



## Performance of domestic agriculture in 2018 (Economic accounts for agriculture, 2018)

- **Production grows**
- **Value of output at current prices goes up**
- **Total gross output of agriculture increases due to growth in volume of live animals and cereals**
- **Volume and value of expenditure both up**
- **Income and labour input decrease**
- **Regions in Great Plain have an outstanding role in agricultural production**
- **Hungary has an important role in production of cereals and industrial crops in the EU**

### Production grows

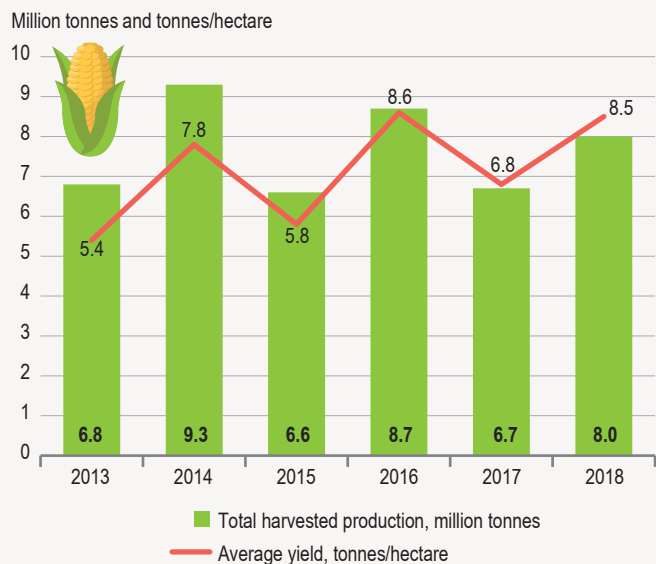
The value of and the change in the volume of agricultural output can be determined based on the observation of annual harvest results and of livestock.

The **volume of the total crop production sector grew by 0.9%** in 2018 compared to a year earlier.

- Nearly 15 million tonnes of cereals were harvested from 2.4 million hectares. The harvested area has been reduced since 2014. Production became 6.5% more, mainly owing to a growth in the production of maize, of which 8 million tonnes were harvested, 18% more than in 2017, contributing this way by 2.0 percentage points to the increase in the volume of total agricultural output. 5.3 million tonnes of wheat were reaped in 2018, 0.2% more on a 6.2% larger area (1 million hectares) than in the previous year.

Figure 1

### Total harvested production and average yield of maize



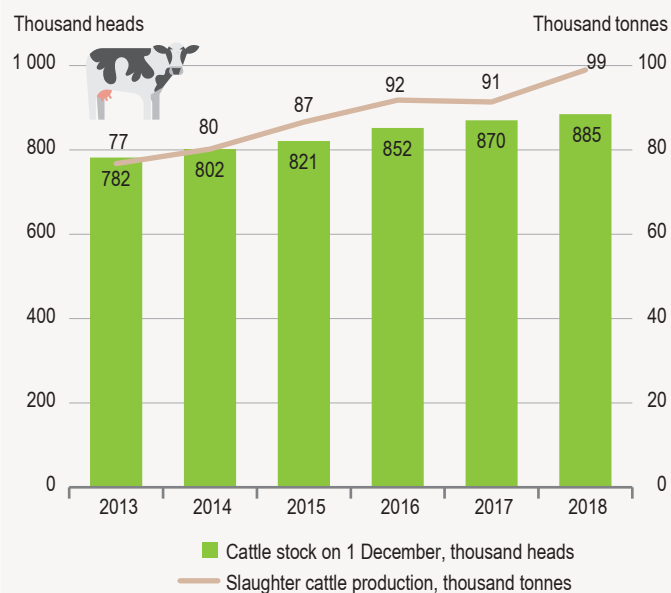
- The productive area of oilseeds was cut by 5.0%, within which the area of sunflower was 11% smaller, while that of rape 9.1% larger. Production also changed accordingly, it decreased for sunflower and went up in case of rape (1.8 million and 1.0 million tonnes, respectively). 958 thousand tonnes of sugar beet were produced, 18% less than in the previous year.
- The harvested production of potatoes was 328 thousand tonnes, less than ever before.
- The quantity of vegetables was down to 1.5 million tonnes.
- The quantity of fruits (925 thousand tonnes) was larger than in the previous year, apples production (679 thousand tonnes) was 43% higher. Grape production was 533 thousand tonnes in 2018, 0.7% more than in 2017.

The **volume of the total livestock production sector increased by 6.3%** in 2018 compared to one year earlier.

- 1.7% more cattle (885 thousand) were kept in holdings in December 2018 than a year earlier, which contributed by 0.5 percentage point to the growth in the volume of total agricultural output.

Figure 2

### Cattle stock and slaughter cattle production



- The pig stock of 2.9 million in December 2018 was almost the same as one year earlier.
- The poultry stock lessened by 2.2% to 39.7 million, within which the chicken stock was reduced by 3.7%, it was 30.7 million in December 2018.
- The total weight of slaughter animals slaughtered over the year (1.6 million tonnes) was 7.1% more than in the previous year. The quantity of slaughter pigs (583 thousand tonnes) increased by

2.0%, that of slaughter poultry (869 thousand tonnes) by 11% and the quantity of slaughter cattle (99 thousand tonnes) by 8.3%. Out of the main animal products cow's milk production diminished by 0.9%, eggs production was up by 4.0% compared to a year earlier. 1.9 billion litres of cow's milk and 2.5 billion pieces of eggs were produced.

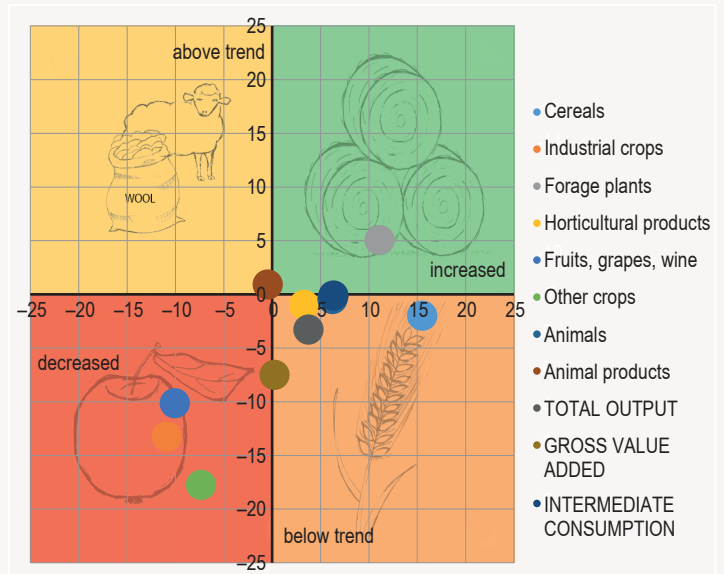
**Value of output at current prices goes up**

The **total gross output** of agriculture was 2,693 billion forints **at current basic prices** in 2018 **according to the economic accounts for agriculture (EAA), 3.7% more** than in the previous year.

- The output of crop and horticultural products was 1,559 billion forints, 3.6% more than in the previous year. The value of output was 714 billion forints for cereals and 346 billion forints for industrial crops. Out of the latter the output of sunflower, representing the largest proportion, amounted to 185 billion forints. Fresh vegetables contributed by 188 billion forints, fresh fruits, grapes and wine by 159 billion forints to total output.
- The value of output of live animals and animal products increased to 946 billion forints in 2018. The output of live animals reached 656 billion forints (within which that of poultry 298 billion forints). The output of animal products was 290 billion forints (out of which that of milk 184 billion forints).
- Agricultural services provided to producers represented a value of 142 billion forints, inseparable non-agricultural secondary activities – the processing of meat, milk, fruits and vegetables – a value of 45 billion forints. These latter represented merely 1.7% of total gross output. The largest share of the total output of agriculture was represented by cereals (27%), live animals (24%), industrial crops (13%) and animal products (11%). The share of total crop production was 58% and that of live animals and animal products 35%.

Figure 3

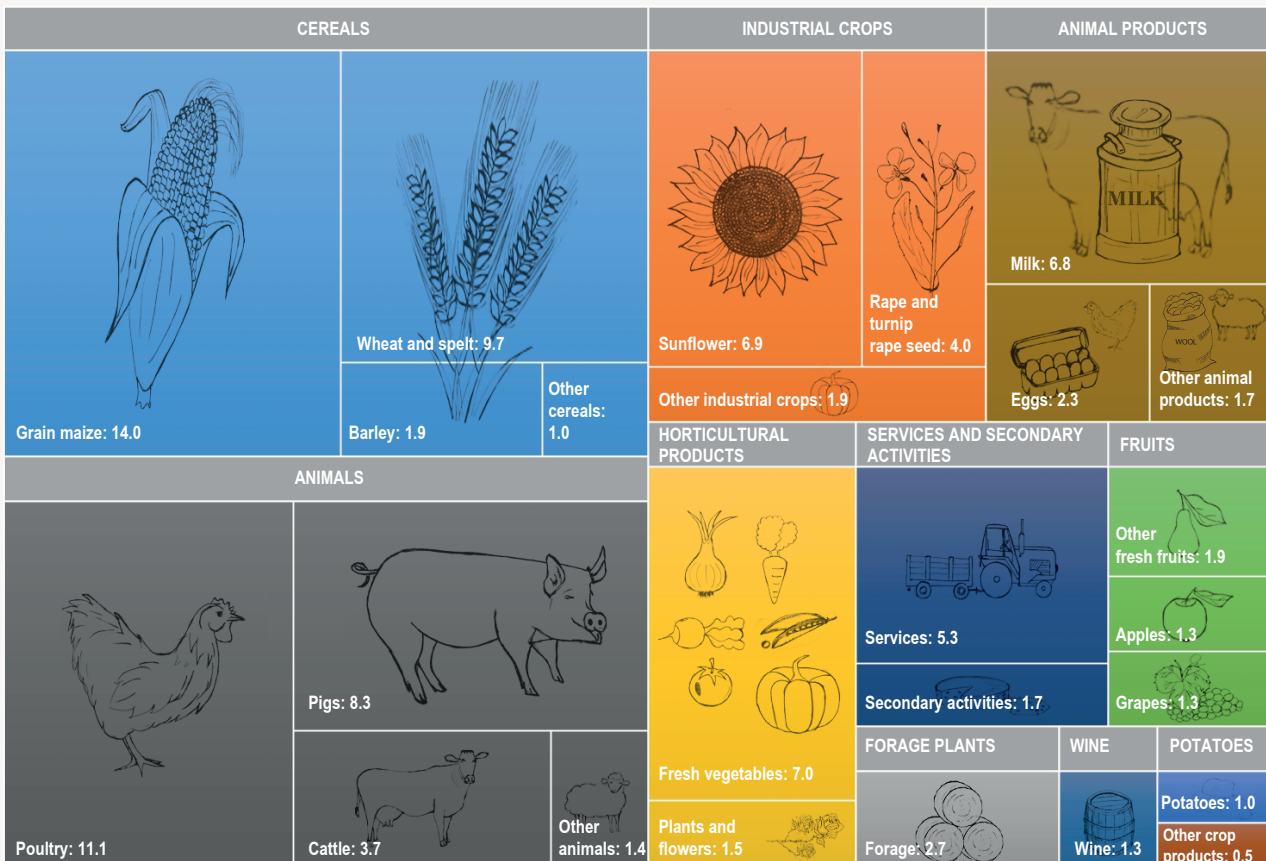
**Value of output compared to previous year and trend value, 2018\***  
(trend value calculated from previous 9 years=100%)



\* The horizontal (x) axis of the figure shows changes in indicators compared to the previous year, and its vertical (y) axis differences from the long-term trend. The long-term trend was defined using a linear trend for the last 9 years. Based on this, indicator values can take up four possible positions: above the trend and increasing (green), above the trend and decreasing (yellow), below the trend and increasing (orange) and below the trend and decreasing (red). The figure includes in addition infographics of agricultural product groups that are the most typical of a particular position. An infographic illustrates the product within a product group which follows changes in its product group. The value of production is above the trend and increases in case of forage plants, within which especially other forage plants. The value of output is above the trend and decreases for animal products, the typical product within other animal products is e.g. raw wool. The output of fruits, industrial crops and other crops is below the trend and decreases. The output of the remaining product groups and indicators is below the trend and increases.

Figure 4

**Distribution of total gross output of agriculture, 2018, %**

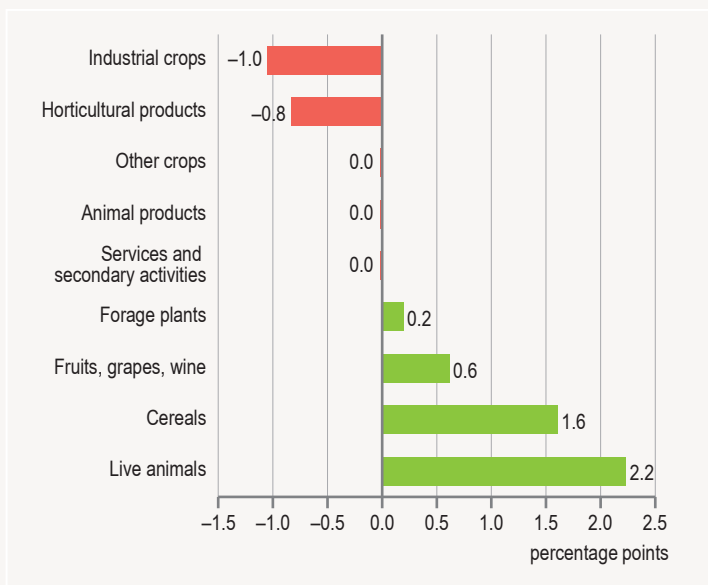


**Total gross output of agriculture increases due to growth in volume of live animals and cereals**

The output and the gross value added of agriculture at current prices have risen continuously since 2012. The output approximated 2.7 thousand billion forints and the gross value added exceeded 1.1 thousand billion forints in 2018. The **volume of the total gross output** of agriculture (its value at the previous year's prices) was **up by 2.7%** in 2018: live animals and cereals together increased the output by 3.8 percentage points, while industrial crops and horticultural products together lowered it by 1.9 percentage points.

Figure 5

**Contribution to change in volume of output, 2018**



- The volume of the output of crop production went up by 0.9%, dominantly due to growths in the production of cereals (6.7%), forage plants (7.7%) and fruits (12%). The volume of maize increased by 17%, that of wheat by 1.2% and the volume of rye by 2.1%, that of barley was cut by 20% and the volume of other cereals by 5.8%. The output of industrial crops as a whole narrowed by 7.0%, out of which all the crops decreased in volume except for rape and soya. The volume of horticultural products fell by 9.7%, while there was a growth (of 12%) in the volume of fruits and (of 1.4%) in that of wine.
- The production of live animals and animal products was up by 6.3% in 2018. The output of major animal species increased compared to the previous year. The output of animal products was unchanged in total, within which that of milk was reduced, while the output of eggs grew.
- The volume of agricultural services provided to other producers rose by 2.4%, while that of non-agricultural secondary activities, inseparable in holdings, decreased.

**Volume and value of expenditure both up**

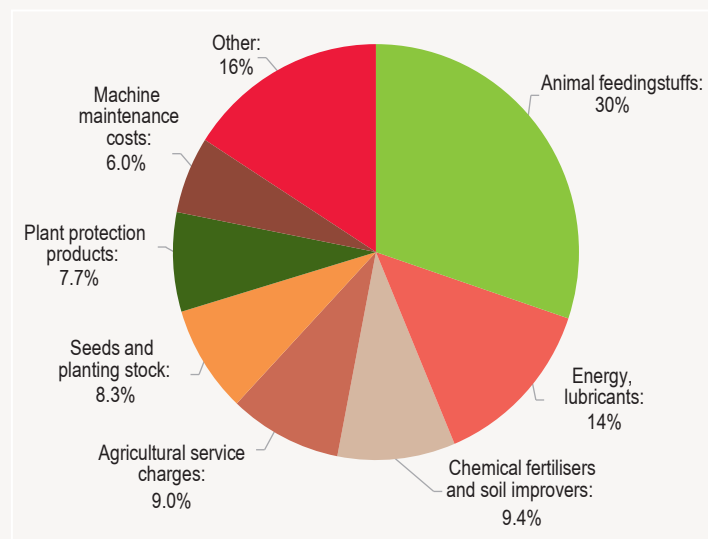
The total output of agriculture provides information on the production of the sector, while use is reported on by expenditure, i.e. intermediate consumption. It covers the value of all goods and services used by holdings in the production process. **Intermediate consumption**, devoted to the production of products and the provision of services, was 1,588 billion forints (at market purchasers' prices) in 2018, **6.3% more** than in the previous year.

- The **volume of expenditure went up by 1.4%** compared to 2017.
- Out of major items the use of chemical fertilisers was cut by 0.4%, the use of plant protection products by 0.6% and the volume of building maintenance costs by 5.4%.
- The highest growths were measured in veterinary expenses and in expenditure on animal feedingstuffs (4.2% for the former and 4.0% for the latter).

The share of expenditure directly connected with crop production – expenditure on seeds, planting stock, chemical fertilisers, soil improvers and plant protection products – rose within total intermediate consumption from 2000 to 2015, but lessened from 2016. This proportion came to 25% in 2018. Expenditure directly connected with livestock production – veterinary expenses and expenditure on animal feedingstuffs – had a declining share of the total amount, at 32% in 2018, while the share of other costs (other goods and services, building maintenance costs, etc.) has risen since 2015, approximating 16% in 2018.

Figure 6

**Composition of intermediate consumption, 2018\***

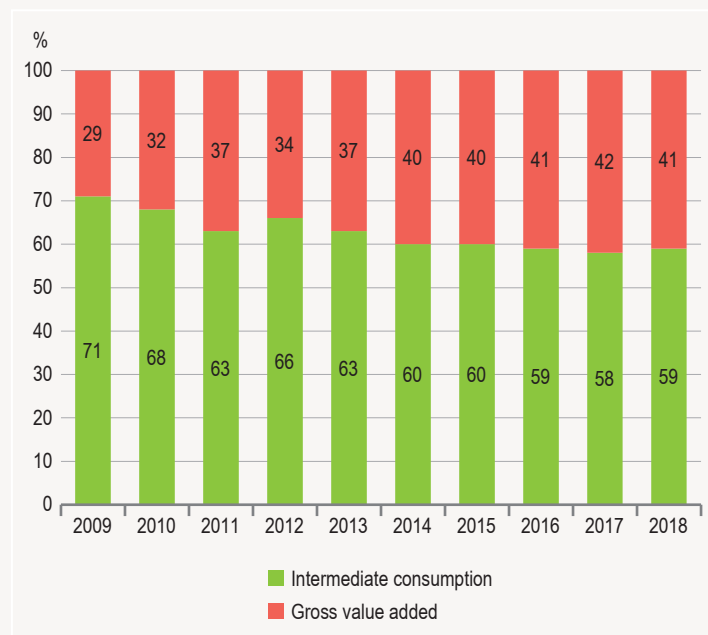


\* At current basic prices.

**Gross value added**, calculated as the difference between output and intermediate consumption, was 0.2% higher at current prices than in the previous year, it was 1,105 billion forints in 2018, **its volume increasing by 4.5%**. The share of gross value added was 41% of total output, i.e. an expenditure of 59 forints was needed for an output of 100 forints. The proportion of gross value added was higher than the average of the past five years.

Figure 7

**Composition of output\***



\* At current basic prices.

According to preliminary data of national accounts<sup>1</sup>, agriculture, forestry and fishing accounted for 4.2% of the total gross value added of the economy in 2018.

### Income and labour input decrease

Income defined in line with the requirements of the economic accounts for agriculture is accrual-based, i.e. is related to a particular period of accounting, irrespective of the realisation of a part of revenues only at a later date in financial terms. It contains the income, too, from which households benefit by consuming own-produced agricultural products (or food produced by processing them at home).

Gross value added and other items increasing income are presented as resources of income in Figure 8. (Gross value added at producer prices is completed by subsidies on products to get the value at basic prices, the amount of other subsidies on production – reduced by taxes on production – is not included in output, it directly increases income.)

The **net amount of subsidies on production reached 553 billion forints in 2018**, 29 billion forints more than in the previous year, its composition remained unchanged. The substantial change in its structure in 2015 resulted from the modification of the instruments of agricultural subsidies. Following EU accession the proportion of subsidies related to products (thus increasing gross value added) decreased continuously, from 44% in 2004 to 6.6% in 2014. Other subsidies, not related to products and having a growing share, e.g. subsidies on land or for rural development – which enhance factor income – gradually rose. However, subsidies on products increased in significance from 2015 again. This was due to member states' higher degrees of freedom in the Common Agricultural Policy (CAP) in force from 2015, and to Hungary completely using the available framework of subsidies related to production. Subsidies on crop products as well as on products from livestock production rose many-fold compared to the years preceding 2015.

Factor income (income on land, capital and labour force used) changed in the past few years mainly depending on the yields and product prices of crop production, which largely influenced the development of entrepreneurial income, too. In contrast, costs on the uses side (wages, rents and interests) and the amount accounted for depreciation fluctuate to a lower extent. Factor income was 1,232 billion forints in 2018, 1.0% higher than in the previous year.

**Net entrepreneurial income** is of a mixed character, since it shows the counter-value of the work of the holder and his/her family (unpaid labour force) and returns on the land and capital belonging to the holding in total. Its value decreased by 1.1% in 2018, it totalled **713 billion forints**.

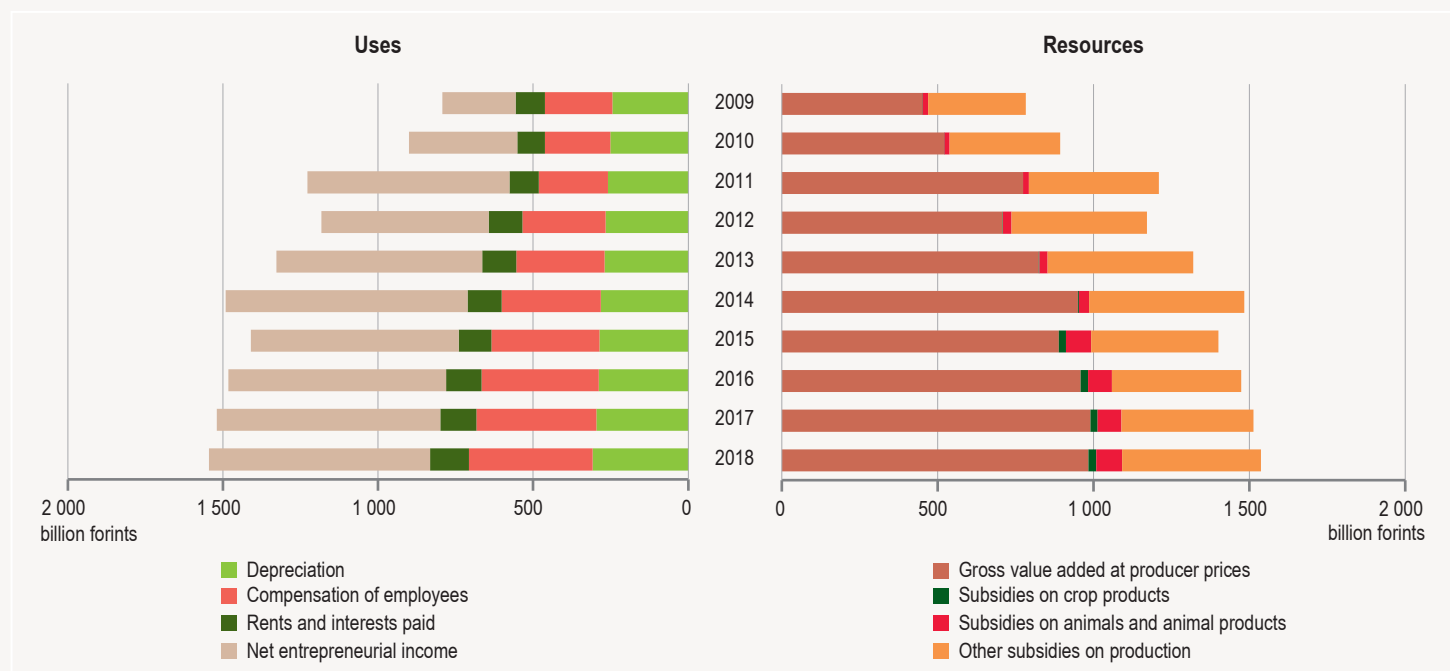
With our EU accession the proportion of subsidies within the income of agricultural entrepreneurs increased. The fluctuation of output, depending primarily on the weather, considerably influences the development of income, too. The role of subsidies declines in the composition of income in years with good yields. This proportion was 78% in 2018.

**Labour input** – expressed in annual work units (AWUs)<sup>2</sup> – went down by 7.1% compared to the previous year. Expressed in full time, labour input **was equivalent to the annual agricultural activities of 392 thousand people**. Unpaid labour input (267 thousand AWUs) went on decreasing, it was 8.7% lower in 2018 than one year earlier. The rising trend of paid labour input, continuous from 2012, stopped in 2017, and the decrease continued in 2018. Holders substituted a part of the declining unpaid labour input by paid input. Agricultural producers paid 399 billion forints to their employees in 2018, 3.3% more than in the previous year.

One of the most important purposes of EAA is to measure agricultural incomes and their changes. Eurostat defined three income indicators to examine the performance of member countries compared to one another and changes over time. The most frequently used of these is **real income from agricultural activities** per full-time worker, indicator 'A', which **was up by 4.0%** in 2018 compared to the previous year.

### Uses and resources of income

Figure 8



<sup>1</sup> The economic accounts for agriculture (EAA) can be well used to examine the performance and structure of agriculture, however, are not suitable for comparison with other sections of the national economy, since EAA is an activity-based observation, which observes holdings above a determined holding size irrespective of their principal activity. It is the system of national accounts that is suitable for the comparison, which system explores data of enterprises registered in a particular section and makes them comparable with the rest of the sections.

<sup>2</sup> One AWU is equal to the volume of time worked in a holding over one year by one person employed full time in agriculture (1,800 working hours). This way of accounting also takes into consideration work completed in a broken period or seasonally.

Figure 9

**Annual change in income indicator 'A' and its factors**  
(previous year=100%)



**Regions in Great Plain have an outstanding role in agricultural production**

The agricultural area and the production conditions of planning and statistical regions are very different, so their output, too, shows an uneven picture. Compared to its agricultural area a considerably higher share is recorded for

- Southern Transdanubia of the national output of cereals,
- Southern Great Plain, Budapest and Pest<sup>3</sup> of the output of horticultural products and potatoes,
- Central and Western Transdanubia as well as Northern Great Plain of the output of live animals and animal products.

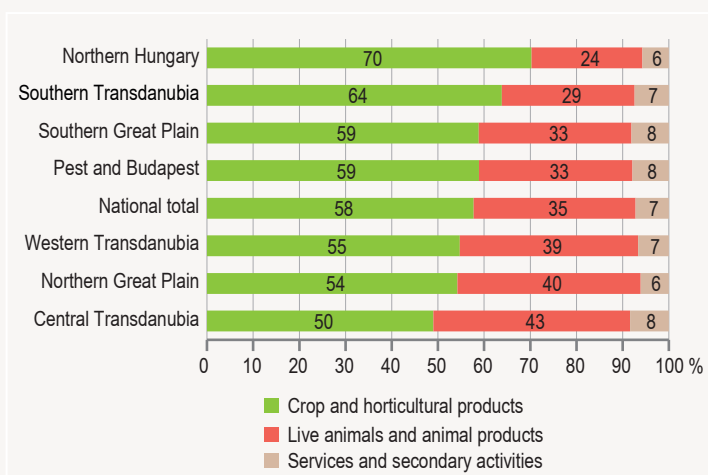
The role of the **regions in the Great Plain**, having the largest areas, is outstanding in agricultural production: they **accounted for nearly the half of total output** at current basic prices, by contrast, merely a total 7.2% of the output came from small-area Budapest and Pest Regions and 7.6% from mountainous Northern Hungary in 2018.

Based on the distribution of crop production, livestock production as well as services and secondary activities, there is a considerable difference among regions.

The proportion of crop production was higher than the national average (58%) in Southern Great Plain, Southern Transdanubia, Budapest and Pest Regions and Northern Hungary, while the weight of livestock production and animal products was above the average (35%) in Central and Western Transdanubia as well as Northern Great Plain.

Figure 10

**Distribution of total gross output of agriculture in regions, 2018**

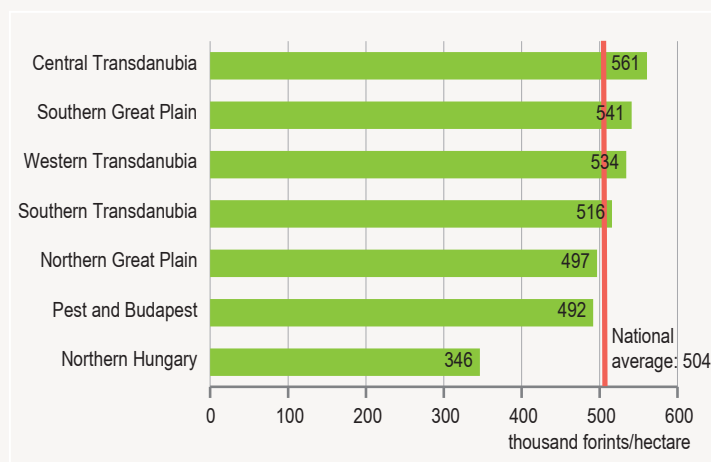


<sup>3</sup> Data for Budapest and Pest Regions are aggregated.

Output per hectare of agricultural area increased in 2018. The intensity was highly above the average in Central Transdanubia, Southern Great Plain and Western Transdanubia, and was substantially lower in Northern Hungary.

Figure 11

**Intensity of agricultural production by region, 2018\***

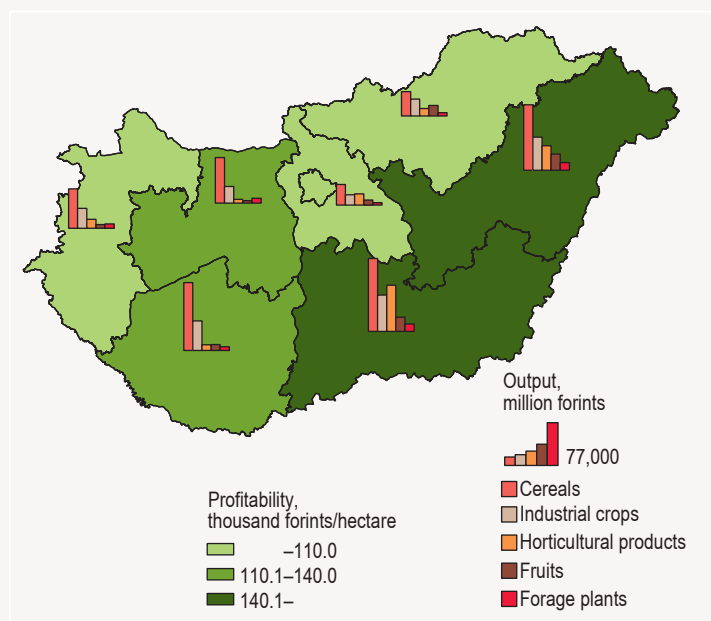


\* Output per hectare of agricultural area, at basic prices.

The **value of entrepreneurial income per hectare of agricultural area** meant a revenue of **133 thousand forints** on average in 2018. The specific indicator ranged widely (between 60 thousand and 170 thousand forints) across regions: it was outstandingly high in Southern and Northern Great Plain, around the average in Central Transdanubia and lower than the average in the rest of the regions. The two regions with a performance highly above the average together accounted for nearly the half (46% and 48%) of total crop production output and total livestock production output (, respectively), 52% of fruit production output and 66% of horticultural output.

Figure 12

**Profitability\* of agriculture and output of crop production classes, at basic prices, by region, 2018**



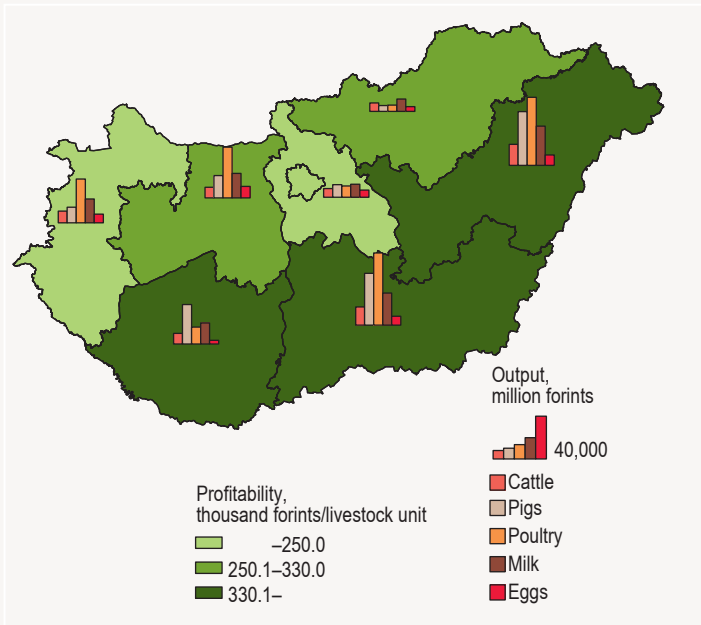
\* Entrepreneurial income per hectare of agricultural area.

**Entrepreneurial income per livestock unit was 310 thousand forints on average** in 2018. The specific indicator ranged more widely (between 185 thousand and 340 thousand forints) across regions than income per

hectare. The indicator was outstanding in Southern Transdanubia as well as Southern and Northern Great Plain, and it was somewhat above the average in Central Transdanubia, too. It was considerably lower than the average in the rest of the regions. The performance of the three regions outstanding in terms of the indicator is explained by the volume of crop or livestock production. The three regions with a performance highly above the average together accounted for more than 60% (62% and 60%) of total crop production output and total livestock production output (, respectively), 63% of live animals output and 53% of animal products.

Figure 13

### Profitability\* of agriculture and output of livestock production classes, at basic prices, by region, 2018



\* Entrepreneurial income per livestock unit.

<sup>4</sup> Member States prepare and send EAA data to Eurostat uniformly. The data were not yet finalised at the time of the preparation of the present publication, so preliminary information was available for comparison.

### Hungary has an important role in production of cereals and industrial crops in the EU

According to the second forecast<sup>4</sup> for the 28 Member States of the European Union, the value of the agricultural output of the Community was 436 billion euros in 2018, 1.2% more than a year earlier. 51% of the value was represented by the output of crop products, 40% by that of animals and animal products and the rest by the output of secondary activities and services. The output of crop production was up by 2.6%, while that of livestock production was reduced by 0.9% compared to 2017. Out of crops the output of all industrial crops fell. Conversely, the highest growth was measured in the output of fruits, grapes and wine, and its value was above the trend. Out of live animals the highest increase was registered in poultry output (5.5%), while pig output fell (6.6%).

France, Italy, Spain, Germany and the United Kingdom were at the top of the ranking of agricultural output, these Member States produced 62% of the total EU output in 2018. In Germany and the United Kingdom out of these the higher proportion was represented by livestock production at above 50%, compared with crop production in the rest. The proportion of services and secondary activities was the highest in the structure of output of Italy among all member countries.

Hungary produced 2.0% of the agricultural output of the European Union in 2018 according to preliminary data, its share increasing by 0.1 percentage point compared to 2017: our country accounted for 2.3% of crop products and 1.7% of animals and animal products. Hungary produced 4.8% of the EU's cereals output. Our industrial crop output was even more significant, 5.9% of the EU's output, due to the production of oil crops primarily.

Although the agricultural output of the 28 Member States of the European Union went up, its value did not reach the trend of the last 9 years. One of the largest growths compared to the previous year and the trend was observed for Romania out of the member countries. By contrast, the output decreased in Latvia, Denmark and Lithuania, and their value compared to the trend was also over 10 percentage points less. Based on its output, Hungary was 1.8 percentage points above the trend. ([Link to the Figure](#))

#### Further data, information (links):

[Tables \(STADAT\)](#)

[Methodology](#)

[Interactive chart](#)

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