



ARGENTINA – AGRICULTURAL CENSUS 2018 – METADATA REVIEW

1. Historical outline

The first agricultural census (AC) in Argentina was conducted in 1888. Since then twelve ACs were carried out in 1895, 1908, 1914, 1930, 1947, 1952, 1960, 1969, 1988, 2002, 2008¹ and 2018. The metadata review and data presented here refers to the AC 2018, the 13th agricultural census conducted in the country.

2. Legal basis and organization

Legal framework

The AC legislation includes the following:

- Argentine Law No. 17622 of 25 January 1968, regulated by Decree No. 3110 and 1831 of 30 December 1970 and 1 September 1993 respectively, which establishes the creation and operation of the National Institute of Statistics and Censuses (INDEC); and
- Resolution No. RESOL2018-47-APN-INDEC # MHA of 28 February 2018, which authorized the organization and implementation of the AC 2018 throughout the national territory.

Institutional framework and international collaboration

The INDEC under the Ministry of Treasury of Argentina is the federal agency responsible for planning and coordinating national censuses and surveys. It coordinates the National Statistics System (SEN)² through which the national, provincial and local statistical services work together. Each provincial government has a statistics bureau, called a Provincial Statistics Directorate (DPE),³ which collects and processes information. The INDEC managed the conceptual and methodological design whereas the DPEs executed the operation of the AC 2018.

Census staff

The census fieldwork involved 24 provincial coordinators (one in every province and the autonomous city of Buenos Aires), 83 zone bosses, 83 auxiliaries (Assistants), 476 supervisors and 2 791 enumerators.

3. Reference date and period

Reference day:

- 31 December 2017 for items on the identification of the holding, total area of the holding, area of permanent crops, etc.
- 30 June 2018 for inventories of livestock, buildings and facilities for production, agricultural machinery, etc.

Reference period: the agricultural year (from 1 July 2017 to 30 June 2018) for crop production, crop and livestock sales, labour, etc.

4. Enumeration period

The enumeration was carried out from 15 September 2018 to 31 March 2019.

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

Scope of the census

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

Statistical unit

¹ The AC 2008 report, with final results, was not published, because data collection was not completed in some important agricultural provinces, such as Buenos Aires and Corrientes in the country.

² Sistema Estadístico Nacional.

³ Dirección de Estadística.

The **statistical unit** for the AC 2018 was the agricultural holding (*explotación agropecuaria* or EAP), defined as “the organizational unit of agricultural production with at least 500 m² within a single province, regardless of the number of parcels (non-contiguous lands): (i) produces crop, livestock or forestry goods for marketing; (ii) has a management that manages the functions and assumes the risks associated with production activities; and (iii) utilizes in all its parcels the same production means and part of the same labour”. The agricultural holdings comprised both holdings in the household and non-household sectors.

Community-level data

Community-level data were not collected along with the census.

6. Census coverage

Geographic coverage

The AC 2018 covered the entire country.

Cut-off threshold and other exclusions

Agricultural holdings with total area less than 500 m² (0.05 ha) were excluded.

7. Methodology

Methodological modality for conducting the census

The classical approach was used in the AC 2018.

Relation to other censuses

For the purposes of the census, the INDEC cartography divided the territory of each province into census “fractions” (fractions) and then into radio. Radio was the smallest unit, which was classified into three types: rural, urban, and mixed (rural and urban). This division was fundamentally linked to the population census.

Frame

Census radios classified as rural and mixed were covered by the AC; urban areas were excluded.

In some provinces, rural radios (located in: mountainous areas, deserts, lake areas) considered lacking in agricultural production were excluded. In this way, the census framework covered by AC 2018 was established.

Complete and/or sample enumeration methods

The census was conducted using complete enumeration.

Sample design

No sampling was used.

Data collection method(s)

Data collection was undertaken by means of face-to-face interviews using CAPI (tablets).

Questionnaire(s) and items covered

Data were collected using a single electronic questionnaire, consisting of several parts and sections. The AC 2018 covered 22 out of 23 essential items recommended in the WCA 2020.⁴

8. Use of technology

Mobile capture device was used for census data collection. The tablets have a mobile application with four interrelated parts or modules: News registration module; Geographic module (reference cartographic material); Questionnaire module (data capture) with six thematic sections; and Specific questionnaires module.

9. Data processing

Data collection through Tablets allowed partial validation and instant data cleaning, which also reduced the time spent on data processing. The consistency that was carried out was internal to the logic of the data collected in the questionnaire. In the survey, the mobile device required

⁴ The following essential item was not covered: 0901 - Whether working on the holding is the main activity

compliance with some consistencies or completeness. But some internal consistency issues remained which were carried out for each surveyed farm, analyzing the internal coherence of the key data contrasted with control variables and some total values were also analyzed with respect to the partial values that compose them. The data correction system (SCD) was made with free license software, accessed through user authentication with password, and served a relational data repository that was also license-free. This system was implemented with web tools and accessed through an Internet browser. The SCD was not publicly accessible and was restricted to the INDEC's internal network. In 2020, the INDEC was reconciling the final census data. However, due to the COVID-19 pandemic, the publication of the final census report was rescheduled to April 2021.

10. Quality assurance

A mobile application (APM) containing four interrelated application modules fully integrates all the tools of the census operation. This led to an improvement in data quality and a reduction in the time between data collection and analysis. The application was also articulated with a computerized management system that allowed the administration, monitoring and control of the field operation.

11. Data and metadata archiving

The files with data and metadata are available on the INDEC website.

12. Data reconciliation

There was no reconciliation process of AC 2018 data.

13. Dissemination of census results and microdata

The preliminary results of the AC 2018 were published in November 2019. This publication included general aspects, methodology, preliminary results of the census and the census questionnaire. The publication of preliminary results was supplemented with two additional publications viz. Preliminary results - Agriculture in January 2020 and Preliminary results - Livestock in September 2020.

The final data was published in April 2021. This publication (in Spanish and in PDF format) as well as the statistical tables (in MS-Excel) are available on the INDEC website (<https://www.indec.gob.ar/indec/web/Nivel4-Tema-3-8-87>). A query system for users was developed and made available on the same website. Users can consult the data at the province or department level, for the published variables. Work is being done on the development of an application that allows new crossovers of variables while respecting statistical secrecy.

14. Data sources

Instituto Nacional de Estadística y Censos. 2019. Censo Nacional Agropecuario 2018. In: *INDEC* [online]. Buenos Aires, Argentina. <https://www.indec.gob.ar/indec/web/Nivel4-Tema-3-8-87>

15. Contact

Instituto Nacional de Estadística y Censos, Dirección de Estadísticas del Sector Primario
Address: Av. Julio A. Roca 609 – 9°– Oficina 902 (C1067ABB) Buenos Aires, República Argentina
Telephone: (+54) 11 50314632
E-mail: pgallo@indec.mecon.gov.ar ; cplat@indec.mecon.gov.ar
Website: <https://www.indec.gob.ar/indec/web/Nivel4-Tema-3-8-87>