

13 AGRICULTURE

Methodological notes

The agricultural “industry” comprises agricultural primary production enterprises engaged in crop production, animal production, and providing services for agriculture, according to the Classification of Economic Activities (CZ-NACE), division 01. Data on gamekeeping covering economic activities given in the CZ-NACE 01.7 group are provided in Chapter 14 Forestry because they have a closer relation to forest management.

The basic unit in agricultural statistics is an agricultural holding defined by at least one of the thresholds as follows: having utilised agricultural area of 1 hectare and more, 1 500 m² of grown intensive crops (orchards, vegetables, flowers), 1 000 m² of vineyards, 300 m² of greenhouses and/or hotbeds, farming of livestock from 1 head of cattle, or 2 head of pigs, or 4 head of sheep or goats, or 50 head of poultry, or 100 head of rabbits.

Data are mostly obtained by sample surveys. The sample of selected respondents is based on the updated Farm Register and the results acquired are grossed up by means of mathematical and statistical methods. Nation-wide structural surveys, which cover all active agricultural entities, are conducted at longer time intervals within agricultural censuses. Since 2002, all data have been measured and grossed up for the agricultural sector only and do not include households of the population out of the agricultural sector.

Notes on Tables

Tables 13-1 to 13-4 Economic accounts for agriculture

The economic accounts for agriculture (EAA) are a fundamental methodological instrument to measure the economic size and performance of agricultural primary production. They include the following aggregates:

- **output of the agricultural “industry”** is the sum of agricultural products and agricultural services produced by holdings operating in the agricultural “industry” and their inseparable non-agricultural secondary activities;
- **intermediate consumption** measures the value of own products, goods, and services consumed in the production process (excluding long-term assets, consumption of which is captured as the fixed capital consumption) and serves as one of the key indicators of the production intensity of agriculture. According to the Commission Regulation (EC) No 909/2006 amending Annexes I and II to Regulation (EC) No 138/2004 of the European Parliament and of the Council on the economic accounts for agriculture in the Community this consumption shall include FISIM (financial intermediation services indirectly measured);
- **gross value added** indicates the resulting effect of the agricultural “industry” measured as the difference between the agricultural “industry” output and intermediate consumption. It is used to assess the performance of the agricultural “industry”;
- **net value added** is the value produced by all agricultural units, obtained by subtracting fixed capital consumption from the gross value added.

The economic accounts for agriculture exclude units producing solely for one’s own consumption (kitchen gardens and private livestock raising in households). However, they include the agricultural output for own consumption of farmers whose holdings are larger than the bottom threshold (holding size).

The output is valued at basic prices, i.e. by the amount the producer receives from the buyer for a unit of goods or services produced by the producer, minus taxes on products plus subsidies on products.

The intermediate consumption is valued at acquisition prices of goods or services that are valid in the moment the goods and/or services are entering the production process. The price includes taxes on products minus subsidies on products, except for VAT.

Table 13-5 Utilised agricultural area and areas under crops

Utilised agricultural area and areas under crops are measured by a survey as at 31 May of the reference year.

The **utilised agricultural area** shall mean land under regular management used for cultivation of crops. It includes arable land, hop gardens, vineyards, gardens, orchards, permanent grasslands, and other permanent crops.

Areas under crops involve areas of agricultural land sown or planted in spring of the given year, in the case of winter crops areas sown in autumn of the previous year, and areas sown in previous years in the case of multiannual crops grown on arable land.

Tables 13-6 to 13-9 Per hectare crop yields and harvests of crops

The **per hectare yield** is the ratio of the harvest to the harvested area of a crop.

The **harvest** represents the total production of a crop of the standard moisture content and purity.

Before 2016, the total harvest of arable fodder crops is given as hay and is composed of the harvest of perennial fodder crops as hay and the harvest of annual fodder crops as green fodder.

Since 2017, the fodder crops harvest has been given with determined moisture content, which is 65% for green maize and maize for silage, 83% for other annual fodder crops, and 15% for multiannual fodder crops. The total arable fodder crops harvest is given with moisture content of 15%.

The **harvested area** is equal to the area under crops (sown area), except for grain maize, green and silage maize, early potatoes, other potatoes, and permanent grasslands.

Table 13-13 Fruit trees and bushes, harvest of fruit

The **number of fruit trees and bushes** includes fruit trees and bushes dedicated to the fruit production of all age categories.

Table 13-15 Production of selected products in households

The table gives an overview of agricultural production in households outside the agricultural sector. The data are an informed guess based on results found on kitchen gardens of the household budget survey, survey on agricultural production in households, and annual data from the surveys on harvests and animal production.

Tables 13-16 to 13-20 Livestock and livestock density

The **livestock population** is given according to livestock surveys conducted as at 1 April of the reference year.

Poultry includes chickens (*Gallus gallus*), geese, ducks, and turkeys regardless of their utility type and category.

The **livestock unit** (LSU) is a reference unit which facilitates the aggregation of livestock from various species and age as per convention, via the use of specific coefficients established as follows: 0.4 for a bovine animal up to 1 year of age, 1.2 for a fattened bovine animal aged 1 year and over, 1.0 for other bovine animals aged 1 year and over, 0.3 for a sow, 0.2 for other pigs, 0.14 for a sheep animal, 0.1 for a goat, 1.0 for a horse, and 0.004 for a head of poultry.

Table 13-21 Animal production

The **production of livestock for slaughter** (cattle, pigs) and **poultry** includes the quantity of livestock in live weight, which were taken to the market for slaughtering and also livestock, which were slaughtered at own slaughterhouses (abattoirs), at other party slaughterhouses for wage, or slaughtered out of any abattoir.

The **market fish production** means the amount of fish caught in lakes and special fish breeding facilities. It does not include fish caught in angling.

The **milk production** includes the amount of milk both milked for sale and milk sucked by suckling calves of dairy cows; the amount of milk sucked from cows for meat, which are not milked for the milk production, is not counted in.

Table 13-22 Livestock yields

The **number of heads reared (calves and piglets)** is the number of animals, which reached a certain age limit (calves three months of age, piglets of the age of weaning). It is given related to the average population of cows or sows.

The **average annual milk yield** is the quantity of milk produced per a dairy cow and year.

The **average annual egg yield** is the number of eggs laid per one laying hen and year. The laying hen shall mean a hen, which has attained maturity for laying eggs and is bred for the production of eggs not intended for hatching.

Tables 13-23 and 13-24 Meat production in the carcass weight and the average live weight of livestock for slaughter

The **meat production** gives the carcass weight of livestock slaughtered in registered slaughterhouses (abattoirs). It includes meat recognised as suitable for human consumption.

The **carcass weight** refers to the weight of carcasses. Veal shall mean meat from cattle slaughtered at the age up to eight months and lamb shall mean meat from sheep slaughtered at the age up to one year. Poultry includes meat of slaughtered chicken, hens, ducks, geese, turkeys, and other domestic fowl bred for meat, but not for hunting purposes.

The **live weight** is the weight of livestock for slaughter before the slaughter. The average live weight of pigs does not include sows and boars.

Table 13-26 Sales of main crops

Sales of crops include all sales by primary producers to trade, processing, and other entities, and direct exports.

Table 13-28 Per capita consumption of selected kinds of food

Data on the agricultural and industrial production, self-supply, initial and final stocks, and on imports and exports are used for the calculation. These data are obtained from statistical surveys of the CZSO, from unions of food producers, and from other institutions. Food consumption is calculated using the mid-year population.

Tables 13-29 and 13-30 Consumption of fertilisers

Mineral fertilisers contain the declared nutrients in the form of minerals. Consumption of main nutrients is given as follows: nitrogen (N), phosphorus pentoxide (P_2O_5), and potassium oxide (K_2O).

Nitrogenous fertilisers give the amount of nitrogen (N) in the mineral fertilisers consumed.

Phosphatic fertilisers give the amount of phosphorus pentoxide (P_2O_5) in the mineral fertilisers consumed.

Potassic fertilisers give the amount of potassium oxide (K_2O) in the mineral fertilisers consumed.

Calcareous fertilisers give the consumption of calcareous matter in liming of agricultural land.

Livestock manure is a by-product of livestock farming. It includes farmyard manure, slurry, liquid manure, and other types of livestock manure. It does not include by-products or main products from cultivation of crops, as collectable after-harvest remnants of plants (e.g. straw or beet greens) or crops for green manure.

Organic fertilisers contain the declared nutrients in an organic form (e.g. compost, digestate).

Organo-mineral fertilisers contain the declared nutrients in mineral and organic forms (e.g. enriched molasses stillage).

The fertiliser consumption refers to consumption of reporting units of the sample (with no grossing up to the agricultural sector as a whole, i.e. it does not include small farmers) per hectare of utilised agricultural area as reported by them.

The marketing year is the period from 1 July of the previous year to 30 June of the current year.

* * *

Further information can be found on the website of the Czech Statistical Office at:

– www.czso.cz/csu/czso/agriculture_ekon