

## 1. HISTORICAL OUTLINE

The Census of Agriculture (CA) 2006/2007,<sup>1</sup> 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.<sup>2</sup>

## 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.

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

<sup>2</sup> 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.<sup>3</sup> 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 items<sup>4</sup> 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](http://www.nsomalawi.mw/images/stories/data_on_line/agriculture/NACAL/Nacal%20Report.pdf)).

**14. CONTACT**

National Statistical Office, Agriculture and Natural Resources Division

Address: P.O. BOX. 333, Zomba, Malawi

Telephone: (+265) 1524377 / 311

E-mail: [enquiries@statistics.gov.mw](mailto:enquiries@statistics.gov.mw)

Website: <http://www.nsomalawi.mw/>

<sup>3</sup> 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.

<sup>4</sup> 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
<b>Total</b>	<b>2 665 565</b>
Customary land	2 079 140
Leasehold	53 311
Freehold	506 457
Public	26 657

LAND FRAGMENTATION		
	Holdings	Number of parcels
<b>Total</b>	<b>2 665 565</b>	<b>7 686 111</b>
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
<b>Total</b>	<b>2 665 565</b>
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)
<b>Total</b>	<b>n.a.</b>
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
<b>Total</b>	<b>n.a.</b>
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