

### GHANA - CENSUS OF AGRICULTURE 2017/2018 - METADATA REVIEW

#### 1. Historical outline

The first Ghana Census of Agriculture (CA) was carried out in 1950, followed by the censuses conducted in 1964, 1970 and 1984. The metadata review and data presented here refers to the CA 2017/2018, the fifth agricultural census conducted in the country and the first to include agricultural institutions (holders that are juridical persons).

## 2. Legal basis and organization

#### Legal framework

The Statistical Service Law (PNDC Law 135) established the Ghana Statistical Service (GSS) in 1985. The law specifically empowers the GSS to conduct national censuses and surveys. The law makes it obligatory for all persons of institutions to provide data to GSS on request. The information collected by GSS is to be kept confidential and used only for statistical purposes. Field officers are under an oath of secrecy.

#### Institutional framework and international collaboration

The CA 2017/2018 was conducted by the GSS in collaboration with the Statistics Research & Information Directorate of the Ministry of Food and Agriculture (MoFA). The National Census Secretariat (NCS), under the authority of the GSS and MoFA, managed the CA 2017/2018. The NCS was composed of professional and technical staff of GSS and MoFA, as well as staff of other Ministries, Departments and Agencies. It was headed by the CA Project Director and supported by the CA National Coordinator from GSS and a deputy from MoFA. The Project Director was responsible for the overall implementation of the census programme while the coordinator and the deputy were responsible for the day-to-day implementation.

The Food and Agriculture Organisation (FAO), the World Bank (WB), the Government of the Netherlands, and the Department for International Development (DFID) of the United Kingdom provided financial and technical support, the Monitoring, Evaluation and Technical Support Services (METSS) of USAID logistical support to the CA 2017/18.

### Census staff

After the district level training, 4 914 field officers were selected. The field officers were constituted into 819 field teams of five enumerators and one supervisor and deployed to the field.

## 3. Reference date and period

**Reference day**: the day of the interview, for items such as structure of agricultural activities of a holder including holding location, purpose of production and livestock, etc.

**Reference period**: the cropping season from 1 March 2017 to 28 February 2018, for structure of agriculture and benchmark data on crops, livestock, aquaculture, and tree planting.

### 4. Enumeration period

The data collection for the core module was conducted from April to December 2018. The supplementary modules are planned to be collected during 2023.

### 5. Scope of the census and definition of the statistical unit

## Scope of the census

The **census scope** covered agricultural activities of a holder<sup>1</sup>. The census also covered non-traditional agriculture produce such as mushroom and beekeeping etc.

### Statistical unit

<sup>&</sup>lt;sup>1</sup> The agricultural activities covered the cultivation of arable crops, tree crops and forest trees, as well as livestock rearing, aquaculture and fish capturing.

The **statistical unit** for the CA 2017/2018 was the agricultural households and institutions (juridical persons) engaged in agriculture. An agricultural household is a household with at least one of its members engaged in agricultural activity. An agricultural institution (juridical person) is a non-household entity engaged in commercial or non-commercial agricultural activities.

## Community-level data

Community-level data were collected at the sub-district level along with census on the main type of agriculture activity, marketing of agriculture produce, presence of irrigation facilities, the availability of electricity, the socio-economic conditions, the soil types, the environment, and the occurrence of natural disasters using the community module questionnaire. <sup>2</sup>

## 6. Census coverage

## Geographic coverage

The census covered the entire country.

## Cut-off threshold and other exclusions

No threshold was used in the CA 2017/2018.

## 7. Methodology

# Methodological modality for conducting the census

Although the modular approach was planned for the CA 2017/2018, the supplementary modules could not be implemented due to financial constraints. Only the core module was conducted.

#### Relation to other censuses

The CA 2017/2018 adopted the 37 657 Enumeration Areas (EAs) created by GSS for the Population and Housing Census (PHC) 2010. These EAs have well-defined identifiable boundaries on maps and can be canvassed by an enumerator during the data collection period of a population census with an average of 150 households. During data collection for CA 2017/2018, the country was administratively divided into ten geographical regions and divided into 216 sub-regional administrative areas: 6 metropolitan, 57 municipal, and 153 district types. <sup>3</sup>

#### **Frames**

The census frame of the CA 2017/2018 was constituted by the EAs from the PHC 2010. All households and institutions engaged in agriculture were identified and enumerated. A listing exercise was conducted prior to the enumeration of agricultural households to identify all households and institutions engaged in agriculture.

### Complete or/and sample enumeration methods

The census was a complete enumeration of all agricultural households and institutions from the frame, according to the census scope.

## Sample design

No sampling was used.

## Data collection methods

The data collection method was face-to-face interviews with CAPI. The data collection was conducted in two phases: (i) Phase 1 involved the listing of all structures to identify all agricultural households and institutions engaged in agriculture; and (ii) Phase 2 consisted of the administration of the core and community modules and collected data on the characteristics of holders and holdings of individuals and

<sup>&</sup>lt;sup>2</sup> Data were also collected on basic infrastructure, such as schools and training centres, health facilities, social facilities, roads and natural resources of the community, among others.

<sup>&</sup>lt;sup>3</sup> Ghana is currently divided into 16 geographical regions and the regions divided into 260 sub-regional administrative areas: 6 metropolitan, 109 municipal, and 145 district types.

institutions, and their agricultural activities. The community level information was collected through focus group discussion using a structured pre-coded community questionnaire.

#### Questionnaire(s) and items covered

The CA 2017/2018 used four types of questionnaires for the core and community modules: (i) the listing questionnaire, used for listing all structures, households, and institutions in the country; (ii) the core module household questionnaire; (iii) core module institutional questionnaire; and (iv) the community module questionnaire.

The questionnaires covered 19 out of the 23 essential items recommended in the WCA 2020.4

## 8. Use of technology

The CAPI method through tablets was used to collect all the information for the census.

## 9. Data processing

The CA 2017/2018 used an electronic questionnaire where CAPI was used in the collection of data on households and institutions engaged in agricultural activities. Census and Survey Processing (CSPro) System software was used for data processing.

## 10. Quality assurance

All the four questionnaires were pre-tested and piloted during the development process to assess the suitability of the questions and instructions, the adequacy and completeness of the questions, the respondents' understanding of the questions, and the procedures and methods of the field work.

Appropriate procedures and controls were put in place during the data collection to ensure that data from the census were of high quality. The NCS constituted five groups of field monitors: (i) Steering Committee, (ii) Technical Committee, (iii) Data Processing/Information Technology team, (iv) Regional Management Committees, and (v) Independent monitors. The monitoring was accomplished using well-structured monitoring guidelines developed by the NCS. Each monitoring group visited areas assigned to them to ensure that: (a) all EAs were covered; (b) the publicity campaign was effective; (c) field logistics were adequate; (d) tablets were functioning; (e) data collection applications were updated regularly; and (f) supervisors were on the field with their enumerators and performing their assigned roles.

## 11. Data and metadata archiving

As of the date of the methodological report, the country is working on the data and metadata without a stipulated publication date.

## 12. Data reconciliation

Agricultural database was revised with the information from the CA 2017/2018

## 13. Dissemination of census results and microdata

The CA 2017/2018 final report was published in September 2020. The census report, which is available on the GSS website (<a href="https://statsghana.gov.gh/index.php">https://statsghana.gov.gh/index.php</a>), included methodological notes, census results and the census questionnaires. External user access to CA microdata has not yet been provided as regional and district reports have not been published.

### 14. Data sources

**Ghana Statistical Service, Republic of Ghana.** 2020. National Report, 2017/2018 Ghana Census of Agriculture. Accra, Ghana, September 2020. (also available at <a href="https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/Final%20Report%2011%2011%202020%20printed%20version.pdf">https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/Final%20Report%2011%2011%202020%20printed%20version.pdf</a>)

<sup>&</sup>lt;sup>4</sup> The following essential items were not covered: (i) 0406 Area of productive and non-productive permanent crops in compact plantation (for each permanent crop type); (ii) 0407 Number of permanent tree crops in scattered plantings (for each tree crop); (iii) 0411 Use of each type of fertilizer; and (iv) 0503 Number of female breeding animals.

**FAO**. 2019. Twenty-Sixth Session of the African Commission on Agricultural Statistics. 4 – 8 November 2019, Libreville, Gabon. In: GHANA's Experiences in the Preparation and Implementation of the WCA 2020 (RAF-AFCAS-19-E-63). <a href="http://www.fao.org/3/ca6708en/ca6708en.pdf">http://www.fao.org/3/ca6708en/ca6708en.pdf</a>

## 15. Contact

Ghana Statistical Service Head Office, P. O. Box GP 1098, Head Office Building Finance Close, Accra, Ghana Telephone: +233-302-682661

Email: <a href="mailto:info@statsghana.gov.gh">info@statsghana.gov.gh</a> Website: <a href="mailto:https://statsghana.gov.gh/">https://statsghana.gov.gh/</a>