Food and Agriculture Organization of the United Nations

GUINEA – NATIONAL CENSUS OF AGRICULTURE AND LIVESTOCK 2020-2022 – METADATA REVIEW

1. Historical outline

The first Agricultural Census was undertaken in Guinea in 1988/1989, and the second in 2000/2001. The metadata review and data presented here refer to the National Census of Agriculture and Livestock (NCAL) conducted in 2020-2022.

2. Legal basis and organization

Legal framework

The NCAL 2020-2022 was conducted under the authority of the Presidential Decree D/2020/288/PRG/SGG of 18 November 2020 organizing the NCAL.

Institutional framework and international collaboration

The NCAL 2020-2022 was implemented by the National Agency of Agricultural and Food Statistics (ANASA) under the Ministry of Agriculture and Livestock, in collaboration with the Ministry of Fisheries, Aquaculture and Maritime Economy, the Ministry of Environment, Water and Forests, and the National Institute of Statistics (INS). Within the framework of the NCAL, the following bodies were created:

- National Steering Committee (CNP/NCAL), political support structure for the NCAL;
- Technical Committee (CT/NCAL), technical and results validation body for NCAL;
- National Coordination of the Project and Central Bureau of the Census (BC/NCAL), national executing body of the NCAL;
- Regional Committees (CR/NCAL), regional structures for the implementation and monitoring of the NCAL; and
- Prefectural Committees (CP/NCAL), prefectural structures for implementing and monitoring the NCAL.

Funds were received from the World Bank through the Integrated Agricultural Development Project of Guinea (PDAIG). FAO provided funding and technical support for the preparatory phase of the NCAL in 2017/2018 and the French Development Agency (AFD) for the establishment of a permanent system of agricultural statistics. The Agricultural and Land Statistical Support Program (ASAF) provided funds for certain aspects of the NCAL, such as training and technical assistance provided by the French Society for Studies and Consulting (SOFRECO) contracted by AFD.

Census staff

The census staff included four trainers of trainers, 48 trainers of field staff, 80 team leaders, 800 enumerators, 16 regional supervisors, 12 digital supervisors, and 38 prefectural supervisors.

3. Reference date and period

Reference day: the day of the interview, for number of livestock.

Reference periods:

- the calendar year 2020, for machinery and equipment, building facilities, fishing and aquaculture, forestry; and
- the agriculture campaign 2019/2020, for crops

4. Enumeration period

The fieldwork for the core module was carried out from May to December 2021 with an interruption from 5 September to 30 October 2021. The field data collection of the supplementary thematic modules was planned between 2022 and 2023. Census preparatory activities resumed in 2020 with funding from World Bank and AFD. Preparation activities were expected to re-start in March 2020 by updating the census methodology and instruments aiming for enumeration in September 2020. Due to the COVID-19 pandemic, the signature of the agreement with AFD was delayed. With the state of emergency in the country, the government reprogrammed census activities. The pandemic delayed the deployment of experts in the field. However, the ANASA moved forward on the finalization of administrative and

technical documents (methodology, questionnaires, data collection schedule, training manuals, etc.) and procurement of equipment.

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

The **census scope** covered agricultural activities (crop and animal production), fishing and aquaculture and forestry.

The **statistical units** were family agro-pastoral holdings and modern holdings. The latter were classified as operated by: (i) a natural person; or (ii) a juridical person.

Community-level data

Community-level data were collected in the NCAL 2020-2022. The questionnaire was designed to collect village-level data.

6. Census coverage

Geographic coverage

The NCAL 2020-2022 covered rural areas, the peri-urban area of Conakry and towns in administrative regions.

Cut-off threshold and other exclusions

The scope of the operation only concerned areas of mainly crop-based agricultural production.

7. Methodology

Methodological modality for conducting the census

The modular approach was implemented in the NCAL 2020-2022. The NCAL was composed of a core module and three thematic modules on agriculture-forestry, livestock, fisheries and aquaculture.

Relation to other censuses

The NCAL data collection for the core module was carried out using the enumeration areas (EA) prepared for the General Housing Population Census (GHPC) that took place in 2014. The NCAL 2020-2022 used the AE and the cartography material of the GHPC for the recognition of the EA boundaries, the names of the localities belonging to the EA, and the access roads of the EA.

Frames

The frame used for the core module was the list of EAs from the GHPC 2014. It was composed of 9 679 EA, of which 6 960 were from rural areas and 2 719 from urban areas. The average size of EAs was 186 households in urban areas and 140 households in rural areas. The information collected in the core module was used as a sampling frame for the supplementary and thematic modules.

Complete or/and sample enumeration methods

The NCAL 2020-2022 used a combination of complete and sample enumeration. The core module was collected using complete enumeration, while data for the thematic and supplementary modules referred to agriculture-forestry, livestock, fisheries and aquaculture were collected using sample enumeration.

Sample design (if sampling was used)

The sample for the thematic and supplementary modules allows prefectural level representativeness. The thematic modules carried out were those related to agriculture: one on the production of rainfed crops and the other on the production of fruit crops. The design adopted in both modules was a two-stage probability sampling with first-stage units stratified using 33 prefectures as strata in which the aim was to obtain significant estimates for important variables, For the module on rainfed crops, the first-stage sampling frame was made up of 7 084 EA containing 1 117 470 households practicing rainfed crops cultivation. The estimated sample size was 13 200 agricultural households at the national level, corresponding to a first-stage sample of 1 320 EA, allocated proportionally in each stratum. The sample was drawn in each prefecture using systematic sampling in the first stage ensuring implicit stratification urban-rural and using simple random sampling in the second stage. In the module on production of fruit crops, the first stage sampling frame was made up of 7 509 EA containing 965 504 households. The

first stage sample size was 1 157 EAs and the second stage sample size was 11 570 households practicing fruit crop cultivation.

Data collection methods

In the NCAL 2020-2022, data was collected using tablets with Survey Solution software through the CAPI method.

Questionnaire(s) and items covered

Two questionnaires were used to collect data for the core module: (i) the household sector agro-pastoral holdings questionnaire[1]; and (ii) the modern holdings questionnaire. Three questionnaires were used to collect data for the supplementary thematic modules: (i) the agriculture-forestry module questionnaire; (ii) the livestock module questionnaire; and (iii) the fisheries/aquaculture module questionnaire. The questionnaire for the core module covered 14 out of 23 essential items recommended in the WCA 2020[2].

A community survey questionnaire was used to collect data at the village level related to basic infrastructure (roads, water, and electricity), schools, heath and socio-economic infrastructure, and natural resources, etc.

8. Use of technology

CAPI was used for field data collection using tablets with Survey Solution software. The CAPI paradata including geo-localisation information was used to monitor the data collection in the field and for data processing, analysis and dissemination phases for the improvement of data quality in the agricultural sector.

9. Data processing

Direct data capture was ensured by the CAPI method. Data was transferred in real-time to the Survey Solution server platform in the cloud. Data was then transferred to a local server in Guinea using a computer program developed to automate, organize and facilitate the operation. Data was temporarily stored for analysis, processing, correction if necessary, and validation for transfer to the final database. SPSS and STATA software were used to process the data sent to the server.

10. Quality assurance

A pre-testing of data collection instruments was conducted to: (i) test the organizational collection mechanism and the various questionnaires developed; and (ii) evaluate the duration of fieldwork. Several teams of supervisors were trained for the supervision of data collection activities in the field. Prefectural and regional supervisors performed supervision in the field twice a month. Digital supervisors tracked data daily and edited inconsistencies to be sent back for corrections. There were also spontaneous missions of the Coordination of the NCAL led by the members of the Central Bureau of the Census. These teams went into the field once a month throughout the territory. During these supervision missions, the teams focused on the following aspects: (i) the precision of the response; (ii) response rate and respondent behavior; (iii) accuracy of interviews; (iv) accuracy in filling out questionnaires; and (v) data quality and risk assessment.

11. Data and metadata archiving

ANASA published aggregated datasets on the open data platform. The aggregated tables relating to the NCAL were loaded on this platform and are accessible from its website and that of the Ministry of Agriculture. Metadata was archived in formats based on the Data Documentation Initiative (DDI) and the Dublin Core Initiative (DC), both defined in XML.

[1] The questionnaire for the agro-pastoral family holdings collect data for all households in an EA using one questionnaire for the EA and not for each holding. The information collected is limited, in most cases with a yes-no answer, and only 3 or 4 essential items were covered.

[2] The following essential items were not covered: (i) 0107 Main purpose of production of the holding; (ii) 0201 Total area of holding; (iii) 0202 Area of holding according to land use types; (iv) 0203 Area of holding according to land tenure types; (v) 0407 Number of permanent crop trees in scattered plantings; (vi) 0501 Type of livestock system; (vii) 0601 Use of agricultural pesticides; (viii) 0901 Whether working on the holding is the main activity; and (ix) 0902 Working time on the holding.

12. Data reconciliation

There was no reconciliation process of NCAL 2020-2022 data.

13. Dissemination of census results and microdata

During the fifth phase of the NCAL, a modern system for archiving will be developed and results will be disseminated using a web platform. Results for data collected in the core module will be disseminated at all administrative levels (national, regional, prefectural, municipal, etc.) and for the four natural regions (Maritime Guinea, Middle Guinea, Upper Guinea, and Forested Guinea). The data from the core module was disseminated through regional and prefectural workshops and through a data portal available at https://guinea.opendataforafrica.org/tfrtrng/resultats-du-rnae-2020-2022.

14. Data sources

Ministry of Agriculture and Livestock (MAL). 2021*. Note technique sur la méthodologie générale du RNAE 2020-2022*. Conakry, Guinea, April 2021.

Ministry of Agriculture and Livestock (MAL). 2022*. Rapport Global de la supervision nationale du RNAE 2020-2022*. Conakry, Guinea, January 2022.

15. Contact

Ministry of Agriculture and Livestock, National Agency of Agriculture and Food Statistics.
Address: Rue du Commerce, Almamya, Commune de Kaloum, Conakry, Guinea
Telephone: +224 625486948/620405824
E-mail: contact@anasa.gov.gn; info@anasa.gov.gn
Website: www.anasa.gov.gn