

CHAPTER 9. 1974 Puerto Rico Census of Agriculture

Historical Background

A special census of the Puerto Rican population was conducted in 1899 after the conclusion of the Spanish-American War, but it was not until 1910 that the first census of agriculture was undertaken. Thereafter, censuses of agriculture were conducted in Puerto Rico every 10 years in conjunction with the decennial censuses. A special census of agriculture was conducted in Puerto Rico in 1935 by the Puerto Rican Reconstruction Administration.

Although earlier legislation had provided for a quinquennial census of agriculture in the United States (first taken in 1925), neither Puerto Rico nor any of the other outlying areas were included in the mid-decade agricultural censuses until 1964. In 1957 an amendment to Title 13, United States Code, provided in section 191(a) that "Each of the censuses authorized by this chapter (other than censuses of population) shall include each State, the District of Columbia, Alaska, Hawaii, the Virgin Islands, Guam, and the Commonwealth of Puerto Rico...." Thus the Commonwealth was included in a regular quinquennial census of agriculture for the first time in 1964. In 1970 the census of agriculture, covering the year 1969, was taken in conjunction with the decennial census of population and housing.

Legal Authority and Special Agreement With the Commonwealth Government

The conduct of the 1974 Puerto Rico Census of Agriculture was governed by the provisions of Title 13, United States Code, and the acts of the Legislature of Puerto Rico relating to censuses. A special agreement between the Bureau of the Census and the Government of the Commonwealth of Puerto Rico, signed in October 1974, specified the responsibilities and functions of the Bureau and of the Puerto Rican Government in taking the 1974 Census of Agriculture on that island. The Bureau of the Census had final responsibility for the planning and conduct of the census, including the operation of a temporary census office in Puerto Rico, the appointment of a Bureau staff member as supervisor of the census, the selection of personnel, and the maintenance of confidentiality under Title 13, U.S.C. The Government of Puerto Rico agreed to make qualified personnel available on a reimbursable basis to the Bureau of the Census for use as supervisors, crew leaders, etc., and to help publicize the enumeration and recruit the necessary field staff.

Definition of a Farm

For the 1974 Puerto Rico Census of Agriculture, a farm was

defined as (1) any place of 3 or more cuerdas¹ on which any agricultural production took place (except vegetables grown for home consumption only) or where any livestock or 15 or more poultry were kept at the time of the enumeration, or (2) a place of less than 3 cuerdas if at least \$100 worth of agricultural products were sold from it in the year before or during the year of the enumeration.

Planning and Preparatory Operations

Census Calendar

After the resumption of activities directed at conducting an agricultural enumeration for 1974 (see p. 8), representatives of the Bureau of the Census met with officials of the Commonwealth Government to make initial plans for the 1974 Puerto Rico Census of Agriculture. The following tentative schedule for census activities was drawn up:

1973

1. Plan the major census operations with the Agriculture Advisory Committee and Puerto Rican officials.
2. Prepare a memorandum of agreement between the Bureau of the Census and the Commonwealth of Puerto Rico regarding the conduct of the census.

1974

1. Prepare forms and instructions for the pretest.
2. Conduct the pretest.
3. Evaluate pretest results and revise form and instructions.
4. Prepare and print forms needed for the enumeration.

1975

1. Organize the Puerto Rican census office.
2. Conduct the enumeration.
3. Check in, format, edit, and correct the returns.
4. Ship returns to Data Preparation Division, Jeffersonville, Ind., for data-keying and processing after the field operations have been closed out.

¹ A cuerda is .97 acre.

5. Prepare specifications for computer processing and computer programs for formatting the records, checking them for consistency edit, correction, and tabulation.
6. Perform computer edits and correct records.
7. Tabulate the data.

1976

1. Publish the results of the enumeration.

This schedule was revised considerably as census operations proceeded.

Pretest

In an effort to make the 1974 Puerto Rico Census of Agriculture as effective as possible, Bureau of the Census officials arranged to conduct a pretest. A pretest is a useful tool for detecting and correcting problems that may affect the accuracy and efficiency of a census.

Beginning May 17, 1974, the pretest continued through June 24, 1974. The actual enumeration was done by 10 enumerators, each of whom worked for 7 days. The adjoining municipios of Las Piedras and Humacao, located at the eastern end of the island and near the temporary census office in San Juan, were selected for the pretest. These municipios contained 1,074 farms in 1969 (392 in Humacao and 682 in Las Piedras). Important considerations for the selection of two adjacent municipios, rather than scattered municipios throughout the island, included cost (i.e., funds available for pretesting) and the need for frequent telephone contact between Washington and San Juan. Each of the 10 barrios in these municipios was an enumeration district.

Two full-time members of the Bureau's regular staff supervised the pretest. Although these two were the only headquarters personnel to remain in Puerto Rico throughout the pretest, other staff members made short visits to the island to observe various aspects of the pretest.

Objectives and results. In conducting the Puerto Rico pretest, the Bureau of the Census had seven specific objectives, the conduct and results of which were as follows:

1. *Test questionnaires and survey materials.* Questionnaires were found to be well designed and easy to complete. However, the use of two report forms, a standard form 73X-A1(PR), for operations with annual sales of at least \$1,200, and a short form 73X-A2(PR), for operations with annual sales under that amount, was found to be time-consuming. Consequently, instead of using separate forms for large and small farms, the standard A1(PR) was used for all agricultural operations. This decision was endorsed by the Puerto Rican Planning Board. Other materials were tested and recommendations for their improvement were made.
2. *Test training methods and materials.* The two supervisors

trained the 10 enumerators (1 for each barrio) in a 2-day session in Las Piedras in June 1974. Training methods were considered satisfactory and only slight modifications were suggested.

3. *Evaluate the general quality of enumerators in Puerto Rico.* The quality of enumerators in Puerto Rico was determined to be sufficiently high. Only two of the 10 enumerator positions were filled by women, since such factors as travel through rural areas, night work, and rugged terrain influenced hiring procedures. The women obtained results as good as those obtained by male enumerators.
4. *Test listing and canvassing procedures.* There were 2,305 families listed and 280 agriculture schedules (64 A1 forms and 216 A2 forms) completed during the pretest. The A procedure, described below, for listing and canvassing was found to be excessively time-consuming. (In urbanized areas, a modified canvassing procedure, B, was used.) The enumerators listed each rural area house, together with the name of the head of each household, in each enumeration district. They were required to spot each farm and nonfarm house on the map and identify it with the line number from the listing book. These were time-consuming procedures, since in Puerto Rico the homes of many nonfarmers who commute to their jobs are concentrated in rural areas. Some enumerators worked more than a day without encountering even one farmer. Eventually this procedure was modified to allow enumerators to spot check built-up residential areas to locate farm operators rather than to make house-to-house canvasses. Enumerators were instructed to make inquiries as to whether anyone living in the built-up area might be operating a farm.
5. *Appraise recruiting problems.* Several recruiting problems surfaced during the pretest. The 1969 agriculture census in Puerto Rico was taken in conjunction with the decennial census in which school teachers were used as enumerators. Since this was not possible in 1974, other qualified persons had to be located and recruited.

Prior to the arrival in Puerto Rico of headquarters staff, the Census Bureau asked local officials to recruit applicants for enumerator positions; but, on arrival, the staff members were confronted with tasks they had expected to be completed. Applicants for enumerator positions in Las Piedras had to be contacted and provided with details about the test site and date. Pretest supervisors found no applicants at all awaiting testing in Humacao. Bureau officials enlisted the assistance of the mayor, the Department of Labor, the Soil Conservation Service, and the employment office in recruiting applicants; the mayor's office and the employment service provided the most helpful results. Sixty persons applied for 10 enumerator positions, and were screened through a competitive process that included a written test and personal interviews.

6. *Determine the usefulness of Puerto Rican tax assessment maps.* The use of tax assessment materials was determined to be impractical for the following reasons:

(a) The definitions of a farm for tax and census purposes differed; a farm is defined for tax purposes in terms of land value, while the census definition concerns land area and value of sales of products. Thus, it would have had to be determined whether individuals on tax assessment lists ought to be enumerated. This was complicated by the difficulties involved in locating individuals, since tax assessment lists included only the barrios, not the owners' mailing or street addresses. (b) The rapid turnover of farm owners causes lists to quickly become outdated. (c) Since many farm plots had been subdivided into house lots, enumerators searching for farmers on the tax list might have been seeking people who no longer owned land. (d) Assessment maps could not be correlated to the terrain of a specific area, making it very difficult, if not impossible, for enumerators to locate specific farms on them.

7. *Prepare for 1975.* Preparations for the census operation in 1975 were advanced: Arrangements to update maps of the entire island were made with the Highway Department and negotiations to recruit crew leaders were begun. The General Services Administration (GSA) office in Puerto Rico procured office space and arranged necessary services (e.g., telephone, electric, etc.) for the San Juan headquarters.

Conclusions. Although the pretest forms were not processed as the census forms would be, they were evaluated to determine whether there were problems that would require changes in vocabulary, format, and so forth.

A pretest is designed to pinpoint problems before the actual census is taken. Recommendations were made to: (1) streamline enumerators' procedures for reporting to supervisors, (2) substitute the enumeration of all households with the enumeration of farm households only, (3) simplify the explanation of the farm definition, and (4) expand publicity programs so farmers would expect enumerators to be visiting them. These suggestions, along with other experience gained during the pretest, provided a basis for further recommendations to improve census procedures. Pretest findings led to a number of modifications to procedures, some of which were described above.

There were a few minor changes in the A1 form as a result of pretest findings. Skip options for crops and livestock were added because only one form was used for all farms. The units for reporting certain crops were changed, and some clarification was added for a few items.

Field Organization and Training

The Bureau opened its central office for the agriculture enumeration in Puerto Rico on April 14, 1975. The Field Division had principal operational responsibility for the field enumeration, and two members of its regular staff were assigned to the Puerto Rico office as the census supervisor and

field supervisor. The Agriculture Division provided several other staff members for temporary assignment as technical advisors and reviewers for 2 to 16 weeks during the pretest, the enumeration, and the clerical processing. Space for the census office was provided by the General Services Administration (GSA) in its building in San Juan. Office desks and other equipment were provided by the GSA or rented locally, and three GSA automobiles were supplied to the census office for the duration of the operation.

Five regional census offices were also established in the municipios of Arecibo, Mayaguez, Ponce, Humacao, and Caguas. These offices were assigned space in the regional offices of the Puerto Rico Department of Agriculture, and staff members of that Department served as supervisory crew leaders for the enumeration. (The five census regions corresponded to the five agricultural regions of the Commonwealth and the supervisory crew leaders served as regional supervisors.)

Recruiting and training. The Commonwealth Government assisted the census operation by providing personnel from its Department of Agriculture to fill the five regional supervisor positions, by establishing test sites to recruit and test the enumeration staff, and by referring job applicants to the census staff for employment. Personnel on loan from the Government of Puerto Rico were paid their normal wages, as well as travel and per diem expenses. The Commonwealth Government was reimbursed for these expenses by the Bureau of the Census.

Recruiting for the field enumeration and office staffs began in January 1975. The Bureau's usual policy when recruiting was to hire crew leaders from the districts they were to supervise and let them hire their staff. (The assumption was that local people would have more complete knowledge of the area than would strangers and, hence, would be able to make a more complete enumeration.) For the 1974 enumeration, however, the staff was recruited on a competitive, islandwide basis, using applicants' test scores to determine who would be hired, in the hope that this would provide a more highly qualified staff than had heretofore been used.

In addition to the 5 supervisory crew leaders assigned from the Commonwealth's Department of Agriculture, 50 crew leaders and 504 enumerators were hired by late June. The census and field supervisors conducted the 3-day training session for the supervisory crew leaders on June 25, 26, and 27. The supervisory crew leaders then held 3-day training sessions for their crew leaders in the first week of July, and the crew leaders, upon completing their own training, conducted training classes for their enumerative staff. By July 11, the recruiting and training effort was complete and enumeration began.

Enumeration aids. The *Enumerator's Manual (A10(PR))* and the *Training Guide for Enumerators (A11(PR))* served as the basic instruction and training documents for the field staff. These materials identified the duties and responsibilities of the staff and described the procedures to follow to obtain the desired data. Enumerators were to carry their manual (and other materials) with them during the census taking and to consult it when problems arose.

Other instructional and training materials included the **Training Guide for Crew Leaders (A8(PR))** and **Crew Leader's Manual (A9(PR))**, which were prepared in English and translated into Spanish at Suitland.

To obtain as complete an enumeration as possible, enumerators were supplied with 1:15,000 scale maps of their assigned areas.² Crew leaders were provided with 1:30,000 scale maps of their districts and were also given lists of the large farms in their localities and were instructed to emphasize the complete enumeration of these places. These lists were assembled from records of the 1969 census and from lists supplied by various government agencies of the Commonwealth of Puerto Rico.

The timing of the enumeration. The Puerto Rico Census of Agriculture was originally scheduled to begin in June 1975, but was postponed until mid-July. This delay caused problems during the later stages of the operation, since many enumerators and crew leaders were college students and left the staff in August.

Publicity. News releases announcing the opening of the agriculture census office in San Juan were mailed from the Suitland office to 82 news outlets in Puerto Rico in April. The Bureau's Public Information Office (PIO) also shipped 40,000 special farm census flyers and 5,000 census posters (both in Spanish-language versions) to the San Juan office in April. All of the posters arrived, but only half of the flyers were received. The materials that did arrive, together with a specially prepared census fact sheet, were given to the Agricultural Extension Service, the Agricultural Experiment Station, the Farmers Association, and the Farmers Co-op Administration for distribution during the 2 or 3 weeks immediately preceding the census. Copies of the flyers were also given to the crew leaders and enumerators.

The San Juan office telephoned many of the media outlets initially contacted by the PIO, and prepared a newspaper article concerning the enumeration that was sent to everyone contacted. Television slides on the census operation were made available to local television stations to use in conjunction with announcements or stories concerning the enumeration. A local television personality interviewed the census and field supervisors and the supervisors held a news conference that was attended by about 10 local media representatives. Comments from the news conference were later heard on local radio and television broadcasts.

A request was made to the Governor's office that the first week of the enumeration be proclaimed the "Week of the Census of Agriculture." The proclamation was prepared, and responsibility for publicizing it was assumed by the census office. The media outlets were recontacted, but the office had

little success in obtaining significant action to publicize the Governor's proclamation.

Census office personnel felt the publicity campaign was reasonably successful, but that better results could have been attained if time had been available for personal visits to more of the major publicity sources, particularly the newspapers, which gave relatively little space to census activities, and if more of the publicity work had been done from the census office in San Juan, rather than from the Suitland headquarters.

The Enumeration

Taking the Census

The data-collection phase of the 1974 Puerto Rico Census of Agriculture was divided into two related operations: Collection and field edit (review of the forms in Puerto Rico for completeness and coverage).

Unlike the 1969 operation, which involved a partial mail enumeration, the 1974 census called for complete coverage by personal interview. The enumerators were assigned specific geographic areas (enumeration districts (ED's)) to canvass. Each enumerator's kit included a supply of form A1(PR) questionnaires (to be filled out for each farm operator interviewed); a map of the ED, which was to be updated and corrected as the operation proceeded; and a record book (form A3(PR)) for the ED being canvassed. The record book cover identified the enumerator and the supervisor; the ED, municipio, and barrio concerned (usually an ED encompassed one entire barrio, but not always); and the enumeration procedure code. (See below.) The record book contained forms A4(PR), List of Farms Without Resident Operators, to describe the size and location of farms in the ED that did not have resident operators, and forms A5(PR), to list the names of the heads of households in the ED.

In predominantly rural ED's, the canvassing was carried out using procedure A. Procedure A called for door-to-door canvassing except in built-up residential areas, called clusters, in which there were 50 or more dwellings with less than half a cuerda of land associated with each. The enumerator was not required to go door-to-door in clusters (identified on the ED maps), but was to inquire among the residents as to whether anyone operated a farm, and then enumerate the operators thus discovered. If an area not identified as a known cluster on the ED map met the criteria for a cluster, the enumerator outlined it on his map and assigned a cluster letter to it. The newly identified cluster was not canvassed until the crew leader reviewed the map or area and gave instructions on the procedure (door-to-door or spot-check) to be used.

The procedure B canvass was used in urban areas and in barrios where the number of farms reported in the 1969 census had been 10 or fewer. In procedure B, the names and addresses of farm operators, drawn from the 1969 census lists, were provided to the enumerator, who visited each address and conducted the census interview.

In both procedures, the enumerator began the interview by asking one or more screening questions to determine if the

² The maps issued to the field staff were prepared using U.S. Geological Survey quad maps updated by the Puerto Rican Highway Authority. Boundaries were taken from the 1969 maps, except for those of two municipios created since 1970; the boundaries of the new municipios were supplied by the Commonwealth Government. The maps were completed by May 9, 1975. A total of 45 crew leader maps and 872 enumerator maps, as well as several office maps, were supplied.

person interviewed was a farm operator. These screening questions for places of 3 cuerdas or more were:

1. Does this person or any member of this family operate any farm?
2. During the last 12 months did this person or any member of this family have
 - (a) 1 or more cattle?
 - (b) 1 or more pigs?
 - (c) 15 or more fowl?
3. During the last 12 months did this person or any member of this family
 - (a) Harvest any sugarcane, coffee, corn, taniers,³ beans, etc.?
 - (b) Harvest any vegetables for sale?
 - (c) Have any nursery or greenhouse products, ornamental plants or sod for sale?
 - (d) Harvest any fruits or nuts?

Places of less than 3 cuerdas qualified as farms if they produced or expected to produce \$100 or more of agricultural products for sale. If a place met the definition of a farm the enumerator proceeded with the interview.

When a place qualified as a farm but contained no housing unit, the enumerator listed it on the form A4(PR), List of Farms Without Resident Operators, in the address register, and gave it a new serial number, so that the listing of such operations had a separate set of consecutive numbers beginning with "1." Special prefixes were added to distinguish them from other serial number sets. These designators were keyed (i.e., were given numbers corresponding to those of the listing) to the lines on the A4(PR) relating to the farms in question. Enumerators consulted neighbors, or any other likely sources, to obtain the addresses of nonresident operators. If an operator lived in the same ED as that of the subject farm, the enumerator continued canvassing until the operation was listed. If the operator did not live in the same ED, the enumerator referred the case to the crew leader.

The crew leader, upon receiving the necessary information about a nonresident operator, filled out and mailed form A38, Informe de Fincas Que No Se Ha Podido Tomar la Información (Report for Farms for Which Information Could Not Be Taken) to the central census office. The A38 card contained all the necessary information on the location of the farm and the address of the farm operator and, upon its receipt, the central office informed the appropriate crew leader that a person in the ED operated a farm elsewhere and to have that operator enumerated. This procedure enabled the central office to coordinate and cross-reference such referrals to insure that coverage was as complete as possible.

Callback

When an enumerator found no one at home, the neighbors were contacted to find out if the household operated a farm. If no one in the household was engaged in agricultural operations, no callback was required. However, if this was not confirmed, the enumerator was to find out the best time to call back and note it in the appropriate column of the A5(PR) listing. Any additional information was included in the "Remarks" section. The enumerators were to call back as quickly as possible after the initial visit so as to avoid an accumulation of delayed work.

Field Review and Quality Control

The quality control plan for the 1974 enumeration was divided into two distinct operations: An observation period for enumerators and a field review of the completed work.

The observation phase involved the selection by each crew leader of the three enumerators who seemed least able to competently perform their duties. Observation periods were scheduled so that these three enumerators could be given on-the-job guidance by the crew leader covering any tasks that seemed to give them difficulty.

The other enumerators were given formal first reviews of their work early in the enumeration. These reviews covered all aspects of their work. Those who passed the first review continued working, while those that failed it were either retrained or released, depending on the nature of their problems.

A second review was made of all ED materials before they were accepted. Field checks were not done.

Supplementary Enumeration

While various local sources expected some decline in the total number of farms, the count obtained by the closing date (October 3, 1975) was nearly 25 percent below that of 1969. Since this drop was far more significant than expected, the Bureau undertook a study of two municipios, Yabucoa and (some time later) Comerío, to determine if an undercount had occurred.

Compilation of the mailing list and test mailings. The Bureau assembled an address list for the test mailout using lists from the 1969 agricultural census lists, the Puerto Rican Department of Agriculture farm lists, and other address lists provided by local farm associations and other sources. These lists were far from complete, since many farmers in Puerto Rico, particularly in rural areas such as Comerío municipio, had no more specific mailing addresses than general delivery. To address this problem, the Bureau contacted postmasters in the two test municipios and requested their assistance in delivering the questionnaires.

An abbreviated Spanish-language questionnaire, form A56(PR), was prepared and an initial mailing of 1,074 forms to farmers in Yabucoa municipio was made in the last week of January 1976 (500 of those forms were sent to the postmasters for general delivery). By the end of February, almost 200 farms

³ Taniers are root plants related to the potato. They have become an important crop in Puerto Rico in recent years.

containing nearly 3,000 cuerdas, that had not been enumerated in the regular census, had responded. The initial Comerío mailout of 542 A56(PR) forms was made in the third week of March (486 of these were sent to the postmasters for general delivery). By the end of April, over 250 additional farms not covered in the census had been enumerated by mail in Yabucoa municipio, and almost 50 unenumerated operations had been recovered in Comerío. These 300 or so farms contained approximately 6,000 cuerdas.

Supplementary enumeration mailout. The results of the test enumeration in Yabucoa and Comerío municipios appeared to justify a large-scale recovery operation. The Bureau decided to use the same techniques employed in its supplemental mail enumeration in 24 additional municipios for which 1974 farm counts or land in farms showed a drop of 24 percent or more. After the mailing and address lists had been unduplicated and made as complete as possible, approximately 1,000 A56(PR) questionnaires were mailed the second week of July. A second request was mailed to about 6,300 delinquent cases in the first week of August, and a third request was mailed to 4,335 nonrespondents in the first week of September. About 4,600 farms, representing over 215,000 cuerdas, were added to the census counts. The information collected was added to the tabulations for Puerto Rico.

Data Processing

General

The processing of the 1974 Puerto Rico Census of Agriculture included the following operations:

Operation	Dates
1. Clerical editing of report forms in Puerto Rico and Suitland	8/1/75-12/31/76
2. Data-keying and verification in Jeffersonville	10/1/75-11/1/75
3. Format and consistency edit by computer in Suitland	1/1/76-5/14/77
4. Technical review of format and consistency edit rejects in Suitland	3/24/77-5/1/77
5. Correction of data rejects in Suitland	4/1/77-5/14/77
6. Tabulation of results	5/15/77-8/31/77

These operations are described in greater detail below.

Editing and Tabulating

The report forms (initially reviewed at the field office) were shipped via air freight to Data Preparation Division, Jeffersonville, Ind., where they were reviewed for completeness and consistency and the data were keyed directly to disk and copied onto magnetic tapes using the key codes preprinted on the forms. (This was the same procedure used for the stateside reports. See ch. 4 for

details.) The data then were transmitted via datalink to the Census Bureau in Suitland for the execution of the format and consistency edit computer programs. The format edit program arrayed the data into a workable record format and carried out the checks for the following items:

1. Illegal items (data-keying errors)
2. Nonresponse to required items
3. Negative items (items reported or keyed as minus values)
4. Check-digit check (insure that each identification number was correct)
5. Out-of-scope records (for places that did not conform to the Bureau's definition of a farm)

Rejected data and out-of-scope records were then displayed for review and possible correction by the subject-matter specialists.

The specifications for the format and consistency edit were furnished in decision logic tables by the subject matter specialists. The consistency edit program—

1. Made consistency checks (a procedure involving computer checks to see whether the total of the data as reported was equal to the sum of the detail data).
2. Set flags (a procedure whereby the computer indicated that a particular piece of information was incorrect or inconsistent with other data elsewhere in the same farm record).
3. Imputed missing or incorrect entries using values derived from data supplied by the Puerto Rico Department of Agriculture and from local farm and marketing organizations.
4. Coded each record for size, by the number of cuerdas; for economic class, by the value of sales; for type of farm (whether dairy farm, sugarcane farm, etc.); and for tenure (whether the operator was a full owner, part owner, or tenant).

Upon completion of the first edit pass, a listing of flagged cases was printed. These cases were reviewed by subject-matter specialists and corrections were coded and keyed using the key-to-tape encoders, edited by the computer, and inserted into the data records on tape. These cases sometimes underwent several computer edits because, when a data item was flagged and corrected, related data items might be found to be inconsistent with the corrected data. Additional consistency edits were then required. Table layouts were furnished by the subject-matter specialists, and two sets of tabulations were made:

1. Data for all farms on the island
2. Data for all farms by municipio

These were cross-tabulated by type, class, size, and tenure of farms; age of the operator, etc., for farms classified in economic classes 1-6. (Those with total value of production of \$1,200 or more.)

Tables were reviewed in Suitland for consistency and accuracy, and corrections of major errors were carried to the data tapes; the final tables were produced as camera-ready copy and the reports were printed.

Comparability of the Data

Comparisons of the data from the 1974 census with data from previous censuses should be made only with an understanding of the differences in coverage for specified items.

For the 1974 census, data on facilities, equipment, work off the farm, and farm expenditures were requested of all farms. For 1969, data on farm expenditures and work off the farm were obtained for all farms, but information about facilities and equipment was asked only of operations with sales of more than

\$1,200. The 1964 data for all these items were asked of only one-fifth of farms with sales of less than \$1,200, and of all farms with larger sales.

Publication Program

The tables for the 1974 Puerto Rico Census of Agriculture were printed directly from the computer tape by the high-speed printer, the product of the printer then being used as camera copy. (For an explanation of this process, see ch. 6.) The final reports were published in English only; since the majority of users were bilingual or English-speaking, the extra convenience of a Spanish-language version did not justify the expenditure necessary to produce it.

The results of the census of Puerto Rico were published in **1974 Census of Agriculture, Volume I, State and County Data, Part 52**. No unpublished data for 1974 are available for Puerto Rico.