



CYPRUS – CENSUS OF AGRICULTURE 2020 – METADATA REVIEW

1. Historical outline

The Census of Agriculture (CA) 2020 was the seventh conducted in the Republic of Cyprus since the country achieved independence. The previous CAs were undertaken in 1960, 1977, 1985, 1994, 2003 and 2010.

2. Legal basis and organization

Legal framework

The legal basis for the CA 2020 was provided by:

- Official Statistics Law of 18 March 2021 (Law No. 25(I)/2021) provides the legal basis for the development, production, and dissemination of official statistics, specifies the tasks of the Statistical Service, and defines its role and function as the agency responsible to produce official statistics. This law replaces and repeals the Statistics Law of 2000 (Law No. 15(I)/2000).
- Regulation (EU) 2018/1091 of the European Parliament and of the Council of 18 July 2018 on integrated farm statistics and repealing Regulations (EC) No 1166/2008 and (EU) No 1337/2011.
- Commission Implementing Regulation (EU) 2018/1874 of 29 November 2018 on the data to be provided for 2020 under Regulation (EU) 2018/1091 of the European Parliament and of the Council on integrated farm statistics and repealing Regulations (EC) No 1166/2008 and (EU) No 1337/2011, as regards the list of variables and their description.

Institutional framework and international collaboration

The Agricultural Statistics Section of the Statistical Service of Cyprus (CYSTAT) was responsible for the CA 2020. The National Coordinator was responsible for the coordination of the census and the Head of the Business, Energy, Environment, Agriculture, Science & Technology and Foreign Trade Statistics Division of CYSTAT supervised the overall census activities.

Census staff

The CA 2020 involved seven permanent staff of CYSTAT who were responsible for all phases of the census, 35 enumerators and supervisors with long-term contracts, and 58 enumerators with short-term contracts.

3. Reference date and period

Reference day: 31 December 2020, for livestock and animal housing, and for all other variables.

Reference periods:

- from 1 September 2019 to 31 August 2020, for land use, land tenure, crops, irrigated area, labour force;
- year 2020, for manure management; and
- from 1 January 2018 to 31 December 2020, for rural development measures.

4. Enumeration period

The CA 2020 was conducted from September 2020 to May 2021. CYSTAT faced delays due to COVID-19 pandemic, particularly in the limited access to systems by teleworking and recruitment process for field workers. The PAPI data collection phase was launched in early September 2020 as planned, but it started with half of the enumerators needed. Consequently, data collection was delayed by three to four months, which influenced all subsequent phases. However, the preparation of the validated results and quality report for all data collections along with the calculation of the derived variables, the quality indicators, and all data analyzes were completed by the end of March 2022, as required by the law. In

mid-November 2020, CYSTAT changed the data collection method from face-to-face interviews to telephone interviews using paper questionnaires, not only because of the government restrictions on mobility but also because many respondents refused personal visits or canceled interview appointments. Face-to-face interviews resumed in April 2021 and data collection was completed in May 2021.

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

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

The **statistical unit** was the agricultural holding, defined as a single unit, both technically and economically, that has a single management and that undertakes economic activities in agriculture in accordance with Regulation (EC) No 1893/2006 belonging to NACE Rev. 2 groups A.01.1, A.01.2, A.01.3, A.01.4, A.01.5 or to the "maintenance of agricultural land in good agricultural and environmental condition" of group A.01.6 within the economic territory of the Union, either as its primary or secondary activity, as it is stated in the Regulation (EU) No. 2018/1091 of the European Parliament and of the Council on integrated agricultural statistics. Regarding activities of class A.01.49, only the activities "Raising and breeding of semi-domesticated or other live animals" (except for raising of insects) and "Bee-keeping and production of honey and beeswax" were included.

Community-level data

There were no community-level data collected along with the census.

6. Census coverage

Geographic coverage

The CA 2020 covered the Republic of Cyprus.

Cut-off threshold and other exclusions

In the CA 2020 the following thresholds were used: (i) 0.2 ha of UAA; (ii) 0.01 ha of UAA under glass or high accessible cover or cultivated mushrooms; (iii) 0.1 of vineyards; (iv) one cow; (v) two bovine animals excluding cows; (vi) five sheep, goats or pigs, or ostrich; (vii) 50 poultry; (viii) 20 beehives; or (iv) ten breeding female rabbits.

7. Methodology

Methodological modality for conducting the census

The classical approach (one-off complete enumeration) was used in the CA 2020. The CA was composed of a core module and three thematic modules on labour force and other gainful activities, rural development, and animal housing and manure management.

Relation to other censuses

No relationship with other censuses.

Frames

The Register of Agricultural and Livestock Holdings (Agricultural Register) was the list frame used in the CA 2020. The register, which is also the frame from which the samples of all agricultural surveys are extracted, is updated on a continuous basis.

Complete or/and sample enumeration methods

The CA 2020 was conducted on complete enumeration basis.

Sample design

No sampling was used.

Data collection methods

In the CA 2020, data was collected through the PAPI method. Due to COVID-19, telephone interviews using a paper questionnaire were increasingly used instead of face-to-face interviews.

Questionnaire(s) and items covered

A questionnaire and a supplementary questionnaire were used to collect data in the CA 2020. The questionnaire covered 19 out of 23 essential items recommended in the WCA 2020¹.

8. Use of technology

Census results will be disseminated online.

9. Data processing

Supervisors collected and checked all questionnaires daily and turned them in to the district officers weekly. The information contained in each questionnaire was checked for errors or inaccuracies including completeness, validations between related variables, acceptable ranges, summations, ratios, and rational checks. Errors were identified at an early stage and the necessary clarifications were requested to minimize the degree of repetition of those errors. Coverage checks were also made by contacting five to ten percent of respondents for whom a questionnaire was completed and ensuring that the questionnaire was completed out according to instructions. Checking teams have been established, working under the guidance and supervision of the district officers. These teams verified the questionnaires submitted by each supervisor and performed a further check by comparing all variables against available information from previous surveys or other available information. In the CA 2020, manual data entry was performed with software designed in Microsoft Office Access by the national coordinator and an officer from the Data Processing Unit of the CYSTAT. The data entry program identified possible errors in the questionnaires (consistency, value, range, arithmetic, etc.), as well as errors made during the data entry process (typing errors). Data entry was checked daily for errors, missing items, changes, and inaccuracies. A team of three persons was formed to check and correct processing errors in the microdata, and to validate them. SAS was used for the preparation of the microdata file that was transmitted to Eurostat.

10. Quality assurance

Different procedures to assure and assess quality are applied by CYSTAT: use of best practices, quality guidelines, and compliance monitoring. Statistics are produced in accordance with the provisions of the European Statistics Code of Practice and in line with the statistical principles governing its implementation. The quality of statistics is assessed according to the following quality criteria: relevance, accuracy, timeliness, punctuality, accessibility and clarity, coherence, and comparability. The quality indicators are assessed considering Eurostat's defined methodology and recommendations. Based on the above criteria, the statistics were assessed as being of very good quality.

11. Data and metadata archiving

Validated microdata along with the quality report for all data collections for the reference year 2020 were delivered to Eurostat using the technical format specified by the Commission Implementing Regulation (EU) 2018/1874. The Code of Practice for the Collection, Publication and Storage of Statistical Data, available at https://library.cystat.gov.cy/NEW/Code_of_Practice_for_Statistical_Data-EN-130115.pdf, provides provisions regarding archiving and the specific actions and precautions that have to be taken in every stage of handling statistical data, in order to safeguard statistical confidentiality. Microdata is kept in a safe place, either in the office of the person in charge or in the storage room. All the procedures provided for in the IT Security Policy Handbook were appropriately followed so as to minimise the risk of a potential breach of data security.

12. Data reconciliation

CYSTAT's Revision Policy describes the general rules and principles governing the procedure of revising data published by CYSTAT (available at <https://www.cystat.gov.cy/en/StaticPage?id=1072>). As part of this policy, CYSTAT publishes a list of scheduled revisions on an annual basis, which can be found on the release calendar page (<https://www.cystat.gov.cy/en/AnnouncementList>). In the case of CA 2020, revisions will be made, if necessary.

¹ The following essential items were not covered: (i) 0107 Main purpose of production of the holding; (ii) 0407 Number of permanent crop trees in scattered plantings (for each tree crop); (iii) 0601 Use of agricultural pesticides; and (iv) 0801 Household size by sex and age groups.

13. Dissemination of census results and microdata

The final results were sent to Eurostat by the end of March 2022, within the deadline specified by the Regulation (EU) 2018/1091. Summary tables were published on the website of CYSTAT on 20 December 2022 and are available at https://library.cystat.gov.cy/NEW/AGRICULTURAL_CENSUS-2020-090223.xlsx. A press release published on the same date accompanied the results of the Census of Agriculture 2020 and is available at <https://www.cystat.gov.cy/en/PressRelease?id=67551>.

CYSTAT, under the provisions of the Official Statistics Law, release microdata for the sole use of scientific research in Cyprus or abroad after approval of the request by the CYSTAT's Confidentiality Committee, and after an anonymisation process which ensures no direct identification of the statistical units but, at the same time, ensures usability of the data. A charge is fixed according to the volume and time consumed for preparation of the data.

14. Data sources

Eurostat. 2022. *Integrated Farm Statistics - National quality reports 2020: Cyprus* [online]. Luxembourg. [Cited 19 October 2022]. https://ec.europa.eu/eurostat/cache/metadata/en/ef_simsif_cy.htm

Statistical Service of Cyprus (CYSTAT). 2022. Census of Agriculture 2020. In: *CYSTAT* [online]. Nicosia, Cyprus. [Cited 19 October 2022]. <https://www.beta.cystat.gov.cy/en/StaticPage?id=1295>.

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