeared to have agricultural operations.

On Guam, three different enumeration procedures, A, B, and C, were used, depending on the characteristics of each ED, the ED being designated for a specific procedure prior to the enumeration. In procedure A (used in predominantly rural areas), the enumerators carried out a door-to-door canvass, filling out A1 report forms as necessary and making certain that a line number from the A2 listing and a dwelling symbol were entered on their area maps for each dwelling in the ED. Procedure B was used in ED's with occasional built-up areas. The same methods were used as in "A" ED's except for built-up areas where groups of 25 or more dwellings were found, each on less than one-third hectare (about an acre). In these areas, the enumerators were to list only those dwellings associated with agricultural operations. Procedure C ED's were those generally more urban areas in which extensive prelists of agricultural operations were used. Enumerators visited each address on the list. If any unlisted agricultural operations were found, these too were to be enumerated and added to the lists.

If any enumerators were unable to satisfactorily perform their duties, or if an enumerator resigned, crew leaders were to suspend operations in the ED involved until another enumerator could be shifted to complete the work. Fortunately, this occasion never arose.

Callbacks—Often, enumerators were unable to complete the necessary report forms on the first visit to a household because the operator was not home, his or her records were not ready, or for some other reason. In such cases, enumerators were to make arrangements for a return visit, a "callback," in order to complete the necessary materials. Whenever possible, these return visits were made by appointment, at a time most convenient for the respondent, but enumerators were encouraged to complete each one within 3 days of the initial visit.

Controls and reports—Enumerators submitted reports of their work to the crew leaders daily, using the A3 or A4 forms described above. The crew leaders, in turn, summarized the work done by the enumerators every week on form A6, Weekly Progress Report of Enumeration. The A6 showed for each week the number of lines filled on the A2 listing, the number of questionnaires completed, the number of callbacks pending, the hours worked by each enumerator, and the mileage for vehicles used in the enumeration for that week. The A6's were sent to the project managers each Monday and the data from them were cabled to Bureau headquarters the next day, providing a weekly report of the progress of the enumeration.

Field Review

Crew leaders were responsible for reviewing the work of their enumerators. In addition to reporting progress and checking slow enumerators, each crew leader carried out two systematic reviews of each enumerator's work, the first during the initial 3

or 4 days the enumerator was on the job, and a second, final review when each ED assignment was completed.

The purpose of the first review was, essentially, to make certain that (1) each enumerator was using proper procedures, (2) each ED was covered completely, and (3) callbacks were not accumulating. When errors were discovered, the crew leaders pointed them out and ensured that corrective action was taken. The second review was made as each enumerator completed his or her assignment. The crew leader checked every fifth report form completed unless there were 10 or fewer involved, in which case all were checked for accuracy, consistency, and completeness. If two or more forms were unsatisfactory, all the questionnaires from the enumerator in question were reviewed. Rejected report forms were returned to the enumerator for additional callbacks and work, unless a satisfactory explanation could be given as to why information was missing. (E.g., the enumerator was unable to find anyone at home after two visits, the respondent refused to provide the information, the housing unit in question was vacant and no one in the vicinity was able to provide any information about it, etc. All of these cases were then referred to the enumerator's supervisor for final clearance.)

CENSUS OF AGRICULTURE IN AMERICAN SAMOA AND NORTHERN MARIANA ISLANDS

General Information

The census of agriculture in American Samoa and the Northern Mariana Islands was an adjunct to the 1980 Census of Population and Housing in those areas, and was conducted under the supervision of the Bureau's Decennial Census Division (DCD). The Agriculture Division's part in the operation involved designing the questionnaires to be used, writing enumeration procedures for the agriculture part of the census, and processing and tabulating the data once the completed forms were forwarded to Suitland.

Inasmuch as the enumeration took place in April of 1980, the data were collected for calendar year 1979. In the previous census of agriculture in the outlying areas of the Pacific, taken as part of the 1970 Decennial Census, the Trust Territory of the Pacific Islands had also been enumerated. For 1980, however, the territorial authorities suggested that the census of agriculture of the Trust Territory of the Pacific Islands not be conducted by the Bureau of the Census since the territorial government had itself recently carried out an agricultural census. The Secretary of Commerce, authorized under title 13 to determine which of the outlying areas not specified in the title will be covered in the census, acceded to the suggestion of the territorial government, so that of the various local jurisdictions comprising the Trust Territory, only the Northern Mariana Islands were included in the agriculture census program.

Planning and Preparation

Census schedule—The DCD's Outlying Areas Branch was established in July 1978 and served as the central planning and coordinating office for the population, housing, and agriculture

censuses of American Samoa and the Northern Mariana Islands. The schedule was as follows:

Item	Begin	End
Planning	7/78	3/80
Preparation of training and enumeration materials	9/79	2/80
Opening of area offices.	1/80	(NA)
Shipment of training and enumeration materials to area offices.	12/79	3/80
Recruitment of staff	1/80	4/80
Training of crew leaders and enumerators	3/80	3/80
Enumeration.	4/80	5/80
Quality control and office review of report forms	4/80	5/80
Closing of area office.		6/80
Processing	5/80	12/80

Map preparation—Master maps, showing each enumeration district (ED), and central-office, crew-leader, and enumerator maps, were prepared by the Geography Division between October 1979 and January 1980. In the maps for the Northern Mariana Islands, the ED's were delineated in such a way as to allow comparability with the ED's used in the census taken by the local government in 1974.

Training and reference materials—The general reference source for the census office operations in the outlying areas was the *Office Operations Manual*, form D-513-0A. Chapter 2 of this manual contained instructions about the screening questions to be asked of each household to ascertain whether any agricultural operations were being carried on, while chapter 3 included a section on the review of the agricultural report forms. The *Coordinator's Manual*, form D-508-0A, described the duties of the census coordinator/supervisor, while the *Crew Leader's Manual*, form D-555-0A, and the *Enumerator's Manual*, form D-549-0A, provided detailed instructions for persons holding those positions. Each of these manuals contained separate sections or chapters, where appropriate, on the agricultural census. In addition, a *Questionnaire Reference Book for Agriculture*, form 80-A10 ((AS) and (NM), for American Samoa and the Northern Marianas respectively), was provided to the enumerators and crew leaders with explanations and detailed instructions for the form 80-A1 report forms. The census coordinators and census advisors in each of the outlying areas also received verbatim training guides to insure uniform training of crew leaders (form D-655-0A) and enumerators (form D-649-0A).

All these materials were in English and were prepared and reproduced by the DCD at the Bureau's Suitland headquarters. Those portions of the reference materials dealing with the agricultural census were drawn up by the Agriculture Division's Outlying Areas Branch.

Staffing, training, and expenditures—The staffs for the census in American Samoa and the Northern Mariana Islands were

similarly organized. The composition of the 1979/80 census staffs was as follows:

Staff	American Samoa	Northern Mariana Islands
Total	119	73
Census advisor	1	1
Census coordinator	1	1
Census administrator	1	1
Administrative assistant	1	1
Clerks.	4	4
Field operations supervisor	1	1
Crew leaders	15	7
Enumerators	95	57

All candidates for jobs were required to take an oath to protect the confidentiality of census information.

The census coordinators were appointed by the governors of the areas and were generally responsible for the overall conduct of the census in their respective areas. However, the census advisor was a U.S. Bureau of the Census employee and was specifically responsible to the Director of the Bureau for maintenance of acceptable statistical standards and adherence to Bureau procedures and requirements.

Recruiting began in January 1980. All candidates for jobs were given written tests by the census coordinators, administrators, and/or the census advisors; candidates who passed the test were interviewed before final selection for hiring. In both areas, crew leaders and enumerators with facility in the local language were required, since many of the inhabitants spoke little or no English. Crew leaders were given a 3-day training session during the second week of March 1980 to familiarize them with their pre-census, enumeration, followup, and field review duties. The enumerator staffs were trained a total of 24 hours in the week immediately preceding April 1, 1980.

The Bureau of the Census provided funding for the basic census; any proposed expansion of the enumeration by the local government (special questions, surveys, etc.) had to be paid for by the local government, and the procedures used had to meet the Bureau's statistical and methodological standards. (This provision did not become effective, since no expansion of the census was requested.) Initial sums corresponding to 80 percent of the total field budget were advanced to the territorial governments for the conduct of the censuses, with the remaining 20 percent of the budgeted funds held in reserve, to be made available if necessary.

Agriculture census report forms—The report forms 80-A1(AS), for American Samoa, and 80-A1(NM), for the Northern Marianas, were 16" x 14" sheets of white stock folded to 8" x 14", with printing and shading in black ink. They were essentially identical in content: Data were requested on land in agriculture; vegetables and field crops; fruits, nuts, and tree crops; land use; livestock and poultry; fishery; selected equipment and facilities; and operator characteristics. An item asked

whether any other persons in each household (other than the operator being interviewed) had any agricultural operations. The principal difference between the two versions was in the land use section; while the 80-A1(NM) employed conventional wording asking for data on land owned, rented, or leased by or to an individual operator, the section in the form for American Samoa included inquiries as to whether or not any of the land being used was *matai* land.¹


Taking the Census

General information—Each enumerator was given a kit, containing a map of the enumeration district (ED) to be canvassed, a supply of population and housing and agriculture census questionnaires; an *Address Register*, form D-104-0A, for the ED to be covered; and copies of the appropriate *Questionnaire Reference Book* and *Enumerator's Manual*. The ED map showed the boundaries of the area the enumerator was to canvass, as well as roads, built-up areas, and natural features. The address register contained a cover sheet identifying the enumerator and the ED involved, and listing pages for recording name, address or location description, geographic code, serial number, etc., for each household enumerated. The listing page also included check-off boxes showing which household had qualified for inclusion in the agriculture census, and, if so, how many agricultural report forms were required. Daily progress of work—living quarters enumerated, agricultural report forms filled out, callbacks made, and the like—was recorded on the cover sheet of the address register.

Enumeration methodology—The decennial census in the outlying areas was a house-to-house canvass of each ED. Enumerators were to visit and fill out a census questionnaire for every household. The last page of the population and housing questionnaires for American Samoa and the Northern Marianas included a section containing screening questions to determine whether or not any individual operated a farm. These were as shown in the next column.

Enumerators completed a form 80-A1 for any household that gave an affirmative answer to any of these questions, regardless of where the agricultural land was located within the ED. If the person operating the farm also had farmland or other agricultural operations outside the ED in which he or she lived, the enumerator was to include the data on those operations on the report form as well. In cases in which a form 80-A1 had already been filled out in another ED, each enumerator was required to fill out the identification sections of the form 80-A1 (parts A and B, giving the operator's name and address, and items 1-4 of section 1, showing acreage), and write in the "Remarks" space: "Completed Questionnaire obtained by Enumerator in _____ (name of District or Area)." For cases where an agricultural operation was controlled or managed by someone living outside the ED in which it was located, the

¹ A *matai* is the chief or head of an extended family or tribe-like group. Land occupied and used by the group is traditionally considered *matai* land, although the *matai* may not personally have possession or use of it. This arrangement presents some difficulties in collecting and tabulating agricultural data.

Section C	
1. Does anyone living in this house operate a farm?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Does this place have 15 or more poultry (chickens, ducks, guineas, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Does this place have 5 or more livestock (cattle, hogs, goats, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Is there a combined total of 10 or more fruit, nut, or tree crops on this place?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Does this place have 100 square meters or more on which root or field crops or vegetables were harvested for sale during 1979?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>ENUMERATOR — If this house is on a farm but you are unable to contact the farm operator OR THIS HOUSE IS VACANT, find out the name of the person to contact and the address (if the farm operator does not live here) and enter here: </p>	
<p>Name of operator (or, if vacant, owner of the house) _____</p>	
<p>Address _____</p>	
<p><i>If "Yes" to questions 1, 2, 3, 4 or 5 — — FILL AN AGRICULTURE QUESTIONNAIRE</i></p>	

enumerators were to try to obtain the name and address of the operator, partially fill out a form 80-A1 (as above), and note in the "Remarks" section that the enumerator for the appropriate district or area should complete a form 80-A1 for the operation. Callbacks were to be made to places for which no report form could be completed on the first visit. (This normally occurred when the person having agricultural operations was absent.)

Review and edit—The crew leaders were immediately responsible for the quality of coverage and data collection in the census and carried out two reviews of their enumerators' work. The first was conducted as soon as possible after training and after each enumerator had begun his/her job. This review was primarily concerned with making certain that correct procedures were followed and the ED's were covered completely. The crew leaders checked each enumerator's address register and map, edited as many completed population and housing questionnaires as possible, and reviewed a one-in-five sample of the agriculture forms completed. (If there were fewer than 10 questionnaires, all were reviewed.) If corrections were necessary, the enumerator(s) involved were informed and, whenever necessary, retrained in the correct procedures.

The final review (when the enumerator turned in his or her completed assignment) involved a detailed check of the address register and map, to ensure that a report form had been filled out for each household, and a review of the agriculture questionnaires. This review was patterned on the first one; every fifth report form was thoroughly checked, unless there were fewer than 10 involved, in which case all were checked. The field edit was intended to identify and correct possible problems as soon as possible after they occurred, and to ensure that all appropriate items were completed and the data provided were legible. If forms were filled out incorrectly or data were missing, enumerators revisited the household concerned to complete the necessary information.

The crew leaders also conducted a coverage check of their districts, visiting and listing a sample of households before the enumeration got underway, and determining at the time of the review of the enumerator's work whether those households had been enumerated. This check, however, was principally concerned with the population and housing census.

Quality control—As crew leaders finished the final review of the report forms and address registers, the completed materials were forwarded to the census offices, where they were separated by type (agriculture, and population and housing) and were batched into work units, each consisting of the report forms from one or more ED's from one crew leader district.

DATA PROCESSING

Guam and Virgin Islands

The census of agriculture on Guam and in the Virgin Islands was completed by the late summer of 1978 and the report forms were shipped to the Bureau's headquarters in Suitland. There, Bureau employees edited the forms, withdrawing from further processing any that did not meet the Bureau's definition of a farm. The edit checked the forms for consistency and completeness, and adjusted errors in calculation, units of measure, inconsistencies, or misplaced entries on the basis of data available from the same report or from nearby operations of the same type.

After editing, the forms were shipped to the Bureau's Jeffersonville facility for processing. Later, the data were keyed to magnetic tape and transmitted for tabulation to the Bureau's central computer facility in the Suitland headquarters via data-link telephone transmission lines. While the computers were used to make the basic tabulations and cross-tabulations, they were not employed to reproduce the tables. Instead, the Agriculture Division's Outlying Areas Branch prepared and typed the tables, and posted the computer tabulations to them by hand. After table verification and review, the data were subjected to disclosure analysis and were released for printing in April 1980.

American Samoa and Northern Mariana Islands

Upon completion of the census of agriculture in American Samoa and the Northern Marianas, the report forms were sent to Suitland, where Bureau employees performed a further edit and hand-tabulated the materials. The tables were then prepared and typed, and the tabulations posted to the tables by hand. The tables for the Commonwealth of the Northern Mariana Islands were verified and the data released for publication in April 1981, while those for American Samoa were verified and released in the following July.

PUBLICATION PROGRAM

Data from the 1978 Census of Agriculture for the outlying areas were published in the reports of the *1978 Census of Agriculture, Volume 1, Area Reports, Part 53, Guam; 54, Virgin Islands; 55, American Samoa; and 56, The Northern Mariana Islands.* (No preliminary reports were published for any of the outlying areas.)

These four parts present data for farms and farm characteristics; land in farms and land use; size of farm; tenure and characteristics of the operator; amount harvested of fruits and nuts, vegetables, and field crops; selected machinery and equipment; and inventory of livestock and poultry and their products. Data on the value of sales of agricultural products and on selected farm expenditures are found in this volume also for the Virgin Islands and for Guam, but not for the Northern Mariana Islands and American Samoa.