

1. HISTORICAL OUTLINE

The Census of Agriculture (CA) 2006/2007,¹ to which this metadata review and data refer, is the fourth CA conducted in Malawi. The first one was conducted in 1968/1969, the second in 1980/1981 and the third in 1991/1992.

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The CA was conducted under the authority of the National Statistics Act 1964, which defines the framework for the collection, compilation, analysis and dissemination of statistical information, including the conduct of population and agricultural censuses.

Institutional framework and international collaboration

The CA 2006/2007 was under the responsibility of the National Statistical Office (NSO), specifically its Agriculture and Natural Resources Statistics Division, and was conducted in collaboration with the Ministry of Agriculture and Food Security (MoAFS). The Norwegian Government provided the bulk of the funds. Statistics Norway provided technical assistance for the CA.

Census staff

Field data collection included approximately 600 enumerators, supervised by 60 district supervisors and ten national supervisors.

3. REFERENCE DATE AND PERIOD

Reference day: the day of the interview, for inventory items such as livestock numbers.

Reference periods:

- the 2007 crop year (from January to October 2007), for items such as production of crops, inputs for crops;
- the 12 preceding months (in relation to the date of data collection), for items such as the participation of household members in cooperative agricultural work or livestock disposed of; and
- the seven preceding days (in relation to the date of data collection), for food security items and income sources for food consumed.

4. ENUMERATION PERIOD

The data collection was carried out in several stages, from January to October 2007.²

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

The **census scope** covered agricultural activities (crop and livestock production).

The **statistical unit** was the agricultural production household (“agricultural household”).

6. GEOGRAPHIC COVERAGE

The census covered all rural and peri-urban areas.

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

The AC 2006/2007 did not cover agricultural holdings in the non-household sector.

8. METHODOLOGY

Methodological modality for conducting the census

The CA 2006/2007 was a sample-based census conducted in several stages: eight questionnaires were used for holding-level data collection. In addition, a village questionnaire was applied for community-level data collection (for more details, see “Questionnaire(s)” subsection below).

Frame

The Malawi Population and Housing Census (MPHC) 1998 provided the frame of EAs for the CA 2006/2007. The sampling frame of agricultural households was built on the basis of the listing of households from the sampled EAs.

Complete and/or sample enumeration methods

The CA 2006/2007 was conducted based on a sample enumeration.

¹ Originally, this was called the “National Census of Agriculture and Livestock” (NACAL).

² Data collection on food security took place during the months of January, June and September 2007, using modules 1 to 4, with the questions asked being almost identical in the three rounds. Data collection for the information on HIV/AIDS took place in June 2007. Data collection for the information from the other modules was undertaken during one of the three enumeration periods.

Sample design (if sampling was used)

A two-stage sample design was used, in which the PSUs were the EAs from the MPHIC. The SSUs were the agricultural households. The stratification was done to improve the precision of the estimates by reducing the variance between EAs and within individual EAs. The sample size at EA level was of 15 households.³ The total sample size was of 25 000 agricultural households nationwide.

Data collection method(s)

Face-to-face interviewing was applied to collect information from holders, using the traditional PAPI method. Objective measurement was applied to measure the areas of land parcels and plots.

Questionnaire(s)

The CA used a set of nine questionnaires (“modules”). Eight questionnaires were used for holding-level data collection: (1) Household Composition; (2) Land Parcels; (3) Plot Details (information on production and area); (4) Food Security and HIV/AIDS; (5) Marketing; (6) Welfare Monitoring Survey; (7) Livestock Survey; and (8) Estate Survey. The Village Facility Survey questionnaire was used to collect community-level data.

The CA questionnaires covered 12 of the 16 core items⁴ recommended for the WCA 2010 round.

9. USE OF TECHNOLOGY

Areas of land parcels and plots were measured using GPS. Scanning technology was applied for data capture. Census results were disseminated and are accessible online.

10. DATA PROCESSING AND ARCHIVING

Data entry was accomplished by scanning the questionnaires using the Eyes and Hands software. Data processing and analysis was done using SPSS.

11. CENSUS DATA QUALITY

There was an effort to reconcile the CA 2006/2007 data with the estimates from the MoAFS annual Agriculture Production Estimation Survey (APES); however, the APES estimates were significantly higher and the evaluation was inconclusive.

12. DATA DISSEMINATION

The results were published in April 2010 and are available online on the institution’s website.

13. DATA SOURCES

CountrySTAT. 2019. Food and agriculture data network. In: *CountrySTAT- Malawi* [online]. Rome, Italy. [Cited 6 September 2019]. <http://www.countrystat.org/home.aspx?c=MWI>

FAO. 2017. Regional Roundtable on the World Programme for the Census of Agriculture 2020 (WCA 2020). 18-22 September 2017, Nairobi, Kenya. In: *World Programme for the Census of Agriculture* [online]. Rome, Italy. [Cited 30 August 2019]. <http://www.fao.org/world-census-agriculture/events/wca2020kenya/en/>

National Statistics Office. 2010. *National Census of Agriculture and Livestock 2006/2007*. Lilongwe, Malawi. (also available at http://www.nsomalawi.mw/images/stories/data_on_line/agriculture/NACAL/Nacal%20Report.pdf).

14. CONTACT

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³ Each district was stratified by agro-ecological zones and each EA was stratified by land cultivated (small-scale farmers and large-scale farmers). Sampling of households was undertaken based upon the listing of households, four strata were identified (estate households, large-scale smallholders, small-scale smallholders and landless households). All estates were included in the AC, while landless households were not in the target population. Actual sampling was done among small-scale and large-scale smallholders. It was decided to select five large-scale and ten small-scale households from each EA. Where less than five large-scale households were found, the number of small-scale households sampled was increased correspondingly in order to achieve a total of 15 from each EA.

⁴ The following core items were not covered by the CA: (i) “Legal status of agricultural holder”; (ii) “Presence of aquaculture on the holding”; (iii) “Presence of forests and other woodland on the holding”; (iv) “Other economic production activities of the holding’s enterprise”.

MALAWI – CENSUS OF AGRICULTURE 2006/2007– MAIN RESULTS

| LAND TENURE | |
|----------------|------------------|
| | Holdings |
| Total | 2 665 565 |
| Customary land | 2 079 140 |
| Leasehold | 53 311 |
| Freehold | 506 457 |
| Public | 26 657 |

| LAND FRAGMENTATION | | |
|--------------------|------------------|-------------------|
| | Holdings | Number of parcels |
| Total | 2 665 565 | 7 686 111 |
| 1 parcel | n.a. | 3 689 333 |
| 2 parcels | n.a. | 2 536 417 |
| 3 parcels | n.a. | 922 333 |
| 4 parcels and over | n.a. | 538 028 |

| DISTRIBUTION OF HOLDINGS BY LAND SIZE CLASSES | |
|---|------------------|
| | Holdings |
| Total | 2 665 565 |
| Less than 0,100 ha | 133 278 |
| 0,100–0,199 ha | 186 590 |
| 0,200–0,499 ha | 693 047 |
| 0,500–0,999 ha | 932 948 |
| 1,000–1,999 ha | 506 457 |
| 2,000 ha and over | 213 245 |

| LIVESTOCK | |
|----------------------|-----------|
| | Head |
| Cattle | 884 132 |
| Sheep | 76 613 |
| Goats | 2 623 017 |
| Pigs/swine | 792 364 |
| Asses (donkeys) | 14 191 |
| Poultry (1 000 head) | n.a. |
| Chickens | 7 558 |
| Ducks | 429 |
| Turkeys | 61 |
| Guinea fowls | 282 |
| Other animals | |
| Rabbits | 167 501 |

| TEMPORARY CROPS HARVESTED | |
|---------------------------|-------------|
| | Area (ha) |
| Total | n.a. |
| Cereals | n.a. |
| Rice | 41 952 |
| Millet | 16 215 |
| Sorghum | 22 746 |
| Root/tuber crops | n.a. |
| Sweet potatoes | 46 122 |
| Irish potatoes | 7 026 |
| Cassava | 61 787 |
| Leguminous crops | n.a. |
| Ground beans | 9 367 |
| Pigeon peas | 13 795 |
| Cow peas | 6 138 |
| Beans | 11 559 |
| Oilseed crops | n.a. |
| Groundnuts | 143 081 |
| Soya beans | 33 720 |
| Sunflower | 4 681 |
| Other temporary crops | n.a. |
| Cotton | 45 162 |
| Tobacco | 64 895 |

| PERMANENT CROPS | |
|---------------------------------|------------------------|
| | Number of trees/plants |
| Total | n.a. |
| Tropical and subtropical fruits | n.a. |
| Mangoes | 10 688 |
| Papayas | 2 085 |
| Avocados | 1 014 |
| Guavas | 2 018 |
| Citrus fruits | n.a. |
| Oranges | 721 |
| Lemons | 393 |
| Tangerines | 406 |
| Pome fruits and stone fruits | n.a. |
| Peaches | 436 |