

## SLOVAKIA – AGRICULTURAL CENSUS 2020 – METADATA REVIEW

### 1. Historical outline

The country conducted its first Agricultural Census (AC) in 2001, followed by a second in 2010, and the third in 2020, to which the metadata review and data presented here refer.

### 2. Legal basis and organization

#### *Legal framework*

The legal basis for the AC 2020 was provided by:

- Act No. 540/2001 of 29 November 2001 on State Statistics, which is the basic Slovak law for the AC;
- Decree of the Statistical Office No 250/2017 of 9 October 2017, which issued the programme of state statistical surveys for the years 2018-2020;
- 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 Agricultural Statistics Department under the Business Statistics Directorate of the Statistical Office of the Slovak Republic (SOSR) conducted the AC 2020.

#### *Census staff*

A total of 180 SOST staff participated in AC 2020, including 6 employees from the Agricultural Statistics Department and 174 employees from 8 regional workplaces.

### 3. Reference date and period

**Reference day:** 31 October 2020, for livestock, fruit trees and shrubs, and all other variables.

#### **Reference periods:**

- from 1 November 2019 to 31 October 2020, for land variables, crops, irrigation and soil management practices, labour force, other gainful activities, vegetables, fertilisation, manure management, animal housing, information about holder and farm; and
- from 1 January 2018 to 31 December 2020, for rural development measures.

### 4. Enumeration period

The AC 2020 was conducted from November 2020 to March 2021. Due to COVID-19, consultations and training of enumerators were slowed down, but data collection using PAPI and CAWI started in November 2020, as planned. The SOSR tried to minimize personal contact with survey units. However, the second wave of COVID-19 had a substantial impact on data collection. Most statisticians were working from home. Follow-up was required with reporting units that had not yet responded due to limited contact.

### 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 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) five ha of UAA; (ii) two ha of arable land; (iii) 0.5 ha of potatoes (including seed potatoes) – outdoor, or fresh vegetables (including melons) and strawberries – outdoor; (iv) 0.2 ha of aromatic, medicinal and culinary plants - outdoor, flowers and ornamental plants (excluding nurseries) - outdoor, seeds and seedlings - outdoor, or nurseries - outdoor; (v) 0.3 ha of fruits, berries and nuts (excluding citrus fruits, grapes and strawberries) - outdoor, or other permanent crops including other permanent crops for human consumption - outdoor; (vi) 0.1 ha of vineyards; (vii) 0.01 ha of UAA under glass or high accessible cover, or cultivated mushrooms; or (viii) 1.7 livestock units.

## **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.

### ***Relation to other censuses***

No relationship with other censuses.

### ***Frames***

The AC 2020 used the farm register, which is a continuously updated list frame using data of applicants for subsidies from the Agricultural Paying Agency, the vineyards and orchards register, the Breeding Animals Evidence Centre, and the organic farming register.

### ***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 and post (mail-out/mail-back) methods. Due to the COVID-19 pandemic, staff were forced to use CATI method with non-responding units. Information on rural development were collected from the Integrated Administration and Control System (IACS).

### ***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 2020<sup>1</sup>.

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<sup>1</sup> The following essential items were not covered: (i) 0107 Main purpose of production of the holding; (ii) 0601 Use of agricultural pesticides; and (iii) 0801 Household size by sex and age groups. The item 0203 Area of holding according to land tenure types was covered only for the UAA.

## 8. Use of technology

CAWI 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

Direct data capture was ensured by CAWI and CATI methods. For paper questionnaires from post method, manual data entry was used. Staff from local and central department carried out data validation through data format, completeness, range, and relational checks, and via comparisons with previous rounds of the data collection, using tools in the electronic data collection system (controls, control questions, colour highlighting, etc.) and manual validation. For this purpose, documents and datasets received from the Ministry of Agriculture, Agricultural Paying Agency, State Veterinary and Food Service, Central Control and Testing Institute in Agriculture and the data from the previous FSS surveys were used.

## 10. Quality assurance

The SOSR management commits to follow the Quality Policy based on requirements of users of statistics, on rules, principles, recommendations, and requirements of the ISO 9001 standard for Quality Management Systems (QMS). For the successful implementation of this commitment, the SOSR management ensures the following tasks: establish and maintenance the SOSR Quality Policy and Quality Objectives; ensure permanent maintenance and periodic review of the efficiency and effectiveness of the Integrated QMS implemented to achieve these objectives; ensure the availability of all necessary resources; and make decisions on activities for improving the QMS. The following procedures are implemented to assure and assess quality: quality guidelines; designated quality manager, quality unit and/or senior level committee; compliance monitoring; external review or audit; and certification. For the AC 2020, the following actions were used to minimize non-sampling errors: information obtained from local authorities to minimize under-coverage and contact errors; explanatory notes and handbooks for enumerators or respondents, controls in software during data processing and direct data validation to minimize measurement errors; follow-up interviews, reminders, and imputation to minimize non-response errors.

## 11. Data and metadata archiving

Microdata is stored in the integrated statistical information system. The metadata is published on the Eurostat website.

## 12. Data reconciliation

There was no reconciliation process of AC 2020 data.

## 13. Dissemination of census results and microdata

In August 2022, final results at the national and regional level were published in Slovak and English in a printed publication and online, the latter being available at <https://slovak.statistics.sk/PortalTraffic/fileServlet?Dokument=5d85b2b4-ce35-44ef-8c1a-5f1a560a8e25>. A farm typology report was published in November 2022 and is available at <https://slovak.statistics.sk/PortalTraffic/fileServlet?Dokument=752c3e3d-b1d2-46bf-b0c9-5b8a0d210c23>. Regarding microdata, the Act on State Statistics does not allow an access to confidential data for usual users. The SOSR may provide confidential data for scientific purposes to legal persons, who carry out scientific research as their basic mission and are able to ensure conditions for the data protection. Data are provided as follows: (i) complete confidential data, provided only to the state authorities (for example ministries, national bank etc.) based on the mutual contract and within the data exchange through secured FTP server; and (ii) anonymised data which do not allow direct identification of legal or physical persons, to other organisations than the state authorities.

## 14. Data sources

**Eurostat.** 2022. *Integrated Farm Statistics - National quality reports 2020: Slovakia* [online]. Luxembourg. [Cited 9 November 2022]. [https://ec.europa.eu/eurostat/cache/metadata/en/ef\\_simsif\\_sk.htm](https://ec.europa.eu/eurostat/cache/metadata/en/ef_simsif_sk.htm)

## 15. Contact

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