

1. HISTORICAL OUTLINE

The first agricultural census (AC) was conducted in Hungary in 1895, followed by the second one in 1935. Starting from 1972, ACs were conducted regularly, in line with the ten-year rounds of the WCA, in 1972, 1981, 1991, 2000 and 2010. The AC 2010 was carried out together with the SAPM.

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The legal framework of the AC 2010 included:

- Act XLVI of 1993 on Statistics, that provided the general regulatory framework of surveys implemented in Hungary;
- Act XXIV of 2010 approved by the Hungarian Parliament, which provides the regulatory framework of the AC 2010;
- the National Data Collection Programme, OSAP (which includes all statistical surveys to be conducted in the country) approved annually by a government decree; and
- the EU legislation relevant for implementing the FSS 2010.

Institutional framework and international collaboration

The Hungarian Central Statistical Office (HCSO) was responsible for the implementation of the AC. To increase coverage, the HCSO was authorized to use administrative data sources listed in Act XXIV of 2010 and had the legal authority to access them.

Census staff

The staff involved in the AC data collection included 13 500 enumerators, 2 700 supervisors and 270 area agents of the regional directorates.

3. REFERENCE DATE AND PERIOD

Reference day: 1 June 2010, for inventory items such as livestock characteristics.

Reference periods:

- from 1 June 2009 to 31 May 2010 for labour force, other gainful activities buying and selling land area, irrigation, SAPM, manure storage, animal housing, use of fertilizers;
- the three years preceding the AC (2008–2010), for landscape features, rural development measures and average size of the irrigated area.

4. ENUMERATION PERIOD

The enumeration period for the AC 2010 was between 1 June and 21 June 2010.

5. SCOPE OF THE CENSUS AND DEFINITION OF THE STATISTICAL UNIT

The **census scope** covered agricultural activities related to the production of crop and livestock products, as well as to agricultural services provided by the holdings.

The **statistical unit** was the agricultural holding, defined as a single unit, both technically and economically, which has a single management and which undertakes agricultural activities listed in Annex I to the European Parliament and Council Regulation (EC) No. 1166/2008 within the economic territory of the EU, as either its primary or secondary activity. Two main types of agricultural holding were distinguished: “private holdings” and “agricultural enterprises”.

6. GEOGRAPHIC COVERAGE

The AC 2010 covered the entire country, including some urban areas (where agricultural production was allowed).

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

In the 2010 AC, the following physical thresholds were applied for private holdings:

- the holding uses at least: (i) 1 500 m² of productive land area (including, jointly or severally, arable land, kitchen garden, orchard, vineyard, meadow, pasture, forest, fish-pond, reed); (ii) 500 m² of orchards or vineyards, jointly or severally (at least 400 m² of fruit trees and 200 m² of berries or vines); or (iii) 100 m² of land area under cover, or 50 m² of mushroom area;
- the holding has at least: (i) one head of big animals (cattle, pig, horse, sheep, goat, buffalo, emu, ostrich, donkey); (ii) 50 head of poultry, such as hens, geese, ducks, turkeys, guinea fowls; or (iii) 20–25 head of rabbits, furry animals, pigeons for slaughter, or five bee colonies; or
- provides agricultural services.

No threshold was applied for agricultural enterprises.

8. METHODOLOGY

Methodological modality for conducting the census

The classical approach was used in the AC 2010. Some census data were collected directly from administrative registers.

Frame

For elaboration of the list of the survey units the basic source was the addresses of the Farm Register (FR). Agricultural enterprises operated in 2010 formed the census frame. Between the AC 2000 and the AC 2010, the FR of private holdings was updated only partially based on the information of the Census of Vineyards and Fruit Plantations 2001, FSSs (2003, 2005 and 2007) and regular annual sample surveys.

In the preparation phase of the AC 2010, the FR was completed with information from administrative data sources.

Complete and/or sample enumeration methods

The AC 2010 was a complete enumeration of agricultural holdings. The SAPM was implemented using sampling for private holdings and complete enumeration for agricultural enterprises.

Sample design (if sampling was used)

Random sampling was applied for the SAPM in the case of private holdings.

Data collection method(s)

The data collection for private holdings was carried out using face-to-face interviews, while for the agricultural enterprises, the data collection was accomplished using self-interviewing, by reporting to the HCSO through the post. The HCSO used some administrative data as a source of census data.

Questionnaire(s)

Two types of questionnaires were designed for the implementation of the AC: (i) for private holdings, in two formats: with SAPM questions and without SAPM questions; and (ii) for agricultural enterprises, including SAPM questions. While the content was the same, there were differences in the order of the questions. All questionnaires were printed on paper and also made available on the Internet in Excel format.

The census questionnaires covered all 16 core items recommended in the WCA 2010.

9. USE OF TECHNOLOGY

The following new technology was used in the AC 2010: (i) collection of some census data, directly from administrative registers, to reduce the response burden; and (ii) the online dissemination of census results.

10. DATA PROCESSING AND ARCHIVING

All data entry applications related to the AC were developed by the IT Department of the HCSO within the framework of the Data Entry and Validation System, run by the HCSO. The staff of the directorates and the Central Office were responsible for data entry. Logical and arithmetical coherency within and between tables were incorporated into the data entry programme. Data were entered and stored in an Oracle database.

11. CENSUS DATA QUALITY

A pilot survey was carried out before starting census activities for testing census tools. Key validation rules were incorporated into the data entry application, the micro and macro data were analysed thoroughly, and compared with other available agriculture statistics. The survey results met the quality requirements stated in the related EU regulation.

12. DATA DISSEMINATION

The preliminary data were released at a press conference in December 2010. More detailed preliminary data were published in September 2011. The final data were published in several volumes in 2012. The census information is available in English on the HCSO website.

13. DATA SOURCES

Eurostat. 2019a. Archive: Agricultural census in Hungary. In: *European Commission: Eurostat* [online]. Luxembourg. [Cited 26 August 2019]. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Agricultural_census_in_Hungary

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FAO. 2017. Regional Roundtable on the World Programme for the Census of Agriculture 2020 (WCA 2020), 3–7 April 2017, Budapest, Hungary. In: *World Programme for the Census of Agriculture* [online]. Rome, Italy. [Cited 9 September 2019]. <http://www.fao.org/world-census-agriculture/events/wca2020budapest/en/>

Hungarian Central Statistical Office. 2012. *Farm Structure Survey 2009/2010 and Survey on agricultural production methods 2009/2010*. National Methodological Report. Eurostat. (also available at http://ec.europa.eu/eurostat/documents/749240/749313/HU_NMR_FSS_2010.pdf/20425806-6e3c-469d-81c7-34f5021af05b).

14. CONTACT

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HUNGARY – AGRICULTURAL CENSUS 2010 – MAIN RESULTS¹

| NUMBER OF HOLDINGS AND AREA, BY LEGAL STATUS | | |
|---|----------------|------------------|
| | Holdings | Area (ha) |
| Total | 576 810 | 7 102 970 |
| Civil persons | 567 630 | 2 702 610 |
| An individual (sole holder holdings) ² | 567 630 | 2 702 610 |
| Juridical persons (legal entities) | 9 180 | 4 400 360 |

| LAND TENURE | | |
|--|----------------|------------------|
| | Holdings | UAA (ha) |
| Total | 576 810 | 4 686 340 |
| Legal ownership and owner-like possession (owned land) | 524 360 | 2 040 350 |
| Rented from others (Land rented) | 24 640 | 2 340 170 |
| Other form of tenure (shared farming or other modes) | 14 670 | 305 820 |

| DISTRIBUTION OF UAA, BY LAND SIZE CLASSES | | |
|---|----------------|------------------|
| | Holdings | UAA (ha) |
| Total | 576 810 | 4 686 340 |
| Holdings without UAA | 42 790 | |
| Holdings with UAA | 534 020 | 4 686 340 |
| Less than 2 ha | 412 740 | 138 000 |
| 2–4,99 ha | 46 060 | 142 670 |
| 5–9,99 ha | 26 540 | 183 910 |
| 10–19,99 ha | 19 430 | 268 840 |
| 20–29,99 ha | 7 950 | 190 290 |
| 30–49,99 ha | 7 440 | 282 690 |
| 50–99,99 ha | 6 410 | 445 860 |
| 100 ha and over | 7 450 | 3 034 080 |

| LAND USE | | |
|--|----------------|------------------|
| | Holdings | Area (ha) |
| Total | 576 810 | 7 102 970 |
| UAA | 534 020 | 4 686 340 |
| Arable land | 317 370 | 3 796 920 |
| Land temporarily fallow | 42 720 | 260 040 |
| Land under permanent crops | 180 450 | 151 720 |
| Permanent meadows and pastures | 72 100 | 720 900 |
| Kitchen garden | 340 040 | 16 790 |
| Other land | 567 880 | 2 416 640 |
| Wooded area | 47 230 | 1 723 630 |
| Unutilised agricultural land and other areas | 565 820 | 693 010 |

| MANAGERS BY SEX ³ | | |
|------------------------------|----------------|-------------------|
| | Number | UAA operated (ha) |
| Total | 576 810 | 4 686 340 |
| Male | 424 940 | 4 141 330 |
| Female | 151 870 | 545 000 |

| MEMBERS OF HOLDER'S HOUSEHOLD, BY SEX ⁴ | | |
|--|----------------|--|
| | Number | |
| Total engaged in agricultural activities on the holding | 485 500 | |
| Male | 127 470 | |
| Female | 358 040 | |

| LABOUR FORCE OF THE HOLDING | |
|---------------------------------|------------------|
| | Number |
| Total | 1 143 500 |
| Male | 615 490 |
| Female | 528 010 |
| Family labour force | 1 052 820 |
| Male | 544 900 |
| Female | 507 920 |
| Regular non-family labour force | 90 680 |
| Male | 70 590 |
| Female | 20 090 |

| MANAGERS BY SEX AND AGE ³ | |
|--------------------------------------|----------------|
| | Number |
| Total | 576 810 |
| Male | 424 940 |
| Female | 151 870 |
| less than 35 years | 40 760 |
| Male | 31 190 |
| Female | 9 570 |
| 35–44 years | 84 030 |
| Male | 67 740 |
| Female | 16 290 |
| 45–54 years | 122 010 |
| Male | 97 190 |
| Female | 24 820 |
| 55–64 years | 160 820 |
| Male | 121 950 |
| Female | 38 870 |
| 65 years and over | 169 190 |
| Male | 106 870 |
| Female | 62 320 |

| LIVESTOCK | | |
|--------------------------------------|----------------|-----------|
| | Holdings | Head |
| Total holdings with livestock | 381 650 | |
| Cattle | 19 120 | 707 400 |
| Sheep | 26 780 | 1 204 350 |
| Goats | 19 820 | 91 730 |
| Pigs/swine | 183 100 | 3 207 910 |
| Equines (Equidae) | 27 270 | 71 110 |
| Poultry (1 000 head) | n.a | n.a |
| Broilers | 18 750 | 13 920 |
| Laying hens | 252 600 | 10 300 |
| Others | 214 450 | 24 480 |
| Other animals | n.a | |
| Rabbits (breeding females) | 24 250 | 127 370 |
| Other | 27 180 | |
| Insects | | |
| Bees (hives) | 10 510 | 594 470 |

| METHODS OF IRRIGATION | | |
|---|---------------|---------------------|
| | Holdings | Irrigable area (ha) |
| Total holdings with irrigable area | 20 260 | 235 750 |
| Holdings with irrigated area⁵ | 13 760 | 114 550 |
| Surface | 3 900 | n.a |
| Sprinkler | 11 460 | n.a |
| Localized irrigation (drop irrigation) | 3 720 | n.a |

¹ Data source – Eurostat database, available at:

<https://ec.europa.eu/eurostat/web/agriculture/data/database>

² The categories in brackets are presented as indicated in the Eurostat database (if different from the WCA 2010).

³ According to Eurostat, managers include holders that manage the holding themselves, and managers that are not holders, including of legal units

⁴ Data are presented without holders.

⁵ Excluding kitchen garden and area under glass.