

Performance of agriculture in 2017 (Economic accounts for agriculture, 2017)

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Summary

The output and gross value added of agriculture have risen continuously since 2012 at current prices. The output approximated 2.6 thousand billion forints and the gross value added exceeded 1.1 thousand billion forints in 2017. The volume of output went down by 4.1% compared to a year earlier, which was dominantly influenced by a failure in the production of cereals. However, the volume of industrial crops grew. The volume of expenditure was reduced, the amount of subsidies slightly expanded and income increased compared to the previous year. The rise of expenditure on paid labour force, lasting for years, broke, the volume of total labour input was cut as well. The agricultural output of the European Union somewhat grew according to preliminary data, the main contributor to which was a large increase in the output of animal products.

Crop production decreases

The value of and the volume change in agricultural output can be determined based on the observation of annual harvest results and livestock. The production of major crops was typically lower in 2017 than the results one year earlier, out of the main animal species pig and chicken stocks decreased, and a growth in the cattle stock implied an increase in cow's milk production, too.

14 million tonnes of cereals were harvested from 2.4 million hectares in 2017. The harvested area has been reduced since 2014. Production became 16% less, mainly owing to a decline in maize production. Of this crop 6.7 million tonnes were harvested, 23% less than in the previous year. 5.2 million tonnes of wheat were reaped in 2017, 6.4% less on a 7.5% smaller area (966 thousand hectares) than in the previous year. The quantity of sunflower and rape (2.0 million and 0.9 million tonnes,

respectively) resulted in a record, both crops were grown on a larger area than in 2016, together on nearly 1 million hectares. 1.2 million tonnes of sugar beet were produced, 4.5% more than in the previous year. The harvested production of potatoes was 341 thousand tonnes, less than ever before. The quantity of vegetables increased, more than 1.7 million tonnes were produced. The quantity of fruits (723 thousand tonnes) was lower than in the previous year, apples production (474 thousand tonnes) was 4.7% lower. Grape production was 530 thousand tonnes in 2017, 11% more than in 2016.

The cattle stock went on rising, 2.1% more animals (870 thousand heads) were kept in holdings in December 2017 than a year earlier. The pig stock was cut by 1.3% to 2.9 million heads. The poultry stock grew by 1.1% to 40.6 million, within which the chicken stock was reduced slightly, by 0.6%, it was 31.8 million in December 2017.

The total weight of animals for slaughter slaughtered over the year was 4.0% lower than in the previous year, the total quantity was down to 1.5 million tonnes in 2017. The quantity of pigs for slaughter (571 thousand tonnes) became 4.1%, that of poultry for slaughter (783 thousand tonnes) 5.7% and the quantity of cattle for slaughter (91 thousand tonnes) 0.5% less. Out of the main animal products cow's milk production increased by 2.6%, eggs production was reduced by 3.7% compared to one year earlier. The quantity produced was 1.9 billion litres in the case of the former and 2.5 billion pieces in the case of the latter.

Value of output at current prices goes up

The total gross output of agriculture was 2,595 billion forints at current basic prices in 2017 according to the economic accounts for agriculture (EAA), 0.3% more than in the previous year.

Of crop and horticultural products an output of 1,505 billion forints was generated, 3.7% less than in the previous year. The value of output was 618 billion forints for cereals and 389 billion forints for industrial crops. Out of the latter the output of sunflower, representing the largest proportion, was 224 billion forints. Fresh vegetables contributed by 180 billion forints, fresh fruits, grapes and wine by 177 billion forints to total output.

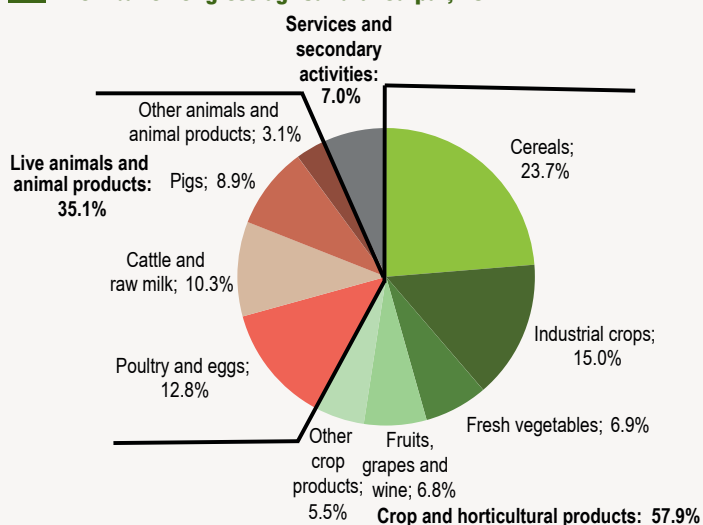
The value of output of live animals and animal products went up, it was 909 billion forints in 2017. The output of live animals amounted to 618 billion forints (within which that of poultry to 271 billion forints). The output of animal products was 291 billion forints (out of which that of milk was 184 billion forints).

Agricultural services provided to producers represented a value of 134 billion forints, inseparable non-agricultural secondary activities – such as the processing of meat, milk, fruits and vegetables – a value of 47 billion forints. These latter made up merely 1.8% of total gross output.

The share of crop production was 58% and that of live animals and animal products 35% of the total output of agriculture. This ratio did not change significantly compared to the average of the years 2012–2016.

Figure 1

Distribution of gross agricultural output, 2017

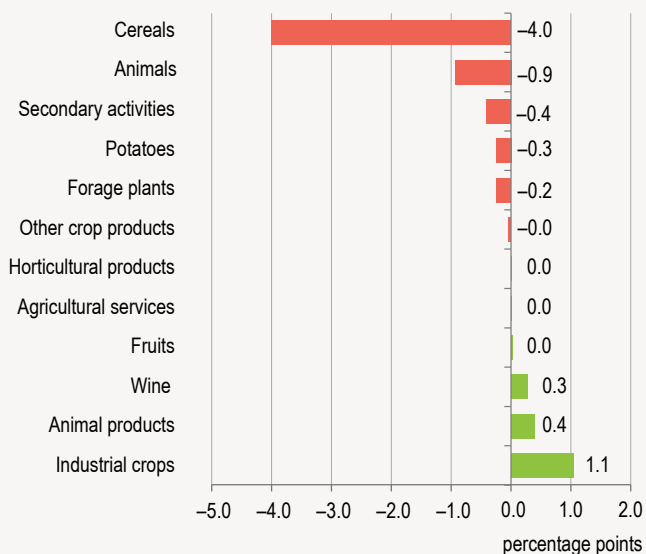


Growth of industrial crops and animal products lowers volume decrease

The volume of the total gross output of agriculture (its value at the previous year's prices) was 4.1% less in 2017: cereals and livestock production lowered the output by 4.9%, while industrial crops and animal products raised it by 1.5%.

Figure 2

Contribution to change in volume of output, 2017



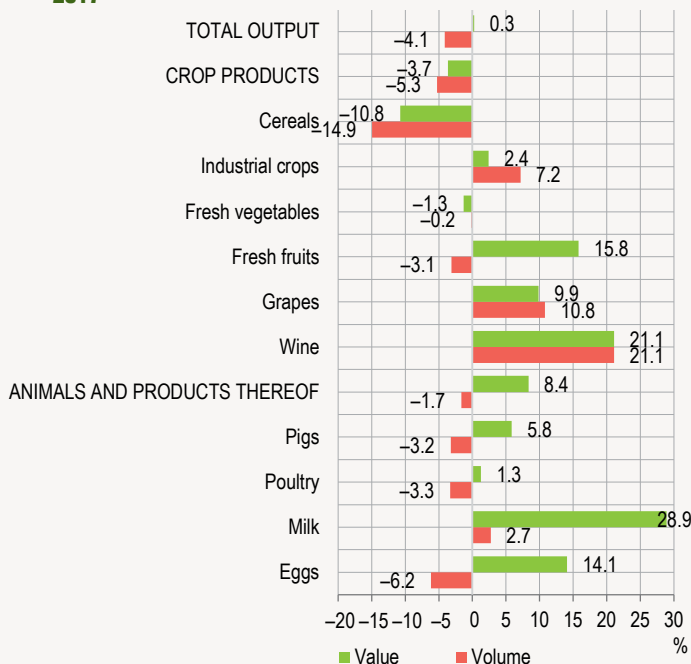
The volume of the output of crop production decreased by 5.3%, dominantly due to a 15% fall in cereals production and to unfavourable weather conditions. The volume of maize diminished by 21%, that of wheat by 7.2%, the volume of barley by 12% and that of other cereals by 7.0%. Out of industrial crops the volume of sunflower, sugar beet, protein crops and rape increased, that of other oilseeds, raw tobacco and fibre plants lessened, the output of industrial crops as a whole expanded by 7.2%. The volume of horticultural products was unchanged, while there was a growth (of 0.8%) in the volume of fruits and (of 21%) in that of wine.

The production of live animals and animal products went down by 1.7% in 2017. The output of major animal species – except for the horse stock – was lower than in the previous year. The output of animal products rose by 4.4% in total, within which the output of milk grew, while that of eggs became less.

The volume of agricultural services provided to other producers stagnated, that of non-agricultural secondary activities, inseparable in holdings, decreased.

Figure 3

Value and volume change in output compared to previous year, 2017



Volume and value of expenditure both cut

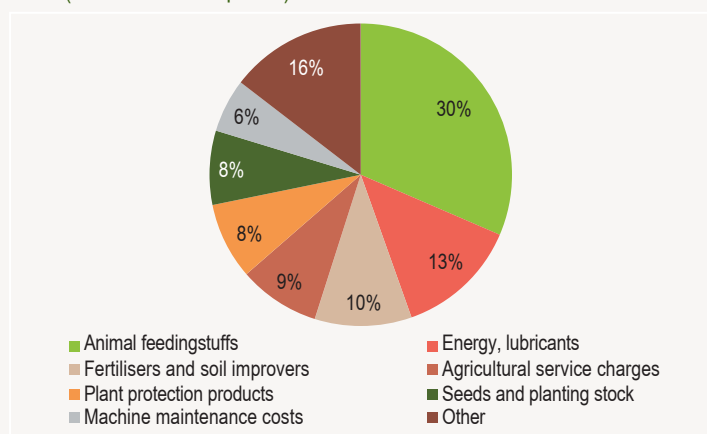
The total output of agriculture provides information on the production of the division, while use is reported on by expenditure, i.e. intermediate consumption, which covers the value of all goods and services used by holdings in the production process. Intermediate consumption, devoted to the production of products and the provision of services, was 1,493 billion forints (at market purchasers' prices) in 2017, 1.6% less than in the previous year.

The volume of expenditure narrowed by 1.6% compared to 2016. Out of major items the use of fertilisers was down by 1.8%, the use of plant protection products by 2.1% and the use of feedingstuffs by 4.7%, agricultural service charges stagnated. The largest fall was recorded in expenditure on energy and lubricants (-5.0%).

Making an analysis from 2000 to 2015, it can be stated that the share of expenditure directly connected with crop production – expenditure on seeds, planting stock, fertilisers, soil improvers and plant protection products – rose within total intermediate consumption, but lessened from 2016. This proportion came to 26% in 2017. Expenditure directly connected with livestock production – expenditure on veterinary products and animal feedingstuffs – had a declining share of the total amount, at 32% in 2017.

Figure 4

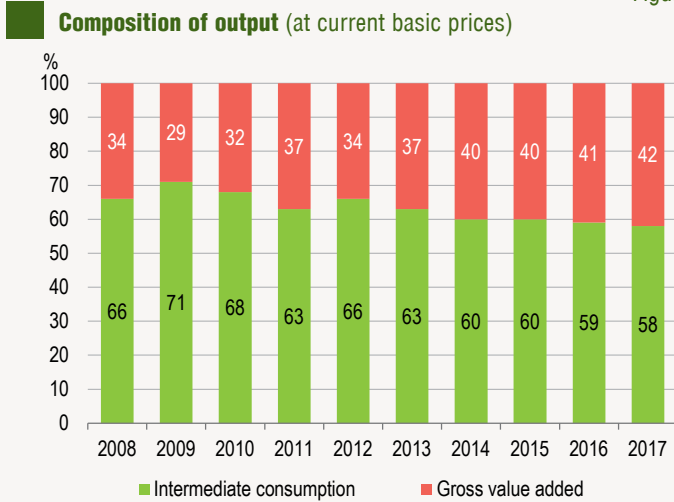
Composition of intermediate consumption, 2017 (at current basic prices)



Gross value added, calculated as the difference between output and intermediate consumption, was 2.9% higher at current prices than in the previous year, it was 1,102 billion forints in 2017, its volume decreasing by 7.7%. The share of gross value added was 42% of total output, i.e. an expenditure of 58 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.

According to preliminary data on national accounts¹, agriculture, forestry and fishing section accounted for 4.4% of the total gross value added of the national economy in 2017.

Figure 5



Income increases, labour input decreases

Income defined in line with the requirements of the economic accounts for agriculture is different both in terms of concepts and contents from the one used in everyday life. It is accrual-based on the one hand, 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. On the other hand, it contains the income, too, from which households benefit by consuming own-produced agricultural products, or food produced by processing them at home.

Resources and uses of income

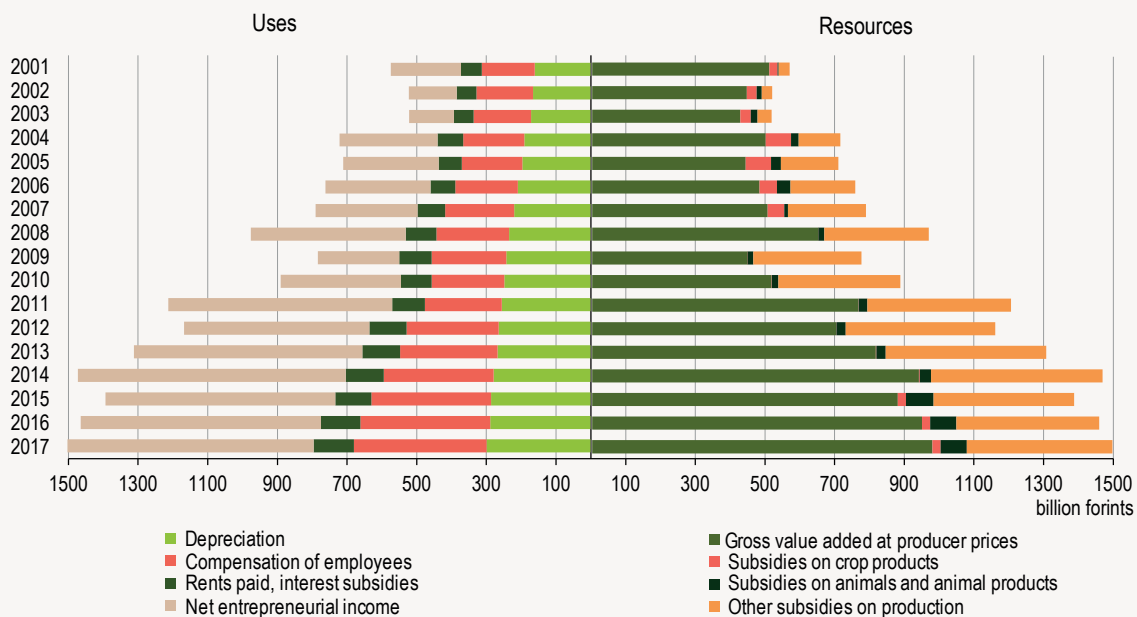


Figure 7 presents gross value added and other items increasing income as resources of income. (Gross value added at producer prices is completed by subsidies on products to get the value at basic prices, the amount of other subsidies on production – reduced by taxes on production – is not included in output, it directly increases income.)

The net amount of subsidies on production reached 524 billion forints in 2017, 9 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 (e.g. subsidies on land or for rural development, which enhance factor income) and having a growing share, gradually rose in the meantime. 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 that year, 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 previous years.

Figure 6

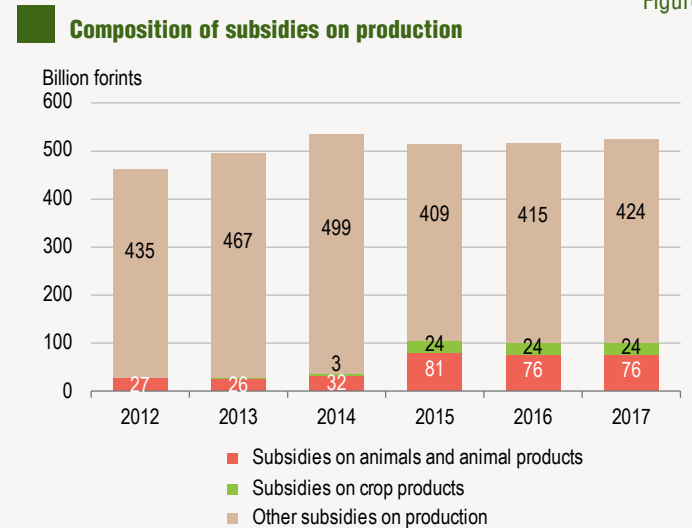


Figure 7

¹ 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 on enterprises registered in a particular section and makes them comparable with the rest of the sections.

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 1,215 billion forints in 2017, 2.4% higher than in the previous year.

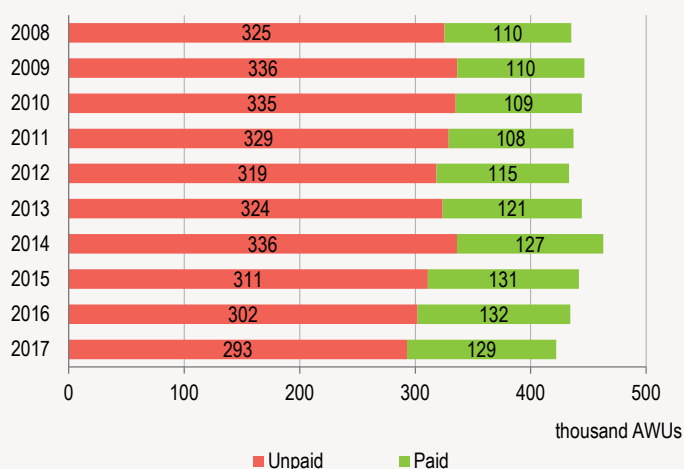
Net entrepreneurial income is of a mixed character, since it shows the counter-value of the work of the holder and his/her family (unpaid labour force) and returns on the land and capital belonging to the holding in total. Its value was up by 2.5% in 2017, it totalled 716 billion forints.

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 value was 73% both in 2016 and 2017.

Labour input – expressed in annual work units (AWUs)² – went down by 3.0% compared to the previous year. Expressed in full time, labour input was equivalent to the annual agricultural activities of 421 thousand people. Unpaid labour input (293 thousand AWUs) continued to fall, it was 3.0% lower in 2017 than a year earlier. The rising trend of paid labour input, continuous from 2012, stopped in 2017, paid labour input was 2.5% less than in 2016, at about 129 thousand AWUs. It can be concluded that holders substitute a part of the declining unpaid labour input by paid input. Agricultural producers paid 386 billion forints to their employees in 2017, 2.2% more than in the previous year.

Figure 8

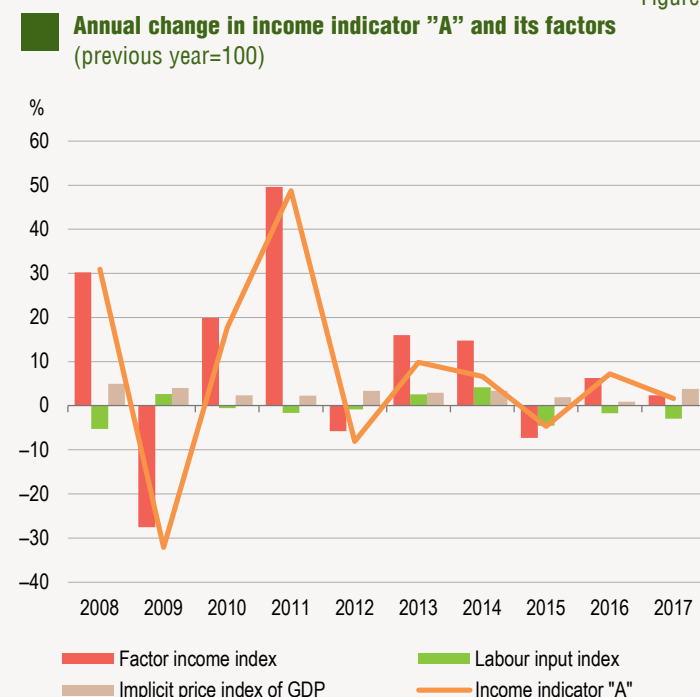
Labour input in annual work units



One of the most important purposes of EAA is to measure agricultural incomes and their changes. Eurostat uses 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 1.6% in 2017 compared to the previous year.

Figure 9



Regional³ economic accounts for agriculture, 2017

The agricultural area size and the production endowments of planning and statistical regions are very different, so their output, too, shows an uneven picture. Compared to its agricultural area Southern Transdanubia has a considerably higher share of the national output of cereals, Southern Great Plain as well as Budapest and Pest Regions of the output of horticultural products, grapes, wine and fruits, and 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: Northern and Southern Great Plain accounted for nearly the half of total output at current basic prices, by contrast, merely a total 7.4% of the output came from small-area Budapest and Pest Regions and 8.3% from mountainous Northern Hungary in 2017.

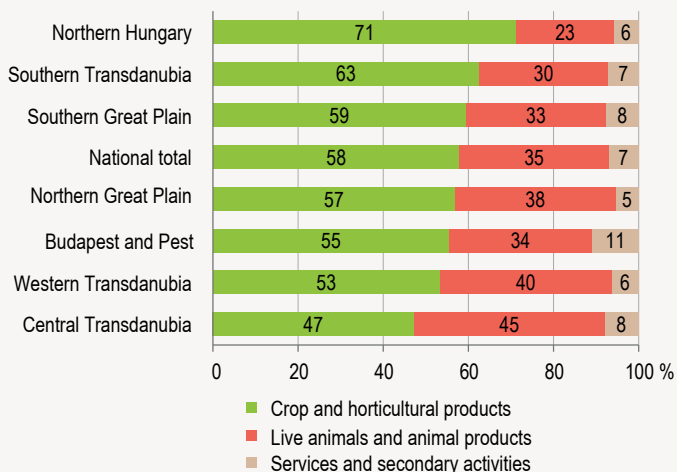
Based on the distribution of crop production, livestock production as well as services and secondary activities there is a considerable difference among regions. The proportion of crop production was higher than the national average (58%) in Southern Great Plain, Southern Transdanubia and Northern Hungary, 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.

² 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.

³ Data for Budapest and Pest Regions are aggregated.

Figure 10

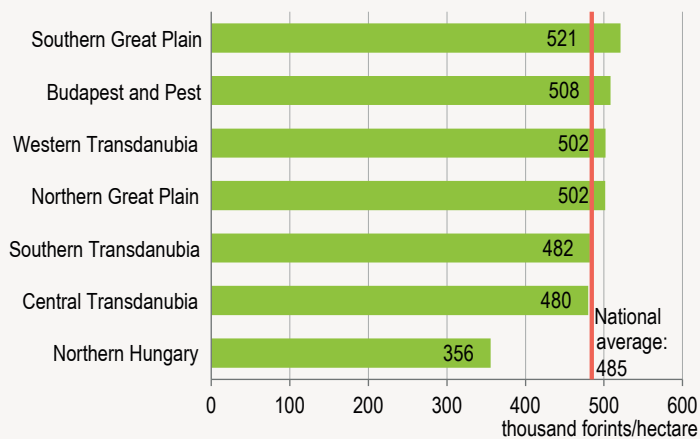
Distribution of gross output of agriculture by region, 2017



Output per hectare of agricultural area rose in the last few years, but the rate of increase lessened to 1% in 2017. The intensity was highly above the average in Southern Great Plain as well as Budapest and Pest Regions, and was substantially lower in Northern Hungary.

Figure 11

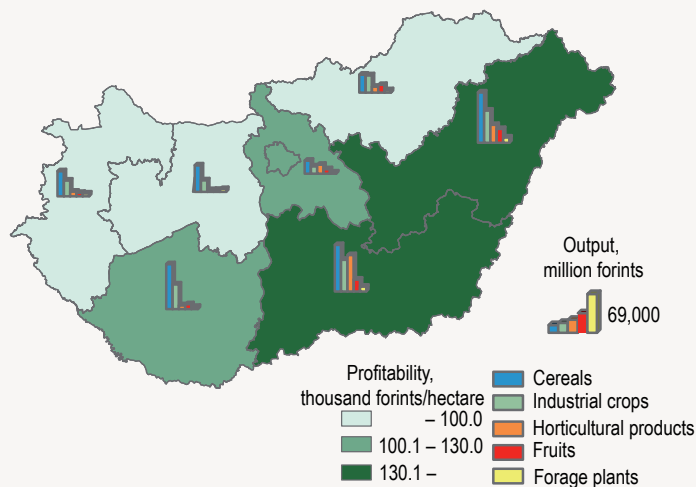
Intensity of agricultural production by region, 2017*



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

Figure 12

Profitability* of agriculture and output of crop production classes at basic prices, by region, 2017



* Entrepreneurial income per hectare of agricultural area.

The value of entrepreneurial income totalled 716 billion forints at basic prices in 2017, which meant a revenue of 134 thousand forints per hectare of agricultural area on average. The specific indicator ranged widely (between 87 thousand and 175 thousand forints) across regions. The indicator was outstandingly high in Southern Great Plain and Northern Great Plain, it was around the average in Southern Transdanubia. It was considerably lower than the average in the rest of the regions. The two regions with a performance above the average together accounted for nearly the half (48%) of each of total crop production output and total livestock production output, 53% of fruit production output and 68% of horticultural output.

Entrepreneurial income per livestock unit was 311 thousand forints on average in 2017. The specific indicator ranged more widely (between 184 thousand and 368 thousand forints) across regions than income per hectare. The indicator was outstanding in Southern Transdanubia and Northern Hungary, it was above the average in addition in Southern and Northern Great Plain. It was considerably lower than the average in the rest of the regions. The performance of the two regions outstanding in terms of the indicator is explained not by the volume of crop or livestock production but by the intensity of agricultural production: agricultural output per

Regional distribution of output by product group and of income, 2017
(national total=100.0)

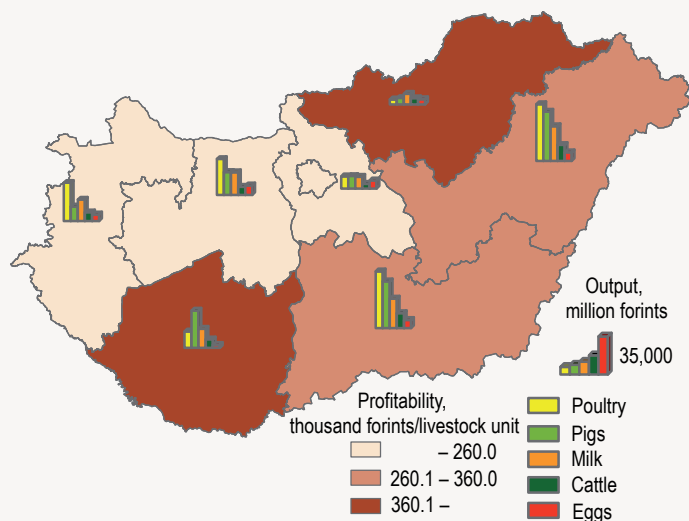
Table 1

Denomination	Budapest and Pest	Central Transdanubia	Western Transdanubia	Southern Transdanubia	Northern Hungary	Northern Great Plain	Southern Great Plain
Crop and horticultural products	7.1	9.0	10.4	15.8	10.2	22.4	25.2
Within which:							
cereals	5.9	11.8	11.3	20.0	8.0	22.4	20.7
industrial crops	5.2	8.3	11.3	17.6	12.3	22.8	22.4
horticulture, fruits, grapes, wine	10.0	4.5	7.3	8.9	11.7	22.4	35.2
Live animals and animal products	7.1	14.1	13.0	12.6	5.4	24.6	23.1
Services and secondary activities	11.6	12.6	10.1	14.9	6.8	17.4	26.6
Agricultural output	7.4	11.0	11.3	14.6	8.3	22.8	24.6
Agricultural area	7.1	11.2	10.9	14.7	11.3	22.1	22.9
Factor income	6.3	9.4	9.3	14.2	7.7	26.4	26.8
Net entrepreneurial income	5.5	8.2	7.9	14.0	7.4	28.8	28.3

livestock unit was the highest here, which was above 1.4 million forints, at the same time, intermediate consumption per livestock unit was also the highest here, at about 800 thousand forints. The higher specific expenditure allowed more efficient production in these regions.

Figure 13

Profitability* of agriculture and output of livestock production classes at basic prices, by region, 2017



* Entrepreneurial income per livestock unit.

Hungary's position in EU agriculture

Member states prepare and send EAA data to Eurostat uniformly, the finalised data for the countries were not yet accessible at the time of the preparation of the present publication, so preliminary information was available for comparison.

According to the second forecast for the 28 member states of the European Union, the value of the agricultural output of the Community was 427 billion euros in 2017, 5.0% more than one year earlier. 50% of the value was represented by the output of crop products, 41% by that of live animals and animal products and the rest by the output of secondary activities and services. The output of crop production was up by 1.6% and that of livestock production by 10%. Out of crops the output of potatoes and fruits fell, that of other crops grew or remained at the same level. The highest increase (10%) was recorded in pig output, while poultry output was slightly down.

France, Germany, Italy, Spain and the United Kingdom were at the top of the ranking of agricultural output, these member states produced 62% of total EU output in 2017. Out of these the volume decreased in Italy and Spain and was unchanged or went up in the rest.

Hungary produced 1.9% of the agricultural output of the European Union in 2017 according to preliminary data, its share diminishing by 0.1 percentage point compared to 2016. Our country accounted for 2.2% of crop products and 1.6% of animals and animal products. Hungary produced 4.3% of the EU's cereals output. Hungary's output of industrial crops was even more significant – 5.5% of EU output –, due to the production of oil crops primarily.

Figure 14

Volume and price changes in agricultural output in the European Union compared to previous year, 2017+

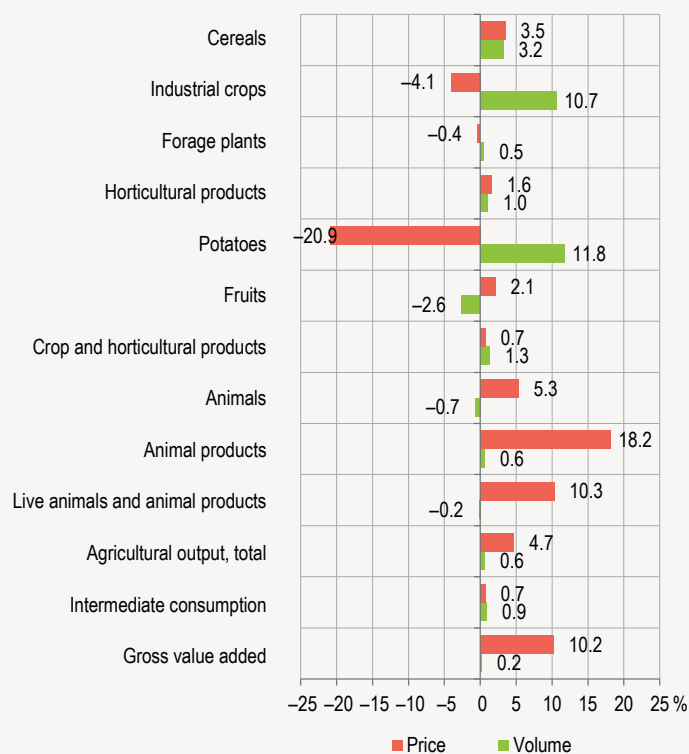


Table 2

Distribution of agricultural output in the European Union, at current basic prices, 2017⁺

(%)

Denomination	Hungary	Five largest producing countries					Total
		FR	DE	RO	PL	UK	
Cereals	4.3	21.0	13.7	9.1	8.6	8.0	60.5
Industrial crops	5.5	21.0	18.9	8.9	7.7	6.3	62.8
Forage plants	0.9	23.8	22.5	6.8	6.0	5.7	64.7
Vegetables and horticultural products	1.3	17.6	17.0	16.5	10.5	8.6	70.2
Potatoes	0.7	18.2	16.2	13.0	8.5	8.5	64.3
Fruits	1.7	33.1	17.6	12.1	7.8	5.2	75.9
Wine	0.5	43.0	33.2	7.7	5.6	3.8	93.4
Crop products	2.2	18.3	13.6	13.4	12.1	6.5	63.8
Live animals	1.9	15.1	13.8	13.7	10.6	9.6	62.9
Animal products	1.2	17.8	14.6	9.0	8.6	7.9	58.0
Live animals and animal products	1.6	15.4	14.9	10.6	9.5	9.2	59.7
Services	2.1	24.2	21.6	12.9	12.5	6.6	77.7
Secondary activities	1.1	27.4	12.7	10.2	8.9	7.4	66.6
Agricultural output, total	1.9	16.8	13.3	12.8	11.5	7.2	61.6

Country codes: DE – Germany, EL – Greece, ES – Spain, FR – France, IT – Italy, NL – Netherlands, PL – Poland, PT – Portugal, RO – Romania, UK – United Kingdom.

Further data, information
(links):

[Methodology](#)
[Tables \(STADAT\)](#)

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