

# 19. AGRICULTURE

## **Agricultural area**

Cultivated arable land, kitchen gardens, orchards, vineyards and grassland.

## **Animals for slaughter**

Livestock to be slaughtered for public, farm or other purposes, as well as livestock for exports, irrespective of breed, age, sex or weight (the weight of livestock for slaughter refers always to live weight).

## **Arable land**

Any land area under regular cultivation irrespective of the soil cultivation and whether the area is under crop production or not due to any reason, such as inland waters or fallow. Area under tree nurseries (including ornamental and orchard tree nurseries, vineyard nurseries, forest tree nurseries, but excluding those for the holdings' own requirements grown in the forest), permanent crops (e.g. alfalfa and strawberries), herbs and aromatic crops are included. Area of kitchen gardens utilised for crop and horticultural production is included in case it is not devoted for consumption of persons living on the holding. Temporary grassland planted within 5 years, which is a part of the holdings' crop rotation, is also included.

## **Average market price**

The modus price weighted with the actual quantity of products brought to markets and fairs.

## **Average procurement price**

The quotient of the total amount paid for procured products without VAT and the quantity belonging to it. Observation covers 168 products.

## **Average yield**

Arable crops and vegetables: up to 1996 the quantity of crops harvested from one hectare of arable land and garden, from 1997 the quantity of crops harvested from one hectare of arable land. In case of grapes and fruits the harvested quantity calculated for one hectare of total land, from 2003 the harvested quantity calculated for one hectare of productive land area (for land-unit of yielding vineyard or orchard).

## **Cereals**

Wheat (winter, spring and spelt), durum wheat, einkorn, rye, barley (winter and spring), oats, maize (in grain in May), triticale, meslin, rice, and other cereals (Indian rice, millet, canary seed, sorghum and buckwheat).

## **Consumption from own production**

The value of goods consumed by private farmers either from production or received in kind from economic organizations.

## **Cow's milk**

*Milk production per cow* is calculated by average stock of dairy and dual-purpose cow. (1 litre milk = 1.027 kg milk)

## **Cultivation method**

Cultivation method is the actual method of use characteristic for the land area, including arable land, kitchen garden, orchard, vineyard, grassland (intensive, extensive), forest, reed, fishpond and uncultivated land.

## **External trade**

The method of the external trade statistic has been changed in several aspects from 1 May 2004 due to Hungary's EU accession. External trade of Hungary covers both its trade inside and outside the EU.

Source of data: Data on trade within the EU are reported directly by traders, while information on trade outside the EU comes from the Hungarian Customs and Finance Guard, collected along the customs procedures. Responsibility for production and dissemination of external trade statistics lies with the Hungarian Central Statistical Office.

In order to reduce the burden on intra-EU traders, some two-third of them, providing less than 2% of the total trade value, are exempted from their information providing obligation. Adjustments are made for this under-threshold trade and non responses as well. Data on external trade in tables 19.1.1.24.–19.1.1.25. comprises only fresh or chilled vegetables and fruits and do not contain frozen ones. In case of data on external trade in chapter 4.1., the content of CN codes at 4 digit level differs from that of at 6 or 8 digits. While the data at CN-4 level include the estimated turnover as well, those at 6 or 8 digit level do not, they were compiled only from collected figures. As a result of this, the sum of 6 or 8 digits code are generally lower (by the value of estimated turnover) than the respective data at CN 4 digit level. Please note also, that estimated data are available only for values, for quantities not.

## **Gross production of agricultural products**

The gross production value of agricultural products produced (the sum of gross output, intermediate consumption from own

production, work-in progress and fish production). From 1999 milk for feeding suckling lambs and goats excluded.

### Grouping by legal form

From 1 January, 1994 it contains the following groups due to agricultural peculiarities: **Agricultural enterprises:** units carrying out agricultural activity, excluding private farmers and including budgetary and other institutions. **Private farmers:** self-employed persons carrying out agricultural activity and households performing agricultural activity (irrespective of the size of their livestock and land area).

Production and sales of major products are shown according to the **Domestic Product Classification** (BTO). When comparing data it must be taken into consideration, that according to the BTO introduced in 1996 vegetables do not comprise Hungarian red paprika, as well as crop products exclude spice crops, which figure only among crop production and horticultural products.

### Hen's eggs

1 kg eggs = 18 pieces of eggs.

### Input price index

Data on purchase price of fertilizers, pesticides, feeding-stuffs and veterinary products are collected from retailers and wholesalers. For obtaining weights the proportions of base year (2015) values (excluding the amount of VAT) of goods and services purchased by agricultural producers from retailers or wholesalers are used. Rebasing are used every five years as follows: all years ending in 0 or 5 are considered as base years and switch in the third year following the calendar year (eg price indices based on 2015 were first applied in 2018, and base year 2020 expected to take place in 2023). The weights remain unchanged for 5 years. Price indices compared to the same period of the previous year are calculated from the fix based indices. According to the new methodology for the calculation of annual indices the quarterly price indices are not weighted any longer using the value of products sold during the year but the annual value weight is distributed equally over each quarter at product and product group level.

### Intermediate consumption

The value of goods and services of agricultural and industrial origin and service charges used as inputs in the process of production. EAA data does not include value of own produced seed, milk for feeding, hatching and fodder egg.

### Land area

From 2020 onwards:

- Data are published only on agricultural area (arable land, kitchen gardens, orchards, vineyards, grassland) due to the changes in the data collection methodology
- Data refer only to areas that can be identified at farm level. No estimate is made for areas not identifiable at farm level (belonging to national parks, the Hungarian State Railways, the General Directorate of Water Management, the Hungarian Defence Forces, churches and others).
- The farm threshold has changed, which limits the comparability of the data.

[https://www.ksh.hu/docs/eng/agarar/change\\_of\\_farm\\_threshold\\_from\\_2020.pdf](https://www.ksh.hu/docs/eng/agarar/change_of_farm_threshold_from_2020.pdf).

### Land use

Data by land use, taken into consideration either owned, let or leased land areas.

### Land prices

According to the market price concept, the price of agricultural land (arable land, permanent grassland) is the price received/paid by the holder in free trade without deduction of taxes or levies and without the inclusion of subsidies. In practice, this means the actual price agreed upon by the transactors.

Any tax that the seller may have to subsequently pay as a result of selling the land, such as capital gains tax, is not deducted from the price.

The selling/purchase price of land should thus:

- exclude costs of transferring ownership (therefore lawyer's fees, registration taxes and real estate tax are not included in the land price);
- exclude deductible VAT;
- exclude the entitlements related to the land;
- exclude the value of any monetary compensation received by farmers for the sale/acquisition of the Utilized Agricultural Area (UAA);
- exclude the value of any building on the sold/purchased agricultural land;
- exclude inheritance transfers.

### Land rents

Rents correspond to payments made to the owner of land in return for his making assets available to another physical person/legal

person/legal entity.

In practice, this means the actual rent price agreed upon by the transactors and to be paid by the user of land, including the value of related levies/taxes and including payments in kind (i.e. including contracts with partially or solely payment in kind) valued at the current year price.

No distinction is made taking into consideration the duration of the renting contract/agreement and the time for contracting. Therefore, all rents for land (even if the land is rented for more than one year) should be taken into account for the calculation of average yearly rent.

The rental price of agricultural land should:

- exclude the entitlements related to the land;
- exclude deductible VAT;
- exclude the rentals of buildings or dwellings situated on it and any other expenses related to other assets except the agricultural land (current maintenance expenditure on buildings, buildings insurance, depreciation of buildings, rents paid for the professional use of nonresidential buildings etc.).

#### **Live-born animals**

The new-born animals, living at least 24 hours following their birth.

#### **Livestock**

Up to 1995 livestock on 31 December. From 1996 livestock is observed on 1 December according to the methodology of the European Union in force.

#### **Livestock unit**

Means a standard measurement unit that allows for the aggregation of the various categories of livestock in order for them to be compared.

Livestock unit coefficients used from 2020:

Type of animal	Characteristic of animal	Coefficient
Bovine animals	Less than 1 year old	0.400
	1 to less than 2 years old	0.700
	Male, 2 years old and over	1.000
	Heifers, 2 years old and over	0.800
	Dairy cows	1.000
	Non-dairy cows	0.800
Sheep and goats		0.100
Pigs	Piglets, live weight of under 20 kg	0.027
	Breeding sows, live weight 50 kg and over	0.500
	Other pigs	0.300
Poultry	Broilers	0.007
	Laying hens	0.014
	Other poultry	
	Turkeys	0.030
	Ducks	0.010
	Geese	0.020
	Ostriches	0.350
	Other poultry fowls n.e.c.	0.001
Rabbits, breeding females		0.020

#### **Meat production**

The total amount of meat of slaughtered cattle, pigs, horses, sheep, poultry and other animals (including offal, excluding slaughter grease and other by-products).

#### **Net meat production**

The total amount of meat of slaughtered cattle, pigs, horses, sheep, poultry and other animals including offal, in carcass weight, irrespectively of their origin, whether indiginous or foreign. The meat production of pig does not cover slaughter grease.

#### **Orchard**

Land area under fruit trees and bushes, where the main crops are fruit trees and bushes. Orchard area may include several fruit species (e.g. apples, pears, cherries etc.). Coherent orchard area in the kitchen garden is also included if the area is 200 m<sup>2</sup> or above in case of berries and 400 m<sup>2</sup> or above in case of fruit trees. Not productive orchard area is also included.

#### **Procurement of agricultural products**

The procurement of agricultural products from the producers for processing or resale. The survey covers approximately 200 products.

#### **Producer price index of agricultural products**

Reflects changes in prices (compared to annual average prices) paid to producers for agricultural products procured for processing or further sale, or sold directly to households for consumption (in the market). It excludes the value of direct exports and value of direct sales (between farmers) of animals and animal products. The indices have been calculated by the Laspeyres type formula weighted with the ratio of sales values in fix base. Rebasing are used every five years as follows: all years ending in 0 or 5 are considered as base years and switch in the third year following the calendar year (eg price indices based on 2015 were first applied in 2018, and base year 2020 expected to take place in 2023). The weights remain unchanged for 5 years. Price indices compared to the same period of the previous year are calculated from the fix based indices.

#### **Productive land area**

Productive land area is the total of agricultural area including the area of arable land, kitchen garden, orchard, vineyard, grassland, plus the area under forests, reed and fishponds.

#### **Total harvested production**

Total production of main, inter-, border and edge plants and plants harvested as secondary crop produced on the arable land, including the crop grown in other cultivation methods such as kitchen gardens.

#### **Uncultivated land area**

Uncultivated land is the total of area of unused agricultural areas and other areas such as buildings and structures, farm yards, parks and ornamental gardens, roads and the associated ditches, ponds, quarries, waste land, etc. required for the operation of the holding.

#### **Utilization of organic and chemical fertilizer**

The size of land area is taken into account once, irrespectively of the frequency of fertilization. The utilized organic fertilizer includes manure and semi-liquid manure.

#### **Value of output by subtracting intra-agricultural use**

Value of agricultural output reduced by intermediate consumption.

#### **Vegetables**

Up to 1995 green peas were registered in shell weight, since 1996 in grain weight (100 kgs in shell weight = 40 kgs in grain weight).

#### **Vineyard**

Vineyards are areas where vines are planted at regular spacing and row width and the main crop is grape. The vineyard area may consist of several varieties of vines. In addition to the fruity areas vineyards also include areas that do not yet or already bring fruit. Areas under grapes in the kitchen garden of equal plant spacing and row width also qualify as part of the vineyard branch of cultivation provided such area is equal to or exceeds 200 m<sup>2</sup>.

#### **Volume index of procurement of agricultural products**

From data of approximately 200 products, volume indices are weighted with the prices 2 years before the reference year.

#### **Volume indices of gross production of agricultural products, 1990=100,0**

Chain volume index of loss-free production of crops production and animal husbandry; basic year is 1991 between 1991–1996, 1995 up to 1997–1998, and after 1998 at producer prices of previous year.

## **Food balances**

19.1.1.47–19.1.1.66.

The **model of food balances** is the following:

Production + imports – exports – losses ± changes in stocks = domestic use

Domestic use – use for non-food purposes = domestic consumption (available food)

The balances of food and alcoholic beverages are quantity compilations of the supply and use of major products representing a large

weight in consumption. The balances are of basic-material type, i.e. they contain preparations (including meals at catering units) in basic material weight. (Quantities in basic material weight and in goods weight may be very much different in the case of a particular product.) Data on consumption per capita, is derived from balances and published here, are not quantities actually consumed by households but consumable quantities or supply available for households. Data on domestic supply cover goods consumable in the area of the country. This way data include, in addition to the consumption of domestic households, purchases by international tourists in Hungary, but exclude consumption by Hungarian citizens abroad. Furthermore, they do not take account of goods coming to the country through tourism and goods originating from private imports or other sources – that cannot be taken into account – and distributed via occasional sales, though their quantity may be substantial in the case of certain products. Data on the quantity of food consumption of households are regularly collected and published in household statistics, too. On the one hand, these data refer to the quantities purchased by households resident in Hungary, "**resident households**", which is a narrower term than domestic consumption, on the other hand, data in household statistics show the consumption of food in goods weight and in the form (basic materials, preparations, food) in which food products were purchased. Therefore, the quantity data of macro consumption and household statistics cannot be compared directly.

Data on **domestic consumable quantities** include retail trade losses and stocks.

The **data per capita** are calculated with the average number of inhabitants in the middle of the current year.

Methodological changes were implemented in the compilation of food balances in 2000, primarily according to the guidelines of the European Union. In line with the expectations the list of goods involved in external trade was extended among others, and processed vegetables and fruits are taken into account in raw weight, as opposed to the earlier practice. When making comparisons over time, changes in methodology have to be taken into consideration.

From 2000, melons are classified among vegetables instead of fruits.

From 2004 the quantity of consumable meat is calculated on the basis of net meat production. The external trade data cover only meat and meat preparations, export and import data do not include trade in animals for slaughter.

*Source of data:* Research Institute of Agricultural Economics.

**Net meat production:** quantity of meat – including offal, in carcass weight – from cattle, pigs, horses, sheep, poultry and other animals slaughtered in Hungary, irrespective of the origin of animals for slaughter, whether indigenous or imported. In the case of pork the figures of production do not cover slaughter grease (pig slaughter grease x 0.87 = pig fat). Meat production data refer only to slaughterhouses and meat processing units authorised in Hungary and to home slaughtering.

From 2014 the amount of fish has been calculated in live weight, according to the method of the European Union.

To **compile balances** the following sources are used:

- surveys and compilations (agricultural, external trade, industrial and price statistical data) as well as publications of the Hungarian Central Statistical Office (HCSO),
- food balances of certain food products (Institute of Agricultural Economics Kft. (AKI)),
- slaughtering of animals at slaughterhouses (AKI).

## More information is available from the Meta database:

- [Land use](#)
- [Economic accounts for agriculture](#)
- [Crop production](#)
- [Livestock and animal products](#)
- [Fruit and vine plantations](#)
- [Farm structure - agriculture](#)
- [Agricultural production methods](#)