

13. AGRICULTURE

The agricultural industry embraces agricultural primary production enterprises engaged in crop production, animal production and services for agriculture.

Since 2002 the Czech Statistical Office has harmonized statistical surveys according to laws, regulations and recommendations in force for the EU member states. The data are mostly sample surveyed, the sample of respondents is based on the updated Agro-register, and the results are grossed up by mathematical and statistical methods. 100% structural surveys, which cover all active agricultural units, are conducted at longer time intervals in the framework of Agrocensuses. Since the year above, all the data have only been measured and grossed up for the agricultural sector and do not include own-account production of the population.

The basic unit for records in agricultural statistics is an agricultural holding defined by at least one of the threshold values laid down for the structural survey on agriculture: 1 500 m² of grown intensive crops (fruit, flowers, vegetables grown in the open), 1 000 m² of vineyards, 300 m² of area under cover, 1 head of cattle, 2 pigs, 4 sheep and goats, 50 heads of poultry, 100 rabbits, 100 fur animals, and all holdings engaged in fish farming in water bodies irrespective of the area.

The questionnaire on areas, yields and production of agricultural crops used in the statistical survey on **crop production** is designed in compliance with requirements of international organisations. The crops are reported net, without mixtures.

Data on hunting (CZ-NACE Group 01.7 Hunting, trapping and related service activities) and forestry (CZ-NACE Division 02 Forestry and logging) are presented in a separate Chapter 14. Forestry as they are more tied with this economic activity and due to the intention to maintain continuity with the yearbooks published before.

Notes on tables

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

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

- **output of the agricultural industry** – the sum of agricultural products and services produced by units operating in agriculture and secondary inseparable activities;
- **intermediate consumption** – measures own goods, goods for resale and services consumed in the production process (excluding fixed assets where consumption is observed as fixed capital consumption) and is one of the key indicators of the production intensity of agriculture. According to Regulation (EC) it includes FISIM (Financial Intermediation Services Indirectly Measured);
- **gross value added** – indicates the resulting effect of agriculture measured as the difference between output and intermediate consumption. It is used to assess the efficiency of agriculture;
- **net value added** – the value produced by all agricultural units, obtained by subtracting fixed capital consumption from gross value added.

The economic accounts for agriculture exclude units producing solely for their own consumption (kitchen gardens and private livestock raising). However, they include agricultural output for own consumption of farmers whose holdings are larger than the minimum size (lower threshold).

The output is valued at basic prices, i.e. by the amount received by the producer 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 in force when the goods or services are entering the production process. The price includes taxes on products minus subsidies on products except for VAT.

Table 13-5. Areas under farm crops

Areas under crops measured by censuses taken as at 31 May include spring production areas (i.e., arable land areas; areas under crops in orchards and gardens, and areas of meadows and pastures temporarily ploughed and used for sowing) to be harvested in the reference year. They include:

- a) **areas under winter crops**, sown in the autumn of the previous year and maintained until the spring sowing in the reference year is over (31 May);
- b) **areas under spring crops**, sown in the spring of the reference year;
- c) **areas under perennial crops**, sown in past years and maintained until the sowing in the reference year is over (31 May).

Agricultural and arable utilised land in this table is the land used for agricultural production and land which was and is planned to be utilised but currently it is not. The area of agricultural land farmed refers only to agricultural sector, i.e. excluding household sector.

Set-aside arable land – refers to not sown or planted arable land areas not included into the total area under crops. Included is fallow land and all arable land not sown or planted for whatever reason including arable land temporarily excluded or not farmed land in the reference year up to 31 May.

Tables 13-6 to 13-9. Main farm crops harvested and yields per hectare

The tables list data from the questionnaire on final harvests of farm crops as of the end of year.

The **yield per hectare** is the ratio of harvest to production area.

The **harvest** is the total quantity of a crop harvested at standard moisture content and standard purity, including inferior portions of the crop that can be used for feeding livestock (grain waste, small discarded potatoes, etc.) and excluding seed crops and crop planting stock.

Before 2002, the **production area** refers to an area from which the crop measured was actually harvested. It can be smaller than an area under crops, if such crop is destroyed or ploughed-in in the sowing-to-harvesting period or is not harvested. It can be larger than an area under crops, if used to grow another crop, too (e.g. if part of an area under green maize is grain harvested). Since 2002, production areas have been equal to areas under crops (except for grain maize, green and silage maize and permanent grassland).

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

The **number of fruit trees and bushes** is obtained from processed questionnaires on final harvests as at the end of year.

The **harvest** of individual fruits from fruit trees and bushes is sample surveyed as at the end of year, using questionnaires on final harvests of agricultural crops, and the data obtained are grossed up by mathematical and statistical methods.

Table 13-15. Production of selected products in households of the population

The table gives an overview of agricultural output in the self-supply area, implemented outside the agricultural sector in households of the population. The data represent an expert estimate based on information on kitchen gardens in households of the Household Budget Survey, survey among households and annual data from survey on harvest and animal production.

Tables 13-16 to 13-20. Livestock and livestock farming intensity

Livestock population is derived from livestock censuses conducted as at 1 April of the following year (before 2002, as at 1 March of the following year).

Cows are breeding dams calved at least ones, both mated and non-mated.

Sows are breeding dams farrowed at least once (excluding sows discarded from breeding), both mated and non-mated.

Poultry includes hens and cocks, geese and ganders, ducks and drakes, turkey hens and cocks (including young ones).

Livestock unit is a fixed unit into which each livestock individual is converted by means of factors set as follows: cattle up to 1 year of age 0.4, fattening cattle over 1 year old 1.2, other cattle over 1 year old 1.0, sows 0.3, other pigs 0.2, sheep 0.14, goats 0.1, horses 1.0, and poultry 0.004.

Tables 13-21 and 13-22. **Animal production and livestock yields**

Cattle and pigs production – includes all sales of cattle and pigs for slaughter in terms of live weight (the number of pigs includes estimates for home slaughtering) both in the Czech Republic and abroad.

Poultry production – includes all sales plus in-house consumption of poultry for slaughter in terms of live weight.

The number of weaned calves and piglets – the difference between animals born and lost by death, namely calves up to three months of age and piglets till weaned. The number of born and weaned calves per 100 cows or piglets per 1 sow is related to the average population of cows or sows.

The death loss of calves or piglets – given in percentage points and calculated from the number of born animals. It also includes discarded animals.

Milk production – includes milk both drawn from the cow for further treatment and milk sucked by unweaned calves; milk sucked from suckler cows is not counted in. The **average milk yield** is the quantity of milk produced over 1 year and falling on 1 cow in milk (including dry cows, 60–20 days before calving).

Average egg-laying – the number of eggs laid by 1 hen (not per 1 laying hen only) per year.

Tables 13-23 and 13-24. **Meat production in carcass weight and average live weight of animals for slaughter**

Meat production in carcass weight includes data from all abattoirs in the Czech Republic irrespective whether animals are from the Czech Republic or imported.

Carcass weight refers to the weight of carcasses as defined in regulations of the Council of the European Union. Emergency slaughters are counted in the carcass weight providing the meat is used for human consumption.

Live weight is derived from carcass weight. The average live weight of pigs does not include sows and boars.

Table 13-26. **Sales of main animal products: totals**

Total sales of main animal products include all **sales by primary producers** from their own farming to trading and processing companies, other sales (including products for in-house processing) and direct exports. **Total sales of livestock for slaughter** include cattle, pigs, sheep, goats, horses and poultry in terms of live weight. The data on sales of **eggs** only include eggs for consumption (hatching eggs are excluded).

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

The data on industrial production, self-supply, initial and final stock, imports and exports are used for the calculation. These data are obtained from the CZSO statistical reports, from unions of food producers and organizations dealing with external trade and also from other institutions. The calculation is based on the mid-year population.

Tables 13-29 and 13-30. **Consumption of fertilizers**

Mineral fertilizers (nitrogen, phosphate, potash) – declared nutrients are contained in the form of mineral substances produced by extraction or other physical or chemical process; also urea and urea products.

Barnyard manure is the by-product of farming animals or product of cultivating plants unless it is further treated. Natural processes of storing, mechanical separation of slurry, or addition of substances reducing the loss of nutrients or improving the effect of nutrients are not considered as treatment.

Organic fertilizers – declared nutrients are contained in organic form (e.g. compost, digestate from biogas plants).

Organomineral fertilisers – declared nutrients are contained in mineral and organic forms (e.g. molasses stillage).

Agricultural production year covers consumption from 1 July of previous year to 30 June of current year.

Consumption per ha refers to utilised (not fertilized) land.

Due to the way of measuring, the data exclude consumption of fertilizers by holdings of self-employed farmers.

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

– http://czso.cz/eng/redakce.nsf/i/agriculture_ekon