
APPENDIX A.

General Explanation

DATA COLLECTION

Method of Enumeration

As in the previous censuses of Guam, a direct enumeration procedure was used in the 2007 Census of Agriculture, and as in the 2002 Census of Agriculture, enumeration was based on a list of farm operators compiled by the Guam Department of Agriculture. The statistics in this report were collected from farm operators during the spring of 2008.

Each enumerator is an employee of the Department of Agriculture who has responsibility for specified enumeration districts. The enumerators contacted all persons or operations engaged in agriculture in their assigned area and completed a census report form for all farm operations that met the farm definition. If the person on the list was not operating a farm, the enumerator recorded whether the land had been sold or rented to someone else and was still being used for agriculture. If the land was sold or rented out, the enumerator got the name of the new operator and contacted that person, to ensure that he/she was included in the census.

Training Program

The project manager, crew leaders, and enumerators employed for the census in Guam received special training in accordance with instructions prepared by NASS. The training included practice in interviewing and filling out the report form and a detailed discussion of the enumerator's instructions.

Report Form

Prior to each agriculture census, the content of all census report forms is reviewed to eliminate inquiries no longer needed, to identify new items necessary to meet user needs, and to better describe the agricultural situation in Guam. Data requests are solicited from farm organizations, land-grant colleges and universities, State and Federal agencies, State Departments of Agriculture, agribusinesses, and other users. Each respondent is asked to identify and justify its specific data needs.

The report form for the 2007 Census of Agriculture for Guam was prepared by NASS, in cooperation with the Guam Department of Agriculture. Based on comments from the Guam Department of Agriculture (which coordinated review of the report form by data users in Guam), the content of the 2007 census report form remained almost unchanged from the previous census.

DATA PROCESSING

The processing of the 2007 Census of Agriculture for Guam was done by NASS. Each report form was reviewed and coded prior to data keying. Report forms not meeting the census farm definition were voided. The remaining report forms were examined for accuracy, consistency, and completeness. Reporting errors in computations, units of measures, data inconsistencies, and misplaced entries were corrected. Missing information was derived using reported data for similar type and size farms in nearby areas.

After all the report forms had been reviewed and coded, the data were keyed and subjected to a thorough computer edit. The edit performed comprehensive checks for consistency and reasonableness, corrected erroneous or inconsistent data, supplied missing data based on similar farms, and assigned farm classification codes necessary for tabulating the data. All substantial changes to the data generated by the computer edits were reviewed and verified by analysts. Inconsistencies were reviewed, corrected, and keyed to a correction file. The corrected data were then tabulated by the computer and reviewed by analysts.

Prior to publication, tabulated totals were reviewed by analysts to identify inconsistencies and potential coverage problems. Comparisons were made with previous census data, as well as other available data. The computer system provided the capability to review up-to-date tallies of all selected data items for various sets of criteria which included, but were not limited to, geographic levels, farm types, and sales levels. Data were examined for each set of criteria and a write-up (criticism) was produced for data that were inconsistent. Each criticism was then researched by examining individual data records contributing to the tabulated total. When necessary, data inconsistencies were resolved by carrying corrections to data records.

DEFINITIONS AND EXPLANATION

The following definitions and explanations relate to items that are in the tables. For an exact wording of the questions and instructions on the report form, see the report form in appendix B.

Crops. The report form contained individual inquiries for crops commonly grown and space to write in those less frequently produced. The information requested for 2007 included acres of crops harvested and pounds harvested for sale.

The units of measure for reporting quantities of some crops have varied from one census to another. The aim has been to permit reporting in the units of measure currently in use. The quantities harvested for each crop are expressed in the units of measure given on the 2007 report form.

Root crops. The land area from which individual root crops were harvested for sale was obtained in acres and tenths of acres. When two or more crops were harvested from the same land, the area was to be reported for each separate crop or planting. Total quantities of each crop harvested for sale were also reported.

Vegetables and melons. Land area for individual crops and the quantity harvested for sale for each crop were collected.

Fruits, nuts, and nursery crops. The total number of acres planted in bearing and nonbearing fruit and nut trees and plants was collected. For individual fruit or nut crops, data on the number of bearing and nonbearing trees and plants, and the quantity harvested for sale, were reported. For nursery crops, the land area harvested, both square feet under cover and acres in the open, was collected, along with the value of sales.

Equipment. The following types of equipment on the place at time of enumeration regardless of ownership, were reported if they were operable:

Automobiles. This includes all vehicles used primarily as passenger cars.

Mototrucks. This includes pickup trucks and truck-trailer combinations.

Tillers of all kinds. This includes all types of tillers used to prepare soil for planting.

Tractors. This includes all wheel and tracklaying (crawler) tractors and garden tractors.

Expenses. The 2007 report form contained questions on seven types of farm expenses incurred between January 1 and December 31, 2007, whether made by the farm operator, his/her landlord, or both. A farm operator who rented part of his/her land to others reported only the expenses on the land he/she operated.

Feed purchased for livestock, poultry, and fish. Expenses for feed for livestock, poultry, and fish include total cash payments made for pasture used, salt concentrates, mineral supplements, grain, hay, mill feeds, and any other items purchased for feeding livestock, poultry, and fish on the place. Expenses made for the grinding and mixing of feed and the estimated cost of items furnished to the operator by a landlord or others are also included. Payments made by a tenant to a landlord for feed grown on the tenant's farm are excluded.

Machine hire and customwork. Expenses for machine hire and customwork relate to tractor hire, plowing, and spraying. Any amount spent for the labor involved is considered to be part of the expense. The costs of hauling, trucking, or exchange work without pay are omitted.

Purchases of fertilizers and manure. These expenses include the total amount spent for manure and commercial fertilizers of all kinds for use on the farm.

Purchases of insecticides, fungicides, and herbicides. This item relates to total cash expenses for all chemicals, sprays, dusts, etc., used to control weeds, pests, insects, or disease on crops.

Purchases of livestock, poultry, and fish. This item includes all cash expenses for livestock, poultry, and fish purchased for the place. The cost of livestock and poultry bought and resold within 30 days is not included.

Seed cost. These expenses include all seed purchased for planting, as well as seedlings.

Wages and salaries paid to employees or hired farm workers. Expenses for hired farm labor include total cash payments made to family members and others for farm labor. Payments to persons supplied by a contractor or a cooperative organization and paid directly by them or by the person in charge are also included.

Farm operator. The term "operator" designates a person who operates a farm, either by doing the work himself/herself or by directly supervising the work. The operator may be the owner, a member of the owner's household, a hired manager, or a tenant, renter, or sharecropper. If the operator rents land to others or has land worked on shares by others, he/she is considered the operator only if the land is retained for his/her own operation. In the case of partnership, only one partner is counted as an operator. By definition, the number of operators is the same as the number of farms.

Farms or operators reporting. Figures for "farms reporting" or "operators reporting" represent the number of farms or operators reporting the specified item. The difference between the total number of farms and the number of farms reporting a particular item represents the number of farms not having that item.

Land in farms. The land in farms was determined from the answers to questions 1 through 4 in section 1 of the report form (see appendix B). The amounts of land reported as owned and reported as rented from others were added together, and the amount of land reported as rented to others was subtracted from that sum. The result represents "land in farms."

Land owned. This includes all land that the operator or his/her spouse held under title, purchased contract, homestead law, or as heir or trustee of an undivided estate at the time of enumeration.

Land rented from others. This includes not only land the operator rented or leased from others, but also land worked on shares for others or land occupied rent free.

Land rented to others. This includes all land that the operator rented to others and all land assigned to others on shares or rent free. For the most part, land rented to others represents agricultural land, but it also includes land rented for residential or other purposes. The tenant is considered to be the operator of land leased, rented, or worked on shares, even though his/her landlord may supervise the operations. The landlord is considered to be the operator of only that portion of the land not assigned to tenants.

Land use. Land in farms at the time of enumeration is categorized according to the way it was used between January 1 and December 31, 2007. The land is counted only once, even though it may have had more than one use during the year.

Cropland harvested. This refers to all land from which any crop was harvested. It also includes land in field crops that were grazed when mature or almost mature, and land in nonbearing fruit or nut trees and plants. Land from which two or more crops were harvested and which was also used for other purposes, either before or after the crops were harvested, was to be reported as cropland harvested without regard to the other uses.

Other cropland. This includes all cropland on the place that was used for pasture, and cropland on the place that was not used for crops or pasture. It includes land on which there was total crop failure due to hurricane, flood, drought, insects, fire, or other causes; cropland lying idle; and cropland planted with soil improvement grasses or other cover crops planted for improvement. It does not include land so hilly, rocky, or wet that the cost of improving it for cultivation would be more than the operator could pay. It does not include land in roads, streams, or swamps.

Pasture or grazing land. This refers to all land used for pasture or grazing, except cropland. It includes all woodland where livestock pastured or grazed. It does not include cropland, even though cattle or other livestock may have been grazed on it.

Woodland. This includes all land that is covered in woods or forests. It does not include woodland pasture.

Other land. This refers to all land not included in the other land use classifications, such as house and other building lots, lanes, roads, ditches, and land area of ponds and wasteland.

Livestock and poultry. Inventory data for livestock and poultry relate to the number on hand at the time of enumeration. All livestock and poultry were to be enumerated on the place where they were at the time of enumeration regardless of who owned them. Livestock on unfenced land were to be reported as being on the place identified as the headquarters of the person who had control over them.

Operator characteristics. Data were obtained to classify the operators according to the following seven characteristics:

Age of operator. Operators were classified by age into six groups. The average age was obtained by dividing the sum of the ages of all operators reporting by the number reporting.

Main occupation. If the operator devoted 50 percent or more of his/her work time to agricultural activities, his/her main occupation was considered to be agriculture, otherwise his/her occupation was considered to be nonagricultural.

Race of operator. The race, or national origin, of the operator was collected for the first time in 1993. Respondents were asked to choose between Chamorro, Chinese, Filipino, Japanese, White, or Other to describe their race or national origin.

Residence of operator. Operators were classified by residence according to whether or not they lived on the farms operated. Where all the land was rented from others or worked on shares for others, the dwelling was considered to be on the farm operated provided the dwelling he/she occupied was included in the rental agreement. In such cases, the dwelling was not necessarily on the land being operated. Similarly, an operator who did not live on the land being cultivated or grazed, but who had some agricultural operations (other than a home garden) at his/her dwelling, was considered to be living on the farm.

Sex of operator. Operators are classified as male or female.

Work off farm. The extent to which operators rely on nonfarm sources for part of their income is indicated by the number of days worked off the farm during the year. Work off the farm was defined to include work on someone else's farm for pay as well as all types of nonfarm jobs, businesses, and professions whether the work was done on the farm premises or elsewhere. Exchange work was not included.

Years on present farm. Operators were classified by years on present farm into four groups. These data were based on the question asking the year the operator began operation of the present farm or any part of it.

Value of products sold. Data for value of products sold were obtained for each group of crops or main type of livestock sold from the farm. Data were obtained for sales of field and forage crops, vegetables, fruits and nuts, nursery crops, poultry and poultry products, cattle and calves, hogs and pigs, fish and other aquaculture products, other livestock and livestock products and chicken eggs.

Farms by age of operator. Enumerators entered the operator's age, as of his/her last birthday, on the report form. The computer edit classified the operator's age into one of the following age groups:

Under 35 years	45 to 54 years	65 years and over
35 to 44 years	55 to 64 years	

Farms by size. All farms were classified by size on the basis of the total land area established in each farm. According to the census definition, a farm is essentially an operating unit, not an ownership tract. All land operated or managed by one person or partnership represents one farm. In the case of tenants, the land assigned to each tenant is considered a separate farm, even though the landlord may consider the entire landholding to be one unit rather than several separate units.

Farms by tenure of operator. In the 2007 census, all farms were classified by tenure of operator on the basis of data reported for land owned, rented from others, worked on shares for others, and managed for others. The same classification has been used since 1964. During processing operations, each report form was coded to indicate whether the operator was a full owner, part owner, or tenant.

Full owners. Operate only land they own

Part owners. Operate land they own and also land they rent from others

Tenants. Rent from others or work the land they operate on shares for others

Farms by value of agricultural products sold. All farms were classified on the basis of the total value of agricultural products sold. The total was obtained by adding the reported values of all products sold from the farm. The value of livestock, milk, poultry and eggs, fish, vegetables, fruits and nuts, all field crops, ornamental plants, and all other crops was obtained from the operator at the time of enumeration. The computer edit classified the value of agricultural products sold into one of the following groups:

Less than \$1,200	\$2,500 to \$4,999	\$7,500 to \$9,999
\$1,200 to \$2,499	\$5,000 to \$7,499	\$10,000 or more

RELIABILITY OF DATA

All data compiled in this report originated from a complete enumeration and, therefore, are not subject to sampling variability. However, the data are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; inability or unwillingness on the part of respondents to provide correct information; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, and estimation for missing or misreported data.

The accuracy of these tabulated data is determined by the joint effects of the various nonsampling errors. No direct measures of these effects have been obtained; however, precautionary steps were taken in all phases of data collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors.