

Guam is one of the territories collectively referred to as the “U.S. Outlying Areas”. For statistical purposes, it is recorded as a separate entity in the World Census of Agriculture Database (in the Oceania Region). Consequently, results related to the United States of America bear only upon the continental territory of the country.

1. HISTORICAL OUTLINE

The U.S. Bureau of the Census conducted the first Census of Agriculture (CA) in Guam in 1920, as part of the decennial Population and Housing Census (PHC) of that year. From 1930 through 1960, CAs continued to be carried out in conjunction with the decennial PHC program. Beginning in 1964, censuses on Guam were conducted as part of the quinquennial censuses of agriculture, and have been conducted on a five-year cycle for years ending in 2 and 7. The 2007 census is the fourteenth CA to be conducted for Guam.

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The CA is required by law under the Census of Agriculture Act of 1997, Public Law 105-113 (Title 7, United States Code, Section 2204g). The law directs the Secretary of Agriculture to conduct a census of agriculture every five years, covering the previous year.

The CA 2007 was conducted in accordance with a Memorandum of Understanding approved by the Administrator of the National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture (USDA), and by the Commissioner of Agriculture of Guam.

Institutional framework and international collaboration

The USDA/NASS is responsible for conducting the CA 2007. The CA 2007 was conducted with the cooperation and assistance of the Guam Department of Agriculture (DA). The NASS provided technical assistance at various levels, while the Guam DA was responsible for recruiting and training local officers and field staff and supervising local administrative matters. The census was funded by the United States federal budget.

Census staff

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

3. REFERENCE DATE AND PERIOD

Reference date: the day of enumeration, for inventory items such as livestock, machinery and equipment.

Reference period: the calendar year, from 1 January to 31 December 2007, for crop production, crop and livestock sales, expense data, etc.

4. ENUMERATION PERIOD:

The enumeration was conducted from January to July 2008.

5. SCOPE OF THE CENSUS AND DEFINITION OF THE STATISTICAL UNIT

The **census scope** covered agricultural activities (crop and livestock production). Information on capture fisheries and aquaculture activities carried out by the agricultural holdings was also collected.

The **statistical unit** was the farm (agricultural holding), defined as any place from which USD 1 000 or more of agricultural products produced and sold, or normally would have been sold, during the calendar year 2007. 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.

6. GEOGRAPHIC COVERAGE

The census covered the entire territory of Guam.

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

The 2007 CA in Guam covered “all places” from which USD 1 000 or more of agricultural products were produced and sold, or normally would have been sold, during the 12-month period between 1 January and 31 December 2007.

8. METHODOLOGY

Methodological modality for conducting the census

The classical approach was used in the 2007 CA.

Frame

The census frame consisted of a list of farm operators compiled by the Guam DA.

Complete and/or sample enumeration methods

The census was a complete enumeration of all farms from the frame, according to census scope.

Sample design (if sampling was used)

Not applicable.

Data collection method(s)

Face-to-face interviews were held and the information was collected in paper forms (PAPI method).

Questionnaire(s)

One questionnaire (report form) was used for the 2007 CA; it was prepared by the NASS, in cooperation with the Guam DA. The questionnaire covered 14 of the 16 core items recommended by FAO for the WCA 2010.¹

9. USE OF TECHNOLOGY

Optical Mark Recognition (OMR) was used to capture data from the questionnaires. The census results were disseminated online, through the USDA website.

10. DATA PROCESSING AND ARCHIVING

The processing of the CA 2007 for Guam was done by the NASS. Each report form was reviewed and coded prior to data keying. Report forms that did not meet the census farm definition were voided. Missing information was derived using reported data for similar farms (in terms of type and size) 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 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. When necessary, data inconsistencies were resolved by carrying out corrections to data records.

11. CENSUS DATA QUALITY

Quality checks included strict field supervision, clerical screening for farm activity, follow-up of non-respondents, keying and transmittal of completed report forms, computerized editing of inconsistent and missing data, review and correction of individual records referred from the computer edit, review and correction of tabulated data, and electronic data processing.

12. DATA DISSEMINATION

The final results of the 2007 CA were released in February 2009. The census report included methodological notes and the census questionnaire. The census report and thematic (“special”) studies are available on the NASS website.²

13. DATA SOURCES

United States Department of Agriculture, National Agricultural Statistics Service. 2009. *2007 Census of agriculture, Guam Island Data*, Volume 1, Geographic Area Series, Part 53. Washington, D.C., United States of America. (also available at https://www.nass.usda.gov/Publications/AgCensus/2007/Full_Report/Outlying_Areas/guam.pdf).

14. CONTACT

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¹ Two items were not included in the questionnaire: (i) “Presence of irrigation on the holding”; (ii) “Other economic production activities of the holding’s enterprise”.

² These census publications are available at https://www.nass.usda.gov/Publications/AgCensus/2007/Guide_to_Census_Products/

GUAM – CENSUS OF AGRICULTURE 2007 – MAIN RESULTS

NUMBER OF HOLDINGS AND AREA, BY LEGAL STATUS		
	Holdings	Area (ha)
Total	104	405
Individuals	87	n.a.
Partnership	10	n.a.
Corporation	7	n.a.

LAND TENURE		
	Holdings	Area (ha)
Total	104	405
Land owned	83	320
Land rented	25	85

DISTRIBUTION OF HOLDINGS BY LAND SIZE CLASSES		
	Holdings	Area (ha)
Total	104	405
Less than 0.40 ha	13	2
0.40–0.81 ha	27	18
0.81–1.62 ha	13	18
1.62–2.83 ha	15	33
2.83–3.64 ha	4	13
3.64–7.69 ha	15	84
7.69 ha and over	17	236

LAND USE		
	Holdings	Area (ha)
Total	104	405
Cropland	97	336
Permanent meadows and pastures	10	23
Woodland	5	21
Other land	50	24

HOLDERS, BY SEX AND AGE		Number
Total		104
Male		91
Female		13
Under 35 years		3
35–44 years		15
45–54 years		19
55–64 years		32
65 years and over		35

EMPLOYEES WORKING ON THE HOLDING		Number
Total		368
Paid labour force		232
Unpaid labour force		136

LIVESTOCK		
	Holdings	Head
Total holdings with livestock	n.a.	
Cattle	13	112
Goats	10	124
Pigs/swine	22	635
Equines	2	n.a.
Poultry (1 000 head)	n.a.	n.a.
Chickens	n.a.	0.5
Roosters and pullets	2	0.1

SOURCES OF IRRIGATION WATER		
	Holdings	Area irrigated (ha)
Holdings with irrigated land	96	229
River or stream	4	n.a.
Lake or private pond	1	n.a.
Public utility	89	n.a.
Other	2	n.a.

MACHINERY AND EQUIPMENT USED ON THE HOLDING		
	Holdings	Units
Total tractors of all kind	44	84
Other (machine-powered)	n.a.	
Motortrucks	96	143
Automobiles	48	61
Tillers (all kinds)	58	97

TEMPORARY CROPS HARVESTED		
	Holdings	Area (ha)
Total	n.a.	n.a.
Vegetables and melons	n.a.	n.a.
Bittermelons	17	11
Cantaloupes	5	5
Tomatoes	27	7
Watermelons	7	36
Other vegetables and melons	n.a.	85
Root/tuber crops	n.a.	n.a.
Cassava	7	2
Sweet potatoes	8	4
Taro	10	2
Yams	9	3

PERMANENT CROPS		Holdings
Total		n.a.
Tropical and subtropical fruits		n.a.
Avocados		16
Bananas		31
Breadfruits		14
Mangoes		15
Papayas		25
Pineapples		4
Guavas		7
Citrus fruits		n.a.
Grapefruits		4
Limon and limes		21
Oranges		4
Tangerines		12
Oilseed crops		n.a.
Coconuts		17
Other fruits, nuts, and tree crops		4
Nursery crops (including ornamental plants)		22