

## Methodological notes

The publication **Cattle Production** presents statistical information on two main areas:

- numbers of bovine animals (cattle, buffaloes) broken down by age and purpose of keeping
- production from cattle farming (milk production, production of cattle for slaughter, number of calves born) which serves as a basis for computation of indicators of livestock yields

The data are surveyed in order to meet the obligations arising from Regulations (EC) No 1165/2008 and 138/2004 of the European Parliament and of the Council, Council Directive 96/16 / EC, as amended, for the purposes of internal economy, for the needs of the European Union and international organizations, in particular the Food and Agriculture Organization, and for informing the public.

The data cover the **agricultural sector**, which is defined by agricultural activities as stated in the NACE Rev. 2 classification and by threshold values for registering in the Farm Register:

01.1 Growing of non-perennial crops

01.2 Growing of perennial crops

01.3 Plant propagation

01.4 Animal production; as for class 01.49 of NACE Rev. 2 (Raising of other animals), only a) raising and breeding of semi-domesticated or other live animals (except insects), and b) bee-keeping and production of honey and beeswax are included

01.5 Mixed farming

01.6 Support activities to agriculture and post-harvest crop activities, only maintenance of agricultural land in good agricultural and environmental condition is included

The Farm Register includes agricultural holdings that meet at least one from the following criteria laid down by Decree of the CZSO No 126/2001 Coll.:

a) utilised agricultural area of 1 hectare and more

b) at least 1 500 m<sup>2</sup> of grown intensive crops (vineyards, hop gardens, intensive orchards, flowers or ornamental woody plants, vegetables, aromatic plants, medicinal plants, seeds, nurseries etc.)

c) at least 300 m<sup>2</sup> of greenhouses and/or hotbeds

d) farming of livestock from 1 head of cattle, 2 head of pigs, 4 head of sheep and goats, 50 head of poultry, 100 head of rabbits, and/or 100 head of fur animals

d) freshwater fish farming on water bodies, irrespective of their size

The **statistical population** is economic subjects dealing with raising of cattle.

The **statistical unit** is an agricultural holding, which is defined as a single unit, both technically and economically, that has a single management and that undertakes economic activities in agriculture either as its primary or secondary activity.

Statistical units are legal and natural persons.

**Reference dates** for the number of livestock are 30 June and 31 December.

Calendar half-year or calendar year are **reference periods** for production indicators.

Statistical information cover geographically the **territory** of the Czech Republic and they are broken down by NUTS3 territorial units (CZ010 Hlavní město Praha and CZ020 Středočeský kraj are merged), alternatively by NUTS2.

The **source** of the published **data** is a sample statistical survey Zem1-02 on cattle farming which runs twice a year. The sample is stratified by size of the herd of farmed cattle, affiliation with an agricultural production area, and with a region where the farming takes place. The values obtained in the survey are weighted in particular strata using coefficients corresponding to the percentage of selected units. Values not obtained in the survey (actual non-response) are imputed as average values in respective strata.

**Data** are **validated** at the level of responding units in two stages:

- before submitting a completed online form for principal checks
- after receiving data for conditional checks

and at the level of aggregates for fluctuations using comparison to the preceding period.

Observed data are used for calculation of derived indicators:

average number of cows = number of animal days for cows / number of calendar days in the reference period;

daily milk yield = milk production in litres / number of animal days for dairy cows

milk yield = milk production in litres / average number of cows in a year

number of calves born alive per 100 cows = number of calves born alive/ 100 \* average number of cows in the reference period

*death losses of calves (percentage) = number of calves dead until 3 months of age \* 100 / number of calves born alive*

*number of calves reared per 100 cows = (number of calves born alive - number of dead calves until 3 months of age) / 100 \* average number of cows in the reference period.*

***Breaks in series in surveyed indicators:***

*Since 2017*

*Age breakdown of cattle under 1 year was changed from “under 8 months” and “8 to 12 months of age” to “under 6 months” and “6 to 12 months of age”.*