

1. HISTORICAL OUTLINE

The first decennial agricultural census in the Philippines was conducted in 1960, followed by censuses carried out in 1971, 1981, 1991 and 2002.¹ The 2012 Census of Agriculture and Fishery (CAF) is the sixth in a series of decennial agricultural censuses and the fifth in the series of decennial censuses of fisheries to be conducted in the country.

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The legal basis for the CAF 2012 was provided by:

- Commonwealth Act (CA) No. 591, which authorized the then-National Statistics Office (NSO) “to prepare for and undertake all censuses of population, agriculture, industry and commerce”.
- Executive Order (EO) No. 352 (Designation of Statistical Activities that will Generate Critical Data for Decision-Making of the Government and Private Sector), which provided for the conduct of a census of agriculture every ten years;

Institutional framework and international collaboration

The former National Statistics Office (NSO) was mandated to conduct agricultural censuses. The planning and preparation of the CAF 2012 started in 2009, through the creation of the Census Steering Committee (CSC) and Working Groups to provide overall directions for the CAF’s various activities. The NSO Administrator chaired the CSC. The 2012 CAF was funded by the Government of the Philippines.

Census staff

A total of 43 778 enumerators and 21 477 team supervisors were hired for the census fieldwork.

3. REFERENCE DATE AND PERIOD

Reference days:

- 31 March 2013, for inventory items such as number of livestock, and for data collected for establishment-based agriculture operations;
- the day of the interview, for the number of livestock (including poultry) in household-based agriculture operations.

Reference period: the calendar year (January to December 2012), for the land area of the holding, the number of parcels, land tenure and land use, crops, irrigation, aquaculture and fishery.

4. ENUMERATION PERIOD

The enumeration of household-based holdings was conducted from 25 February to 30 April 2013.

The CAF 2012 Establishment Questionnaires were distributed in April 2013 and retrieved by June 2013, together with other questionnaires of the 2012 Census of Philippine Business and Industry (CPBI).

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

The **census scope** covered agricultural (crop and animal production) activities, as well as aquaculture and fishing activities. The CAF 2012 for establishments constituted a rider to the CPBI 2012. A community survey was also conducted in all *barangays*.²

The **statistical units** of the CAF were agricultural holdings or farms, aquaculture farms (household-based and establishment-based), and units engaged in fishing activities (household-based and establishment-based).

The agricultural holding (farm) was defined as “any piece or pieces of land used wholly or partly for any agricultural activity, such as growing of crops, tending of livestock (including poultry) and other agricultural activities, and operated as one technical unit, by one person alone or with others, regardless of title, legal form, size or location”.

6. GEOGRAPHIC COVERAGE

The CAF 2012 covered the entire country, except for the municipalities of Baganga, Boston and Cateel in Davao Oriental, which were not covered because of the vast damage caused by Typhoon Pablo. Nevertheless, certain households located in these municipalities were enumerated in other municipalities, where they were temporarily relocated.

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

No thresholds were applied in the 2012 CAF. Holdings in government institutions were excluded from the census.

8. METHODOLOGY

Methodological modality for conducting the census

A modular approach was envisaged for the CAF 2012. A core module was carried out on a complete enumeration basis to provide key structural data and the frame for the supplementary modules. Along with the core census module, a community-based module was also administered in all *barangays*.

The CAF 2012 was supposed to conduct sample-based supplementary modules, which would collect more in-depth structural data on irrigation, cropping pattern, aquaculture and fisheries. However, because the former four statistical agencies transitioned into the Philippine Statistics Authority (PSA), these were not carried out.

¹ Censuses of agriculture were also conducted in 1903, 1918, 1939 and 1948 in conjunction with population censuses, although on a limited scale.

² The smallest administrative division in the Philippines, the *barangay* is the native Filipino term for a village, district or ward.

Frame

The census listing covered all households, to identify those with holdings operated by agricultural operators or by aquaculture and fishing operators. All establishments with agriculture, aquaculture and fisheries as their main kind of business or industry were also covered in the CAF 2012. These were the same establishments covered in the CPBI 2012.

Complete and/or sample enumeration methods

The CAF 2012 was conducted by complete enumeration.

Sample design (if sampling was used)

Not applicable.

Data collection methods

Two methods were used for data collection: (i) face-to-face interviews using paper questionnaires (the PAPI method), for data collection from all households for the core and community modules; and (ii) a self-administered paper questionnaire was used for establishments.

Questionnaire(s)

Five household-based questionnaires (forms),³ four establishment-based questionnaires⁴ and one a community module questionnaire (form 6)⁵ were designed and used for the CAF 2012.

The CAF questionnaires covered 15 of the core items recommended in the WCA 2010.⁶

9. USE OF TECHNOLOGY

Census results were disseminated and are accessible online. Microdata are available upon request.

10. DATA PROCESSING AND ARCHIVING

The Scan Stations and Data Entry Stations served as the processing centres for CAF 2012 machine processing. The activities performed in Scan Stations included receipt of questionnaires after manual processing, scanning of forms and maps, and interpretation of Optical Mark Recognition (OMR) data items. Anonymization was applied to the database.

11. CENSUS DATA QUALITY

Four pre-tests were carried out to examine the feasibility and cost-effectiveness of new and alternative field operations, enumeration procedures and questionnaire content.

A pilot census was conducted, providing the opportunity to test all aspects of the census operation in advance of the main census activities. This ensured the smooth operation and success of the census.

12. DATA DISSEMINATION

Census results were disseminated through printed publications and online. Special releases and reports, including statistical tables, were disseminated through the PSA's website.⁷ Access to microdata is available upon request.

13. DATA SOURCES

FAO. 2016. Regional Roundtable on the World Programme for the Census of Agriculture 2020 (WCA 2020). 19–23 September 2016, Bangkok, Thailand. In: *World Programme for the Census of Agriculture* [online]. Rome, Italy. [Cited 4 September 2019]. <http://www.fao.org/world-census-agriculture/events/wca2020bangkok/en/>

Philippine Statistics Authority. 2017. *Census of Agriculture and Fisheries, Agriculture 2012*. Manila, Republic of the Philippines. (also available at https://psa.gov.ph/sites/default/files/CAF2012Agri_Philippines.pdf).

Philippine Statistics Authority. 2019 *Open Stat* [online]. Manila, Republic of the Philippines. [Cited 5 September 2019]. <http://openstat.psa.gov.ph/>

14. CONTACT

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³ The following forms were designed and used for the CAF 2012: Form 1 – for listing the households; Form 2 – Household Roster (the CAF 2012 Form 2 questionnaire was designed to record the sociodemographic characteristics of all members of agriculture, aquaculture and fishing operators' households identified during the listing); Form 3 – Module for Agriculture; Form 4 – Module for Aquaculture; and Form 5 – Module for Fishing.

⁴ Form 24 – Agriculture Establishment (Growing of Crops); Form 25 – Agriculture Establishment (Livestock and Poultry Raising); Form 26 – Aquaculture Establishment; and Form 27 – Fishing Establishment.

⁵ For community-level data collection.

⁶ The core item that was not covered is: "Other economic production activities of the holding's enterprise".

⁷ See PSA's website at <https://psa.gov.ph/content/census-agriculture-and-fisheries-caf>

THE PHILIPPINES – 2012 CENSUS OF AGRICULTURE AND FISHERY – MAIN RESULTS

NUMBER OF HOLDINGS AND AREA, BY LEGAL STATUS		
	Holdings	Area (ha)
Total	5 563 138	7 271 446
Civil persons	5 557 998	6 861 993
An individual	5 512 501	6 786 935
Co-holder	45 497	75 059
Juridical persons	5 140	409 453

LAND TENURE		
	Holdings	Area (ha)
Total	5 563 138	7 271 446
Holdings operated under one tenure form	5 034 385	6 336 952
Fully owned/owner-like farms	3 452 564	4 366 075
Tenanted farms	814 309	1 071 114
Leased/rented farms	165 087	308 601
Rent-free farms	425 264	173 811
Other single forms of tenure of farm	177 161	417 351
Holdings operated under two or more tenure forms	528 753	934 494

LAND FRAGMENTATION		
	Holdings	Area (ha)
Total	5 563 138	7 271 446
1 parcel	3 903 857	3 750 991
2–3 parcels	1 520 737	2 803 316
4–5 parcels	113 628	465 873
6–9 parcels	22 716	166 095
10 parcels and over	2 200	85 169

DISTRIBUTION OF HOLDINGS BY LAND SIZE CLASSES		
	Holdings	Area (ha)
Total	5 563 138	7 271 446
Less than 0,500 ha	2 162 500	277 880
0,500–0,999 ha	1 000 183	594 806
1,000–2,999 ha	1 779 364	2 586 935
3,000–7,000 ha	520 796	2 123 794
7,001–9,999 ha	44 400	365 653
10,000–24,999 ha	50 199	662 624
25,000–49,999 ha	3 943	127 348
50,000 ha and over	1 753	532 406

LAND USE		
	Number of parcels	Area (ha)
Total	7 897 371	7 271 446
Agricultural land	5 658 232	6 913 189
Arable land	3 851 656	3 505 307
Land under temporary crops	3 832 329	3 474 036
Land under temporary meadows	8 754	14 548
Land temporarily fallow	10 573	16 722
Land under permanent crops	1 801 683	3 357 486
Permanent meadows and pastures	4 893	50 396
Forest and other wooded land	6 874	44 514
Land under livestock and poultry raising	69 526	59 101
Land under aquaculture	1 354	1 780
Other land	7 184	5 141
Homelot	2 154 201	247 721

MEMBERS OF HOLDER'S HOUSEHOLD, BY SEX	
	Number
Total	25 034 610
Engaged in agricultural activities on the holding	8 512 092
Aged 15 years and over	8 355 904
Aged 10 to 15 years	156 188

LIVESTOCK		
	Holdings	Head
Total holdings with livestock	n.a.	
Cattle	882 108	1 995 841
Buffaloes	1 160 889	1 790 681
Sheep	14 918	64 361
Goats	693 854	2 291 894
Pigs/swine	1 549 126	7 709 133
Horses	170 714	229 465
Poultry (1 000 head)	n.a.	n.a.
Chickens	4 590 716	146 585
Ducks	638 902	8 938
Other poultry	68 225	2 756
Other animals	7 485	
Insects		
Bees (hives)	2 721	n.a.
Silkworms	2 446	n.a.
Other worms or insects	3 883	n.a.

IRRIGATION BY LAND USE TYPES		
	Number of parcels	Area irrigated (ha)
Total	n.a.	n.a.
Land under temporary crops	1 791 171	1 555 668
Land under permanent crops	80 940	186 133
Land under temporary meadows and pastures	989	1 875
Land under permanent meadows and pastures	504	5 371

PERMANENT CROPS ¹		
	Number of parcels	Area (ha)
Total	n.a.	n.a.
Tropical and subtropical fruits	n.a.	n.a.
Bananas	249 444	214 413
Mangoes	36 394	41 849
Papayas	3 780	2 110
Nuts	n.a.	n.a.
Cashew nuts	3 377	3 892
Oilseed crops	n.a.	n.a.
Oil palms	2 909	34 087
Palm trees	747	5 648
Coconuts	941 232	1 480 928
Beverage crops and spice crops	n.a.	n.a.
Cocoa	24 067	17 278
Coffee	n.a.	27 675
Other permanent crops	n.a.	n.a.
Rubber	93 639	145 923
Abaca	49 924	52 173
Bamboo	2 786	2 545

¹ Data refer to permanent crops in compact plantations.