

AUSTRIA – AGRICULTURAL CENSUS 2020 – METADATA REVIEW

1. Historical outline

Austria conducted its first census of agricultural and forestry holdings in 1902. Subsequent agricultural censuses were held in 1930 and 1950, and every ten years from 1960 to 1990. The last three Agricultural Censuses¹ (ACs) took place in 1999/2000, 2010 and 2020, The metadata review and data presented here refer to the AC 2020.

2. Legal basis and organization

Legal framework

The legal basis for the AC 2020 was provided by:

- Federal Law on Federal Statistics (Federal Statistics Law 2000), Federal Law Gazette I No. 163/1999 of 17 August 1999, as amended;
- Agricultural Structure Statistics Ordinance 2020, Federal Law Gazette II No. 279/2019 of 19 September 2019, ordinance of the Federal Minister for Sustainability and Tourism regarding statistics on the structure of agricultural holdings in 2020;
- 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; and
- 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 Agriculture and Forestry, VIS of the Directorate Spatial Statistics belonging to Statistics Austria was responsible for the AC 2020.

Census staff

The staff involved in the different phases of the census operation was approximately 50 staff members in different units at Statistics Austria. The data collection phase of the AC 2020 was implemented with the support of the 68 chambers of agriculture.

3. Reference date and period

Reference day:

- 1 April 2020 for livestock and animal housing; and
- 1 March 2020 for people living in the holding.

Reference periods:

- from 1 January to 31 December 2020, for land variables, irrigation and soil management practices, manure management, labour force; and
- from 1 January 2018 to 31 December 2020, for rural development measures.

4. Enumeration period

The AC 2020 was conducted from April 2020 to January 2021. Statistics Austria foresaw some delays in early 2020 due to COVID-19. The Austrian Integrated Farm Statistics is closely linked to aid applications for direct payments and the Rural Development Programme. In close cooperation with the

¹ The official name of the census presented here was Farm Structure Survey 2020.

Austrian Paying Agency Statistics, Statistics Austria makes broad use of the collected administrative data. The return of questionnaires stagnated due to the following reasons: (i) the data of the Integrated Administration and Control System (IACS)-applications are a prerequisite for completing the IFS questionnaires, and there were COVID-19 related delays in the processing of aid applications; (ii) the COVID-19 outbreak hit while dispatching census questionnaires to the farmers as it was not their top priority at that time to answer the questionnaires, (iii) it was difficult to provide telephone-hotline to support farmers who were able to fill in their questionnaires by themselves; (iv) at some point, it was not possible to call farmers for telephone-interviews. As of November 2020, there was a delay of three months.

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

The **census scope** covered agricultural (crop and animal production) and forestry 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 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 AC 2020 covered the entire country.

Cut-off threshold and other exclusions

The AC 2020 considered the following thresholds for agricultural holdings: (i) three ha of UAA or permanent pastures; (ii) 1.5 ha of arable land; (iii) 0.5 ha of potatoes (including seed potatoes); (iv) 0.1 ha of fresh vegetables (including melons) and strawberries, aromatic, medicinal and culinary plants - outdoor, flowers and ornamental plants - outdoor, seeds and seedlings - outdoor, nurseries – outdoor, or vineyards; (v) 0.3 ha of fruits, berries and nuts (excluding citrus fruits, grapes and strawberries) - outdoor and other permanent crops including other permanent crops for human consumption – outdoor; (vi) 0.01 ha of UAA under glass or high accessible cover, or cultivated mushrooms; (vii) three ha of forest land; or (viii) 1.7 livestock units. The animal housing and manure management module covered agricultural holdings with at least one cattle, pig, sheep, goat, or poultry.

7. Methodology

Methodological modality for conducting the census

The AC 2020 used the classical approach combined with the use of administrative registers. It comprised a core module and three thematic modules on labour force and other gainful activities, rural development, and animal housing and manure management. All census data related to the thematic module on rural development were collected directly from administrative registers, which were also used partially for the core module, and the frame extension of this module.

Relation to other censuses

No relationship with other censuses.

Frames

The AC 2020 used the statistical farm register, a multiple frame continuously updated by using various types of administrative data (applications for subsidies, social insurance information etc.). The completeness of frame is ensured as newly created holdings usually submit subsidy applications and

their administrative data are used for inclusion in the statistical farm register. Wrongly classified units are discarded due to the routine maintenance of the register with checks against those administrative data.

Complete or/and sample enumeration methods

The AC 2020 was conducted on complete enumeration basis.

Sample design

No sampling was used.

Data collection methods

In the AC 2020, data was collected through CAWI, CATI and CAPI methods. The farmers were able to submit their return either directly at their computer (CAWI, 53 percent), at their competent chamber of agriculture (CAPI, 29 percent) or during a personal interview by telephone with staff of Statistics Austria (CATI, 18 percent). The following administrative registers were used to collect data: IACS, bovine register, Veterinary Information System (VIS), Social Insurance for Farmers (SVS), and rural development measures.

Questionnaire(s) and items covered

One questionnaire was used in the AC 2020. The questionnaire covered 20 out of 23 essential items recommended in the WCA 2020². Data for three essential items were collected partly from administrative sources³.

8. Use of technology

CAWI, CAPI and CATI were used for field data collection. Census data were collected directly from administrative registers to reduce the response burden. Census results were disseminated online.

9. Data processing

CAWI, CAPI and CATI methods ensured direct data capture. Data collected and administrative data were merged via the unique farm number/identifier. Staff from central department carried out data validation. The data sets were checked for missing, incorrect, or implausible information, using an extensive plausibility application developed in cooperation with the IT Department, that detected and either highlighted or immediately corrected missing, incorrect and implausible entries. For each holding, all errors and information errors were listed and categorised. The errors detected (incorrect entries, missing or implausible data) were investigated and rectified by the processing team. Errors were eliminated and plausibility checks were carried out repeatedly directly via the application. The staff themselves corrected logical obvious errors. Missing or incorrect entries were completed from other data sources: administrative data from IACS or the Austrian agri-environmental programme (ÖPUL), VIS, SVS, the forestry yearbook, FSS 2010, 2013 or 2016. Where this did not provide clarity, individual holdings were contacted by telephone.

10. Quality assurance

Statistics Austria has its own internal quality management department. Reports are not only based on best practices, but also on the results of regular (quality) meetings amongst decision-making bodies and users. A commitment to quality of Statistics Austria is available at <https://www.statistik.at/en/about-us/responsibilities-and-principles/standards/statistics-austrias-quality-guidelines>. Quality was also assured and assessed by training courses, quality guidelines, designation of quality manager, quality unit and/or senior level committee, peer review, and external review or audit. Some actions were carried out to minimize measurement errors: pre-testing of questionnaire, pre-filled questions, explanatory notes or handbooks for enumerators or respondents online FAQ or hot-line support for enumerators or respondents, and training of enumerators. A dedicated free hotline was set up by Statistics Austria to answer any questions that arose during the survey phase. In addition, queries could be sent by e-mail

² The following essential items were not covered: (i) 0107 Main purpose of production of the holding; (ii) 0302 Area of land actually irrigated: fully and partially controlled irrigation; and (iii) 0601 Use of agricultural pesticides.

³ The following essential items were covered partly by administrative sources: (i) 0201 Total area of holding; (ii) 0202 Area of holding according to land use types; and (iii) 0502 Number of animals.

to Agrarstrukturerhebung@statistik.gv.at. Non-response was minimized through follow-up interviews, sending reminders to respondents, legal actions, and imputation.

11. Data and metadata archiving

National reference metadata in Single Integrated Metadata Structure (SIMS) will be published in 2023 and will be available at <https://www.statistik.at/en/statistics/agriculture-and-forestry/structure-of-holdings/general-data-of-farms/holdings/farms>. Data is available at <https://www.statcube.com>. A subscription provides access to more detailed data and additional features not available with the free guest access.

12. Data reconciliation

There was no reconciliation process of AC 2020 data.

13. Dissemination of census results and microdata

Preliminary results were published on 22 September 2021 through a press release. Final results were published in July 2022 in the form of a press release available at <https://www.statistik.at/fileadmin/announcement/2022/07/20220712AS2020EN.pdf>. Tables and a report concerning the AC 2020 were made available in the period between July 2022 and November 2022 at <https://www.statistik.at/en/statistics/agriculture-and-forestry> under the structure of holdings, animals and animals production, and agricultural and forestry production methods sections. The report Statistics in Focus, published in German, is available at https://www.statistik.at/fileadmin/publications/SB_1-17_AS2020.pdf. Data are also offered in a data base STATcube at www.statcube.com. A subscription provides access to more detailed data (LAU2 level) and additional features not available with the free guest access, which can be used to access data at the NUTS2 level. Anonymized microdata is not available, but task-specific datasets can be compiled if certain conditions are met.

14. Data sources

Eurostat. 2022. *Integrated Farm Statistics - National quality reports 2020: Austria* [online]. Luxembourg. [Cited 26 October 2022]. https://ec.europa.eu/eurostat/cache/metadata/en/ef_simsif_at.htm

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