



ANGOLA – AGRICULTURAL AND FISHERIES CENSUS 2019/2020 – METADATA REVIEW

1. Historical outline

The Agricultural and Fisheries Census 2019/2020 (AFC) was the first census conducted in the country. During the colonial period from the early 1960s to years 1970s before the independence, a census was carried out in 1964-1965—1967-1968 and, on a regular basis, national agricultural surveys through the Agricultural Investigation Mission.

2. Legal basis and organization

Legal framework

The legal basis for the AFC 2019/2020 was provided by:

- Article No. 12 of Law No. 3/11 of 14 January 2011, and article 3 of Decree No. 27/17 of 22 February 2017, which stated the National Statistical Institute (INE) as the body of the National Statistical System that exercises the competence to produce all official statistics in the country, and in accordance with this legislation and with the National Strategy for the Development of Statistics in Angola (ENDE 2015/2025), INE is responsible for coordinating the country's official statistical activity, which includes the AFC 2019/2020;
- Article No. 25 of Presidential Decree No. 100/14 of 9 May 2014, that established the competence of the Studies, Planning and Statistics Office (GEPE) of the Ministry of Agriculture and Fisheries (MINAGRIP) to guide and coordinate the administrative activity of agriculture and forestry;
- Article No. 16 of Presidential Decree No. 92/14 of 25 April 2014, that established the competence of GEPE of the Ministry of Fisheries and the Sea (MINPESMAR) to guide and coordinate the fishing administrative activity; and
- Presidential Decrees No. 189/18 of 7 August 2018, and No. 194/18, of 20 August 2018, that established the norms and provided the legal framework for conducting the AFC and created the AFC bodies, both at central level and at provincial and municipal level.

Institutional framework and international collaboration

The Central Office of the AFC (GCRAPP) from INE coordinated the census and through the commissions that composed it, implemented all the activities of the census. The GCRAPP was headed by the general coordinator and three deputy general coordinators from INE, GEPE of MINAGRIP, and GEPE of MINPESMAR. After the merger of the MINAGRIP with the MINPESMAR, only one deputy general coordinator was left for the Ministry of Agriculture and Fisheries and one deputy general coordinator for INE. FAO provided technical assistance through technical Cooperation Programme and unilateral trust fund projects to the general and the technical coordination for the implementation of census activities and the preparation of five volumes for the final results. The AFC 2019/2020 was financially supported by the World Bank on the basis of bilateral agreements.

Census staff

The census involved 30 subject matter specialists, 25 IT specialists, five cartographers, 32 provincial supervisors, 27 provincial IT specialists, 32 provincial cartographers, 142 team supervisors, 686 enumerators, and 81 communication and awareness staff. The technical commission was coordinated by a technical coordinator, assisted by two deputy technical coordinators.

3. Reference date and period

Reference day: the day of the interview, for livestock, machinery and equipment.

Reference period: the last 12 months preceding the day of the interview, for crops, land use, labour force, fisheries and aquaculture, food insecurity, irrigation, fertilizers, and pesticides.

4. Enumeration period

The AFC fieldwork was conducted from August 2020 to October 2021. Due to the COVID-19 pandemic, Angola declared a state of emergency in March 2020 and all activities that required grouping people were suspended. Training activities resumed in July 2020. The first phase of fieldwork involved the listing of enterprises that was carried out from September to November 2020, and the listing of holdings

and community (*aldeias*) survey in August-October 2020. The second phase (enumeration of holdings in the household sector), which was expected to take place from December 2020, was postponed again to March 2021 and ended in July 2021. The enumeration of the non-household sector took place in August-October 2021.

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

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

The **statistical unit** was the agricultural holding, defined as an economic unit of agricultural production subject to a single management that includes all the land totally or partially dedicated to agricultural purposes and all the animals kept therein, regardless of the title of ownership, legal form or size. Sole management can be exercised by one person, a household, jointly by two or more persons or households, by a clan or a tribe, or by a legal entity such as a company, a cooperative or a public production unit. Holding lands may consist of one or more parcels (*lavras*), located in one or more separate areas or in one or more territorial or administrative divisions, provided that the parcels share the same means of production such as labour, agricultural infrastructure, machinery, or draft animals.

Community-level data

A community survey was conducted during the listing. Data was collected from August to October 2020 at the village level (*aldeias*) regarding the existence of basic infrastructure and access to social services and support for production and marketing, occurrence of external extreme meteorological phenomena in the village, main constraints or difficulties related to the production, sale and commercialization of agriculture and fishing products, as well as the existence of field schools (ECAs).

6. Census coverage

Geographic coverage

The census covered the entire country.

Cut-off threshold and other exclusions

No threshold was used in the AFC 2019/2020.

7. Methodology

Methodological modality for conducting the census

Although the modular approach was planned for the AFC, supplementary modules on plant and animal production survey; fisheries and aquaculture survey; and forestry and environment survey could not be implemented because of logistic challenges, budget constraints, and delays caused by Covid-19. Only the core module was conducted. The country is implementing agricultural surveys under the FAO 50x2030 initiative, where some of the items foreseen for the supplementary modules are expected to be collected.

Relation to other censuses

The Population and Household Census 2014 included questions intended to provide an adequate sampling frame for the agricultural census and other agricultural surveys. However, this frame was outdated by 2020; several primary sampling units in the rural sector (villages or *aldeias*) had ceased to exist, and new units had emerged. In order to provide a complete coverage of agricultural activities, it was necessary to conduct a listing operation from August to October 2020.

Frames

The list of villages was out of date in 2020. Therefore, the list of all villages in the country was updated so that it was complete and has no omissions or duplications. This operation was conducted in close coordination with municipal coordinators and cartographers from INE. The enumeration areas (census sections -CS- in urban areas or villages in the rural areas) chosen for the sample were listed in the field and a series of filter questions were asked during the interview to determine eligibility (i.e., only those households with agricultural, forestry¹, fisheries, and aquaculture activities and not covered by the list

¹ Cultivated forestry or agro-forestry activities.

of enterprises were eligible). Farm households on the enterprise list were not eligible. Regarding holdings in the non-household sector, the frame was the list provided by the business register of INE, as well as information obtained from the Ministry of Agriculture, the Ministry of Fisheries, and other sources such as provincial association cooperatives.

Complete or/and sample enumeration methods

The AFC 2019/2020 used a combination of complete and sample enumeration. For holdings in the non-household sector and for villages in the community survey, a complete enumeration was used. Data for holdings in the household sector was collected through sample enumeration.

Sample design

A two-stage stratified sample design was used for holdings in the household sector. In the first stage, the enumeration areas (villages/CS in rural/urban areas) stratified into 164 municipalities, were selected using systematic sampling with probability proportional to the number of producing households. In the second stage, 20 households were selected from the selected village/CS, using systematic sampling. A total of 62 191 households were selected to produce reliable estimates for each of the 164 strata. Post-stratification adjustment was applied to calibrate weights, after non-response adjustments.

Data collection methods

In the AFC 2019/2020, data was collected through the CAPI method using tablets with Survey Solution software.

Questionnaire(s) and items covered

The AFC 2019/2020 used four types of questionnaires: (i) the listing questionnaire; (ii) the core module holdings in the household sector questionnaire; (iii) core module holdings in the non-household sector questionnaire; and (iv) the community module questionnaire.

The questionnaires covered 21 out of 23 essential items recommended in the WCA 2020.²

8. Use of technology

CAPI was used for field data collection. Global Positioning System (GPS) devices were used for measuring agricultural areas in six out of the 20 sampled holdings and geo-referencing producer households. Census results were disseminated online.

9. Data processing

The CAPI method ensured direct data capture through Survey Solutions. For the data processing and analysis phase, different teams of technicians were created. The data processing team encoded, recoded, edited, imputed, validated, and tabulated data. During this phase, checks and corrections of sampling weights were also made to ensure representativeness and good quality estimates. At this stage, calculations of sampling error and additional analyses were also carried out. The result analysis team analysed produced tables and prepared preliminary reports for the technical coordination after revision by FAO consultants. This analysis team worked closely with the data processing team under the guidance of the methodology and training subcommittee and the FAO consultants. The editing, correction, and validation team edited and corrected the documents and delivered the final reports to the technical coordination for validation. The software used were R for sample design and creation of real time platforms, and SPSS and Excel for data processing and analysis.

10. Quality assurance

Several actions were taken to ensure quality in the census. A World Bank supervision mission was carried out in October 2018 and the methodologies for conducting various components of the census were confirmed. A pilot census was conducted during January and February 2019. During January 2019, a joint mission of World Bank and FAO was carried out to provide technical support to the preparation of the AFC. A second joint mission, pilot census and one-day workshop were conducted in April 2019. In July 2019, a supervision mission from the World Bank comprised of a senior agricultural census consultant visited the country and worked with the FAO census consultant. In August 2019, a

² The following essential items were not covered: (i) 0108 Other economic activities of the household; and (ii) 0902 Working time on the holding.

pilot census evaluated data collection system through CAPI using Survey Solution. During data collection, and to assure data quality, three control level were established: team supervisor control, headquarter control, and control of key indicators in a real time application. Sampling errors were calculated using Taylor linearization for a number of variables at the national, provincial, and municipal level.

11. Data and metadata archiving

Data and metadata will be published on the FAO CountrySTAT-Angola website. Microdata documentation was performed for the core modules. The Data Documentation Initiative (DDI) system was used for microdata documentation. INE, as the institution responsible for the ANDE platform in Angola, will make metadata and microdata available after publication of all relevant census results using the ANDE platform owned by INE, in which users can search census and surveys data. Nesstar Publisher was the tool used for microdata documentation. The World Bank provided support to the documentation process.

12. Data reconciliation

There was no reconciliation process of AFC 2019/2020 data.

13. Dissemination of census results and microdata

AFC methodology and results were published between May 2022 and January 2023 in four volumes: (i) Volume I: AFC Technical Report; (ii) Volume II: Results of the Village Census Community Report, available at <https://www.ine.gov.ao/publicacoes/detalhes/MTAyODU%3D>; (iii) Volume III: Report on the results of the agricultural, fisheries and aquaculture family holdings, available at <https://www.ine.gov.ao/publicacoes/detalhes/MTAyODQ%3D>; (iv) Volume IV: Report on the results of the agricultural and aquaculture business holdings, available at <https://www.ine.gov.ao/publicacoes/detalhes/MTAyODY%3D>. In addition to these volumes, the AFC also produced the report for the listing module, which gives a summarized view of the households that practice the different agricultural and fishing activities. Some thematic reports will be produced based on AFC data. Dissemination of census results will be done using different means and platforms such as FAO CountrySTAT-Angola platform. In addition to the digital and paper dissemination of the AFC results, different workshops, seminars, and press conferences will be organized at national and provincial level to share the main results. Workshops will also be organized on using census results for policy and planning purposes. Microdata will be available for external users to allow deeper analysis by researchers, academics, consultants, and decision makers.

14. Data sources

National Statistical Institute. 2022. Relatório Técnico. Recenseamento agro-pecuário e pescas. Luanda, Angola, May 2022.

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