

1. HISTORICAL OUTLINE

Denmark has participated in the WCA since 1930. In the following years, the agricultural surveys were conducted as censuses (on a complete enumeration basis): until 1983, 1985, 1987, 1989, 1999 and 2010. A SAPM was carried out in 2011 to complete the data collected in the 2010 Agricultural Census, AC (or Farm Structure Survey, FSS).

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The Law on Statistics Denmark places an obligation on all business units, including agricultural holdings, to complete statistical questionnaires. Likewise, when requested, all government institutions must send their administrative data to Statistics Denmark. The AC 2010 also complies with the relevant EU legislation.

Institutional framework and international collaboration

Statistics Denmark's Division of Agriculture (SDDA) has the authority and responsibility for the CA.

Census staff

Three persons from the SDDA were deployed full-time for the AC 2010 and SAPM activities. Eight persons worked part-time on the AC and the SAPM. No field staff was involved in census data collection, as the questionnaires were filled in using self-registration or by telephone (see section 8).

3. REFERENCE DATE AND PERIOD

Reference dates:

- 1 June 2010, for farms applying for subsidies (for data on cattle, collected from the livestock register);
- 14 May 2010, for all characteristics that can be meaningfully assigned to one specific day, such as livestock; and
- the date of the enumeration, for farms not applying for subsidies.

Reference periods:

- one year prior to the survey day, for labour force characteristics, education, etc. and
- the previous three years (2008-2010), for rural development characteristics.

4. ENUMERATION PERIOD

The AC data collection took place between 7 July 2010 (when the questionnaires were sent to farmers) and March 2011 (following the final telephone reminders). The SAPM data collection took place between 25 June 2011 and November 2011.

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

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

The **statistical unit** is 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, either as its primary or secondary activity.

6. GEOGRAPHIC COVERAGE

The AC 2010 covered the entire country.

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

The AC 2010 and the SAPM include all holdings that fulfil at least one of the following criteria:¹

- an agricultural area of at least 5 ha;
- a standard output of at least EUR 7 500;
- fruits, berries and nursery area of at least 0.5 ha;
- vegetables and strawberries of at least 0.5 ha;
- greenhouse and mushrooms of at least 1 000 m³;
- at least ten cattle, 50 pigs, ten sows, 20 sheep, 20 goats, 1 000 head of poultry, or 40 fur animals.

8. METHODOLOGY

Methodological modality for conducting the census

The classical approach was used in the AC 2010. Administrative registers were also used as a source of census items.

¹ It is estimated that Danish farms that did not meet the abovementioned threshold cover approximately 1.2 percent of the agricultural area of the country and 0.6 percent of the total standard gross margin of Danish agriculture.

Frame

The frame for the AC 2010 and the SAPM 2011 was Statistics Denmark's Business Register, with all units marked as "active in agriculture" and that met the minimum requirements of the holding.

Complete and/or sample enumeration method(s)

The AC was a complete enumeration of all agricultural holdings and the SAPM was a sample survey.

Sample design (if sampling was used)

The sample design for the SAPM was a stratified random sampling.²

Data collection methods

For the AC and SAPM field data collection, different methods were applied: (i) personalized postal questionnaires (mail-out/mail-back method); (ii) Internet-based questionnaires (CAWI method); and (iii) Computer-assisted Telephone Interviewing (CATI). The administrative data were extensively used as a source of census items for the AC 2010.

Questionnaire(s)

One questionnaire was used for AC data collection and one for the SAPM. Both paper-based and electronic questionnaires were used for data collection.

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

9. USE OF TECHNOLOGY

New data collection methods were applied in the AC 2010: CAWI (used by 2 percent of respondents) and CATI (used to collect data from 10 percent of respondents). Optical scanning was used for data capture. Administrative registers were also used as a source of census items. Online dissemination was applied to release census results.

10. DATA PROCESSING AND ARCHIVING

The majority of paper questionnaires received from the respondents by post were scanned (77 percent); the data from other paper questionnaires (23 percent) were keypunched. Data from the IACS were transferred directly into the statistical database. The questionnaires were registered and also edited in an Oracle database; there were approximately 150 validation rules. All individual information was checked both manually and by means of computer-based validation routines. The imputation was performed using SAS and SQL programming.

11. CENSUS DATA QUALITY

Completion/correction methods were applied, such as follow-up interviews (approximately 5 percent of the farms were contacted once by telephone if important information was missing on the questionnaire). All staff that worked on the AC and SAPM had the authority to correct survey information (for instance after contacting a farmer); however, the imputations, where necessary, were performed only by the survey leader.

12. DATA DISSEMINATION

The AC 2010 results (including the detailed regional data) were published in May 2011. A database with FSS and SAPM 2010 data is available on the CBS website. The AC 2010 results were published in the Statistical Ten-Year Review 2011 (in August 2011), the Agricultural Statistical Yearbook 2010 (in November 2011) and the Statistical Yearbook 2012 (in April 2012).

13. DATA SOURCES

Eurostat. 2019a. Archive: Agricultural census in Denmark. In: *European Commission: Eurostat* [online]. Luxembourg. [Cited 23 August 2019]. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Agricultural_census_in_Denmark

Eurostat. 2019b. Database, Agriculture, forestry and fisheries. In: *European Commission: Eurostat* [online]. Luxembourg. [Cited 26 August 2019]. <https://ec.europa.eu/eurostat/data/database>

Statistics Denmark. 2012. *Farm Structure Survey 2009/2010. Survey on agricultural production methods 2009/2010.* National Methodological Report. Copenhagen, Denmark. Eurostat. (also available at http://ec.europa.eu/eurostat/documents/749240/749313/DK_NMR_FSS_2010.pdf/b6daff0-63ea-4543-b0b3-370c4b278a8a).

14. CONTACT

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DENMARK – AGRICULTURAL CENSUS 2010 – MAIN RESULTS¹

NUMBER OF HOLDINGS AND AREA, BY LEGAL STATUS		
	Holdings	Area (ha)
Total	41 360	3 001 380
Civil persons	39 510	2 683 790
An individual (sole holder holdings) ²	39 510	2 683 790
Juridical persons (legal entities)	1 850	317 590

DISTRIBUTION OF UTILIZED AGRICULTURAL AREA (UAA), BY LAND TENURE		
	Holdings	UAA (ha)
Total	41 360	2 646 860
Legal ownership and owner-like possession (owned land)	39 270	1 820 890
Rented from others (land rented)	19 710	825 970

DISTRIBUTION OF UAA, BY LAND SIZE CLASSES		
	Holdings	UAA (ha)
Total	41 360	2 646 860
Holdings without UAA	860	
Holdings with UAA	40 510	2 646 860
Less than 2 ha	520	350
2–4,99 ha	950	3 410
5–9,99 ha	8 050	57 640
10–19,99 ha	7 790	112 080
20–29,99 ha	4 310	105 960
30–49,99 ha	4 900	190 590
50–99,99 ha	5 920	426 090
100 ha and over	8 080	1 750 750

LAND USE		
	Holdings	Area (ha)
Total	42 110	3 001 380
UAA	40 510	2 646 860
Arable land	37 370	2 419 290
Land temporarily fallow	7 700	34 740
Land under permanent crops	4 410	27 720
Permanent meadows and pastures	24 960	199 860
Other land	27 530	354 510
Wooded area	12 900	211 870
Unutilised agricultural land and other areas	26 250	142 640

MANAGERS BY SEX ³		
	Number	UAA operated (ha)
Total	41 360	2 646 860
Male	37 630	2 523 870
Female	3 740	122 990

MEMBERS OF HOLDER'S HOUSEHOLD, BY SEX ⁴		Number
Engaged in agricultural activities on the holding		16 760
Male		4 740
Female		12 020

LABOUR FORCE OF THE HOLDING		Number
Total		78 700
Male		57 750
Female		20 950
Family labour force		56 070
Male		40 410
Female		15 660
Regular non-family labour force		22 640
Male		17 350
Female		5 290

MANAGERS BY SEX AND AGE ³		Number
Total		41 360
Male		37 630
Female		3 740
Less than 35 years		1 960
Male		1 780
Female		170
35–44 years		7 560
Male		6 920
Female		640
45–54 years		13 800
Male		12 590
Female		1 210
55–64 years		10 260
Male		9 290
Female		960
65 years and over		7 800
Male		7 050
Female		750

LIVESTOCK		
	Holdings	Heads
Total holdings with livestock	25 300	
Cattle	13 580	1 571 050
Sheep	2 570	159 630
Goats	720	13 010
Pigs/swine	5 070	13 173 060
Equines (Equidae)	8 210	59 740
Poultry (1 000 head)	n.a.	n.a.
Broilers	280	12 840
Laying hens	3 080	3 900
Other poultry	2 070	2 000
Other animals	n.a.	
Rabbits (breeding females)	210	820
Other	750	
Insects		
Bees (hives)	650	6 730

METHODS OF IRRIGATION		
	Holdings	Irrigable area (ha)
Total holdings with irrigable area	7 930	480 440
Holdings with irrigated area⁵	5 710	320 180
Sprinkler	5 300	n.a.
Localized irrigation (drop irrigation)	230	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.